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**A Short-Lived Energy Self-Sufficiency Dream:  
Nixon's Project Independence.**

A study of the practical results of Project Independence between 1973 and 1976.

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## **Abstract**

In the early 1970s, following the Organization of (Arab) Petroleum Exporting Countries (O(A)PEC) oil embargo and rise in oil price, the United States pictured itself as deeply dependent on foreign oil imports and easily vulnerable to external energy supply disruptions. That situation, worsened by a concrete rise in domestic energy consumption, prompted President Nixon to launch Project Independence: an ambitious initiative aimed at achieving energy self-sufficiency by 1980. Nevertheless, both the oil embargo and the quadrupled prices of petroleum, despite being real problems for other importing countries, were easy-to-manage issues in the American market economy. Therefore, apparently, the problem was not that of a “growing dependency” on imported oil (especially because the U.S. still covered the role of main energy producer in the whole world, and imports from the Persian Gulf were still limited), but rather it was the (little understood) “energy security” problem that scared the American Government. The purpose of this thesis is to analyse the practical results of Nixon’s Project Independence through a study of the promises and measures adopted between 1973 and 1976. By way of a comprehensive analysis of historical documents, policy documents, memoranda, and energy data, this study assesses the reliability of Project Independence's goals and strategies. The research examines the economic, political, and geopolitical factors that influenced the implementation and outcomes of the Project, underlining, where possible, both its strengths and limitations. The findings of this study suggest that while Project Independence was a well-intentioned effort to address the energy challenges of its time, it faced significant obstacles that contributed to its eventual abandonment culminated with the presidency of Reagan in the early 1980s. After a brief introduction that elaborates on the words pronounced by Nixon on 7 November 1973, the thesis develops in three main chapters. In the first chapter, a deep analysis of the global energy market is provided to explain the context (the so-called “oil crisis” that followed the embargo and the oil prices raise) leading to the creation and adoption of Project Independence in the United States. Consequently, the second chapter develops through a detailed analysis of the Project, its genesis and reactions. If the second chapter presents a theoretical approach, the third, and last chapter, develops analysing the practical aspects of Project Independence. It investigates the Nixon, and Ford, Administration’s actions describing to what extent were they coherent with the goals forecasted in Project Independence. Therefore, this study offers a critical examination of Project Independence's reliability and explores the reasons behind its failure. By understanding the factors that contributed to the project's lack of success, policymakers and energy experts can gain valuable insights into the challenges and opportunities of pursuing energy autonomy in a complex and interconnected global energy landscape. The study contributes

to ongoing debates about energy policy, national security, and sustainability, highlighting the need for a nuanced and adaptive approach to addressing energy challenges in the 21st century.

### **Summary (Ita)**

Se gli anni Cinquanta e Sessanta, spesso classificati come “l’Età d’Oro del Capitalismo” in occidente (Stati Uniti d’America, Europa Occidentale e Giappone in primis), rappresentarono il boom economico del dopoguerra caratterizzato dall’abbondante disponibilità di fonti energetiche economiche, grandi investimenti, espansione commerciale, inflazione bassa e livelli di occupazione alti, gli anni Settanta portarono con sé grandi cambiamenti soprattutto nell’ambito energetico.

Esaminare la crisi petrolifera del 1973-74 come una sfida alla sovranità occidentale sulle risorse energetiche è un confronto che ci permette di comprendere le dinamiche della cosiddetta “crisi energetica” e le molteplici reazioni dei paesi dell’Europa occidentale e del governo americano.

In generale qualcuno potrebbe anche sostenere che “l’arma petrolifera” utilizzata dai paesi Arabi non fosse poi così potente da poter minacciare la sovranità dei Paesi industrializzati occidentali specialmente se consideriamo che, tutto sommato, l’embargo che seguì la Guerra dello Yom Kippur fu, alla resa dei conti, un fallimento per i Paesi Arabi stessi. Ciò non vuol dire che, in realtà, tale scelta non potesse effettivamente essere percepita come una possibile minaccia capace di influenzare i vari governi a prendere determinate posizioni nei confronti del conflitto Arabo-Israeliano, soprattutto dal momento che, oltre all’embargo arabo, si aggiunse anche l’aumento dei prezzi del greggio da parte dell’Organizzazione dei Paesi Esportatori del Petrolio (OPEC).

Negli Stati Uniti alcuni aspetti della “crisi energetica” del 1973-74 furono percepiti come una questione di sovranità e, a tal proposito, il governo americano tentò di dimostrare e di accrescere il proprio controllo domestico nel settore energetico. Il piano prevedeva una riorganizzazione istituzionale e l’utilizzo di misure specifiche presentate nel “Progetto Indipendenza” dal presidente americano Nixon il 7 novembre 1973.

Nonostante le ampie riserve energetiche e lo *status* di maggior produttore di petrolio a livello globale, anche la situazione negli Stati Uniti agli albori degli anni Settanta veniva considerata preoccupante. Le importazioni di petrolio (a basso costo) superavano ormai la produzione domestica e, a causa di alcuni interventi del governo nel mercato petrolifero ed energetico (come, ad esempio, il controllo sui prezzi dei prodotti petroliferi del 1971 e il programma di distribuzione del 1973) i problemi di approvvigionamento energetico interno crebbero.

Sommando questi fattori alla già esistente percezione di un’imminente crisi energetica l’Amministrazione Nixon creò una sensazione di emergenza che necessitava di un maggior

intervento del governo. Qualche iniziativa che provasse che la direzione era in pieno controllo della situazione doveva essere attuata.

Già nel 1971 Nixon si rivolse al Congresso richiedendo che l'autorità del Governo Federale in materia energetica fosse rinforzata tramite uno specifico programma e la creazione di un Dipartimento di Risorse Naturali. Due anni dopo, prima dell'embargo petrolifero, le autorità energetiche vennero parzialmente ristrutturate: a giugno 1973, l'inefficace *National Energy Office* fu rimpiazzato dall' *Energy Policy Office* sotto la guida del Governatore Repubblicano del Colorado, John A. Love (il primo "zar energetico" di Nixon). La scelta del termine *energy czar* voleva trasmettere i poteri illimitati della nuova figura su un particolare campo politico tale da rinforzare il ruolo del governo, specialmente in periodi di crisi. Lo scopo ultimo di questa decisione era quello di centralizzare nel nuovo dipartimento le competenze di più sezioni e agenzie federali.

In tal modo gli Stati Uniti potevano dimostrare pubblicamente ai governi dei Paesi produttori e consumatori di petrolio che il governo americano era pienamente in grado di risolvere l'emergente crisi. Questa dimensione puramente simbolica ebbe un ruolo cruciale nel trasmettere la capacità di influenzare le politiche interne affinché la posizione negoziale americana a livello internazionale e la sovranità internazionale stessa restassero intatte.

In realtà il governo americano presentava grandi lacune in questo settore e alla vigilia della "crisi energetica" anche le figure protagoniste si dimostrarono poco capaci di gestire la situazione. Le stesse lunghe code di macchine alle stazioni petrolifere che caratterizzarono gli anni Settanta negli Stati Uniti ne sono un esempio. Esse, infatti, furono una conseguenza auto-inflitta da rigide politiche federali come il controllo sui prezzi e il pesante sistema di allocazione delle risorse.

Lo scopo di questa tesi di ricerca è analizzare i risultati pratici del Progetto Indipendenza per poter dimostrare come azioni e intenzioni (non) fossero in accordo per realizzare gli obiettivi del Progetto stesso. Sebbene l'Amministrazione Carter successiva a quella di Nixon (e Ford) si mosse su un'onda simile promuovendo, seppur con un differente approccio, l'autosufficienza energetica, misurare i risultati al 1980 come Nixon aveva promesso, porrebbe un problema di metodo. Il mio lavoro dunque punta ad analizzare gli anni tra il 1973 e il 1976.

Il Progetto Indipendenza fu la risposta domestica statunitense alla "crisi energetica" e il suo scopo era identificato nella "forza dell'autosufficienza". Nixon stimava di poter raggiungere l'indipendenza energetica entro il 1980 proteggendo così l'economia americana da shock esterni. Il piano puntava a promuovere una riduzione dei consumi energetici, coinvolgendo anche i cittadini americani e a stimolare la produzione interna, favorendo così la diversificazione delle fonti puntando sia sul carbone e sul nucleare, sia su fonti rinnovabili. Sebbene il Progetto fosse stato definito come "ambizioso" (per alcuni fin troppo), esso richiedeva molto denaro, grandi innovazioni

tecnologiche e un allontanamento dalla nuova rotta ambientalista promossa da Nixon stesso (definito da alcuni, per l'appunto, uno dei presidenti americani più *green*). L'insieme di questi fattori lasciò la stessa Amministrazione abbastanza scettica in merito al successo del Progetto.

Per quanto riguarda la riduzione dei consumi, durante il suo discorso Nixon richiese la collaborazione di tutti i cittadini, su base volontaria ma massiva e per un sostenuto periodo di tempo. Essi infatti, per poter affrontare il freddo inverno del 1974, dovevano ridurre gli usi eccessivi della corrente (ad esempio evitando addobbi natalizi troppo sfarzosi), mantenere la temperatura del termostato più bassa e adattarsi a piccoli cambiamenti d'orario per scuole, centri commerciali e uffici cosicché si potesse usufruire il più possibile della luce del giorno. A livello nazionale invece venne imposto il limite di velocità a 88 km/h (55 mph), che divenne legge nel 1974. Lo scopo di queste misure era quello di instaurare una cultura di conservazione che aiutasse a ridurre la domanda complessiva di energia.

Dopo Nixon, anche Ford promosse misure di conservazione tali da rendere gli Stati Uniti nuovamente "netti esportatori di petrolio" prima della fine del decennio. Tra le misure più rilevanti adottate da Ford troviamo l'*Energy Policy and Conservation Act* (EPCA), che successe all'*Energy Petroleum Allocation Act* del 1973, e mirava a ridurre la dipendenza da petrolio importato tramite la creazione dello *Strategic Petroleum Reserve* (SPR) e la formazione di standard per il risparmio del carburante (*CAFE standards*).

Nonostante l'adozione delle misure finalizzate alla conservazione energetica, la riduzione fu molto limitata rispetto alle previsioni. Ciò fu la conseguenza del fatto che le Amministrazioni statunitensi degli anni Settanta preferirono adottare misure finalizzate alla riduzione della dipendenza da importazioni di petrolio estero e all'incremento della produzione energetica interna, piuttosto che alla riduzione dei consumi.

Per quanto riguarda la produzione interna invece, le misure chiave erano l'espansione dell'esplorazione di nuove fonti di petrolio e gas (nell'*offshore* e tramite nuove tecniche come il *fracking*) e lo sviluppo di fonti di energia rinnovabile (in particolar modo solare e geotermica). Nonostante la determinazione per l'incremento della produzione domestica, durante il decennio essa diminuì passando da 9 milioni di barili al giorno nel 1973 a 7,5 milioni di barili al giorno nel 1978. Ciò che evitò una ricaduta ancor più pesante sulle importazioni fu lo sviluppo di strutture petrolifere in Alaska e nel Mare del Nord.

Per facilitare l'incremento della produzione americana, Ford promosse anche la deregolamentazione di nuovo gas naturale ma anche in questo caso, come per le nuove esplorazioni di petrolio, il problema rimaneva quello degli alti costi e degli ostacoli normativi, nonché delle lunghe

tempistiche richieste per l'implementazione di tali misure, e di cui l'Amministrazione non disponeva.

In seguito al discorso del 7 novembre, l'idea che si era instaurata negli Stati Uniti era quella che il Paese dipendesse profondamente dalle importazioni di petrolio, in particolare del greggio del Golfo Persico. A livello amministrativo il panico condusse a una cattiva legislazione che comportò non solo a un aumento di importazioni (nonostante gli auspici per ridurli drasticamente), ma anche a “sfide” per assicurarsele, soprattutto mantenendo stretti rapporti con Canada e Arabia Saudita. Chiaramente la questione importazioni era strettamente legata al problema dei prezzi che, oltretutto, non accennavano a scendere. Avendo la possibilità di importare energia a basso costo, nessuno voleva pagare prezzi alti per promuovere la produzione domestica di energia più costosa.

A novembre del 1974, l'Amministrazione Federale per l'Energia (FEA) pubblicò un report intitolato *Project Independence Report* esponendo la conclusione che ridurre la vulnerabilità americana alle (future) interruzioni della fornitura di petrolio era probabilmente un obiettivo più realistico (e quindi più desiderabile) rispetto all'ambizione di raggiungere l'autosufficienza energetica in cinque o dieci anni. Con questa nuova visione, dato che la produzione energetica a livello domestico continuava a essere insufficiente per soddisfare la domanda nazionale, nonostante gli sforzi dell'Amministrazione del 1973-1976, gli Stati Uniti continuarono a dipendere pesantemente dalle importazioni di petrolio.

Dal 1962 il sistema di politica commerciale statunitense si allontanò gradualmente dall'approccio di commercio aperto che caratterizzava gli Stati Uniti dal 1934. Sebbene l'arrivo di Nixon a Washington nel 1969 si tradusse nell'urgente bisogno di una politica commerciale più forte e coerente, nessuna strategia commerciale fu adottata. Anzi, le Amministrazioni che seguirono agli anni della “crisi energetica” implementarono una serie di misure con significanti implicazioni commerciali, ma che in realtà erano parte di una strategia più grande che ambiva ad accrescere la sicurezza energetica. Le misure adottate infatti avevano poco potere per raggiungere una vera e propria indipendenza energetica; lo stesso Progetto Indipendenza ebbe poca influenza sulla strategia commerciale americana.

Le soluzioni proposte e promosse dal Governo per raggiungere l'indipendenza energetica si rivelarono estremamente complesse e costose, rallentando così la ricezione di un ottimale utilizzo delle risorse domestiche. Le politiche di Ricerca e Sviluppo (R&D) ambivano a promuovere nuove fonti energetiche e risorse convenzionali pulite, ma si rivelarono invece inadeguate soprattutto per le tempistiche richieste (da cinque a dieci anni) per metterle alla fruizione commerciale.

Nel 1974 il Presidente Ford firmò l' *Energy Reorganization Act* che aboliva la Commissione dell'Energia Atomica e creava tre nuove entità federali: l' *Energy Research and Development*

*Administrazion* (ERDA), la *Nuclear Regulatory Commission* (NRC), e l' *Energy Resources Council*. Conservazione ed efficienza energetica restavano le maggiori priorità nazionali e Seamans Jr., posto da Ford a capo dell'ERDA, promosse un piano che richiedeva il passaggio a nuove forme di energia primaria. In seguito a un'Amministrazione non pienamente soddisfatta, Seamans tornò nel 1976 con il piano revisionato: maggior enfasi fu posta sulla questione della conservazione energetica e sulla promozione dell'energia solare (una proposta che riscontrò forte appoggio da parte dei cittadini).

In generale, nonostante gli sforzi, i progetti dell'ERDA non raggiunsero gli obiettivi preposti. I problemi restavano gli stessi: la poca quantità di tempo a disposizione, i fondi economici destinati all'attuazione delle misure proposte, e la mancante esperienza richiesta per passare le nuove tecnologie dalla teoria alla pratica.

A livello internazionale praticamente tutti i Paesi consumatori affrontarono la crisi del 1973-74 poco preparati. Nell'ottobre del 1973 Kissinger tenne un discorso a Londra per cercare di promuovere la cooperazione tra Stati Uniti ed Europa occidentale in tutti i settori, ma soprattutto in quello energetico. L'idea di Kissinger era profondamente sostenuta da Nixon che voleva dimostrare che il Progetto Indipendenza non era una forma di unilateralismo americano. La proposta incontrò riscontro positivo da Regno Unito, Germania, Italia, Norvegia, Canada e Paesi Bassi. Il governo francese invece pose qualche ostacolo alla creazione di un'organizzazione di Paesi consumatori, preferendo continuare il suo progetto di accordi bilaterali direttamente con i Paesi produttori.

Sebbene nel 1972-73 i Paesi consumatori si rivelarono incapaci di produrre una cooperazione efficace, è interessante notare come dal 1974 le iniziative per migliorare la cooperazione energetica risultarono più produttive. Lo stesso Ford insisteva sul fatto che nessun Paese avesse le capacità per gestire la crisi energetica in maniera autonoma e dunque, come gli Stati Uniti stavano lottando per raggiungere l'indipendenza, anche il resto del mondo stava affrontando una sfida che richiedeva un Progetto Interdipendenza. A tal proposito, Ford continuò e accelerò, insieme a Kissinger, il processo di cooperazione internazionale e nel 1974 si formò l'Agenzia Internazionale dell'Energia (IEA).

E' comunque doveroso notare che le negoziazioni che condussero alla formazione dell'IEA e al sistema di cooperazione internazionale, rappresentarono un tentativo americano per mantenere e rinnovare il proprio ruolo egemonico in un particolare periodo di sfide.



## Introduction

When Richard M. Nixon entered the White House in 1969, a serious energy situation was waiting for him. In March 1972, estimates of the State Department forecasted a rise in consumption from a daily 15.8 million barrels in 1971 to 24 million barrels by 1980. This would have implied a dependency on imports of 50 per cent of national oil consumption by the end of the decade.<sup>1</sup>

In the 1970s the U.S. was still the greatest producer of oil in the world, but with the spread of cars, suburbs and factories started in post-World War II America, demand rapidly rose faster than supplies. That situation led policymakers to opt for increased imports of foreign and cheaper oil, and in 1973 the United States was importing 36 per cent of its petroleum consumption.<sup>2</sup> By 1973, Americans relied on oil for almost half of all their energy needs, and each day imports made up an expanding proportion of the country's supply.

The OAPEC embargo and the OPEC rise of prices, despite being real problems at a global level, were easy-to-manage issues in a market economy such as that of the United States. Therefore, what seemed was that the Nixon Administration wanted to take huge advantage from the so-perceived “crisis” and relaunch, through extraordinary measures of national security, some declining sectors of the American economy (i.e. coal and oil production, and nuclear power). The hidden purpose was probably also that of promoting new sectors like that of gas and non-conventional petroleum. Despite the fact that the “energy crisis” involved almost the entire world, the United States had recently started to face the consequences of a transition from a long period of abundant domestic energy production (and limited demand) at reasonable prices, and carelessness towards the environmental consequences of such an abuse of energy use, to a decade of scarcity of acceptable “clean fuels”<sup>3</sup>, growing dependence on imported fossil fuels (and growing demand), and inadequate development of alternative energy sources. Moreover, this transition confused American citizens who had come to stop believing that cheap and plentiful energy was a “birthright”. The energy crisis which challenged such a deeply held belief, took place at a time when many Americans were losing faith in key institutions in society, including their political leaders. As Lifset (2014) wrote, a great majority of Americans was unaware that the country imported oil, and when prices rose and oil company profits soared, almost 73 per cent of respondents to a poll believed that there was no shortage of oil, and that the energy crisis was a fraud perpetuated by the government and by oil

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<sup>1</sup> M. Beers, “The OECD Oil Committee and the International Search for Reinforced Energy-Consumer Cooperation, 1972-3”, in E. Bini *et. al* (ed.), *Oil Shock. The 1973 Crisis and its Economic Legacy*, Tauris Academic Studies, 2016, pp. 142-171 (p. 144).

<sup>2</sup> M. Jacobs, *Panic at The Pump*, p. 4.

<sup>3</sup> Clean fuel is energy that is treated with ethanol to produce fewer greenhouse emissions. Clean energy comes from energy sources that are accessible. It produces less pollution than the alternatives and it is used as a substitute for fossil fuels.

companies to manipulate and increase prices.<sup>4</sup> What, in fact, happened was a great participation of consumer governments both in national and international energy politics.

The Nixon administration was therefore forced to find an exit strategy and basically three options were available. First, to reduce U.S. consumption and oil imports, possibly while promoting investments in “alternative” energy sources. Second, to lead an international coalition of consumers able to force a reduction in international oil prices and bring them back in line with American domestic prices. Third, to implement price controls in order to protect U.S. consumers as much as possible from rising gasoline and product costs.<sup>5</sup> Obviously, a combination of all the three options would have been the ideal strategy. Nevertheless, in the short term, American administrations were essentially “left to rely mostly on domestic price controls as a way of shield U.S. consumers as much as possible from expensive oil”.<sup>6</sup>

Under these complicated circumstances, in November 1973, President Nixon unveiled Project Independence, famously calling for the United States to become energy independent by 1980.

Let us set as our national goal, in the spirit of Apollo, with the determination of the Manhattan Project, that by the end of this decade we will have developed the potential to meet our own energy needs without depending on any foreign energy source.

Let us pledge that by 1980, under Project Independence, we shall be able to meet America’s energy needs from America’s own energy resources.<sup>7</sup>

For the rest of the decade, American administrations were ostensibly committed to “energy independence”. Only by freeing itself from reliance on unstable resources of foreign oil, could the country reclaim and maintain its global hegemony, economic vitality, and national security. The choice of the word “independence” was not even casual for the United States. Nixon himself reminded in his speech that “From its beginning 200 years ago, throughout its history, America has made great sacrifices of blood and also of treasure to achieve and maintain its independence”.<sup>8</sup> The new revisited meaning of such an American concept became to maintain and achieve self-sufficiency in energy.

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<sup>4</sup> R. Lifset, *American Energy Policy in the 1970s*, University of Oklahoma Press, 2014, p. 6.

<sup>5</sup> G. Garavini, *The Rise and Fall of OPEC in the Twentieth Century*, Oxford University Press, 2019, p. 231.

<sup>6</sup> Ibidem.

<sup>7</sup> R. Nixon, Address to the Nation About National Energy Policy, Weekly Compilation of Presidential Documents, Presidential Documents, Richard Nixon, 1973. Dir. of publ. Office of the Federal Register. 12 November 1973, No 45, Volume 9, pages 1309-1328. Washington: US Government Printing Office. "The Energy Emergency", p. 1312-1318.

<sup>8</sup> Ibidem.

The plan was certainly ambitious but it would have required many technological advances, vast amounts of money, and a sharp twist away from the new road of environmentalism. Nevertheless, the same recall to the Apollo project and the earlier Manhattan Project wanted to underline the fact that “Whenever the American people are faced with a clear goal and they are challenged to meet it, we can do extraordinary things”.<sup>9</sup>

The American economy had already grown enormously and what was before considered as luxuries had become commodities; therefore, growing demands had bumped up against the limits of available supply, and until new energy sources were provided, Americans had to be prepared to tighten their belts. The Independence agenda, in fact, aimed at saving energy by reducing consumption – through gas rationing, oil shortages, reduced speed limits, and lower number of flights -, by increasing domestic production capacity, limiting imports, and improving Research and Development efforts.

In the case the measures forecasted in the speech revealed to be insufficient and if shortages persisted, the President would have adopted stronger measures. He declared that,

It is only prudent that we be ready to cut the consumption of oil products, such as gasoline, by rationing, or by a fair system of taxation, and consequently, I have directed that contingency plans, if this becomes necessary, be prepared for that purpose.<sup>10</sup>

More specifically, during the speech, Nixon announced some important steps:

First, I am directing that industries and utilities which use coal – which is our most abundant resource – be prevented from converting from coal to oil. (...)

Second, we are allocating reduced quantities of fuel for aircraft (...), to lead to a cutback of more 10 per cent of the number of flights (...).

Third, there will be reductions of approximately 15 per cent in the supply of heating oil for homes and offices and other establishments.

(...) Fourth, I am ordering additional reductions in the consumption of energy by the Federal Government. (...) In addition, I am ordering that all vehicles owned by the Federal Government (...) travel no faster than 50 miles per hour except in emergencies.

Fifth, I am asking the Atomic Energy Commission to speed up the

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<sup>9</sup> R. Nixon, Address to the Nation About National Energy Policy.

<sup>10</sup> Ibidem.

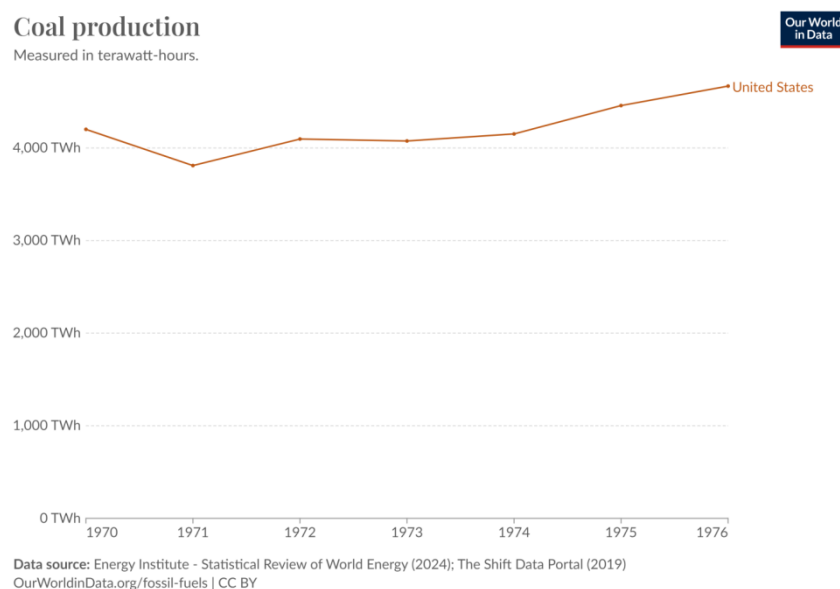
licensing and construction of nuclear plants. (...)

Sixth, I am asking that Governor and mayors reinforce these actions by taking appropriate steps at the Senate and local level. (...). I am also asking Governors to take steps to reduce highway speed limits to 50 miles per hour. This action alone, if it is adopted on a nationwide basis, could save over 200,000 barrels of oil a day (...).<sup>11</sup>

All the actions mentioned by the President were immediately enforceable, but major challenges prevented the reach of their success.

The shift to coal was part of the broader strategy that aimed at boosting domestic energy production and ensuring energy security. The United States, in fact, possessed large quantities of coal which was used primarily for electricity generation and in heavy industries such as steel production. Following the “energy crisis” of early 1970s, the use of coal was pushed up and coal production slightly increased, especially to reduce reliance on foreign oil.

The “energy crisis” also highlighted the vulnerability of the transportation sector to oil supply disruptions. The aviation suffered from oil shortages and, as a consequence, in response to fuel cuts, airlines reduced the number of flights by approximately 10-15 per cent while rescheduling and consolidating routes to operate more efficiently. This included combining lightly populated flights, adjusting flight frequencies, and optimizing schedules to make better use of available fuel.<sup>12</sup>



Available at <https://ourworldindata.org/grapher/coal-production-by-country?time=1970..1976&country=~USA>

<sup>11</sup> R. Nixon, Address to the Nation About National Energy Policy.

<sup>12</sup> For more on fuel shortages and their impact on aviation see R. Simmons et al., “Transportation and Energy”, in E. Coyle and R. Simmons (eds), *Understanding the Global Energy Crisis*, Purdue University Press, 2014, Chapter 9, pp. 215-254.

Remaining in the context of transportation, in January 1974, Congress passed the Emergency Highway Energy Conservation Act, which mandated a national maximum speed limit of 55 mph (88 km/h) on all highways. As anticipated in Nixon's speech, the purpose of the new speed limit was to reduce fuel consumption. The 55 mph limit was projected to save 2.2 to 3 per cent of the nation's fuel consumption; nevertheless, several drivers resisted the change, and compliance was quite inconsistent.<sup>13</sup>

The reduced speed limit was not the only way through which citizens were (on a voluntary basis) called into cooperation to curb energy consumption. In the speech, in fact, Nixon expressed his

supremely [confidence about the fact that] the days and weeks ahead may be a time of some hardship for many of us, they will also be a time of renewed commitment and concentration to the national interest. We have an energy crisis, but there is no crisis of the American spirit. (...) Let us find in this time of national necessity a renewed awareness of our capacities as a people, a deeper sense of our responsibilities as a Nation, and an increased understanding that the measure and the meaning of America has always been determined by the devotion which each of us brings to our duty as citizens of America.

Similarly, Ford supported and initiated policies that aimed at improving energy conservation – such as the Corporate Average Fuel Economy (CAFE) standards and the Strategic Petroleum Reserve (SPR).

In the months following Nixon's address, measures to reduce imports by promoting the shift towards different sources of energy were implemented. During the speech, the President mentioned the important domestic reserves that the country possessed.

We can take heart from the fact that we in the United States have half of the world's known coal reserves. We have huge, untapped sources of natural gas. We have the most advanced nuclear technology known to man. We have oil in our continental shelves. We have oil shale out in the Western part of the United States, and we have all the resources we need to meet the great challenge before

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<sup>13</sup> The 55 mph limit remained in effect for many years, but as the energy crisis eased in the 1980s, pressure grew to repeal the limit. In 1987, Congress allowed states to raise speed limits on rural interstate highways to 65 mph. Finally, in 1995, the National Highway System Designation Act repealed the federal speed limit mandate entirely, allowing states to set their own speed limits once again.

us. Now we must demonstrate the will to meet that challenge.<sup>14</sup>

He further recalled the attention on the necessity to increase the American research and development efforts. To that respect, already in June 1973, Nixon had announced a five year, \$10 billion program to develop better ways of using energy and to explore and develop new energy sources.

The major issues that Nixon did not consider, with respect to all of his proposals, were a lack of time to implement all the measures forecasted in Project Independence, a lack of infinite funds to finance researches and new discoveries to boost domestic production, and the long times required by legislative and legal authorities to meet and administer the national energy program.

The desire of the “Energy self-sufficiency” achievement was present also in some Administrations that followed the one of Nixon and Ford; as such, Carter himself pursued a similar path. However, to measure the results of Project Independence at the end of the 1970s represents a methodological issue. As a matter of facts, in 1980 the Reagan Administration was not in close continuity with Nixon. Therefore, despite the fact that Nixon suggested 1980 as the deadline-year, my study will analyse the years running between 1973 and 1976.

The purpose of this research thesis is to evaluate the process towards Project Independence under the Nixon’s administration (including Ford’s years), investigating the American Presidents’ actions during the years of the so-called “energy crisis” that followed the 1973 O(A)PEC embargo and raised oil prices. In particular, I will examine the practical results showing that actions and intentions were not in synergy to achieve the goals of Project Independence.

The first chapter provides the energy scenario of the early 1970s. First, a study of the global growing energy consumes until the 1970s is provided. Second, I will analyse the role of the United States both as the leading energy producer and the major consumer until the 1970s. Third, the world’s energy actors in the early 1970s will be presented, focusing in particular on the Soviet Union, Middle East and North African (MENA) countries. Finally, the 1973-74 “energy crisis” contexts that led the Nixon Administration to unveil Project Independence will be studied.

The second chapter will open with a detailed analysis of the Nixon’s speech delivered on 7 November 1973, to understand what purposes did he want to achieve through that communication and to what extent were these objectives realistic according to the measures adopted in the following months. There will follow a section on the genesis of the Project Independence and a third paragraph will analyse the speech under an environmental approach. A fourth section will

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<sup>14</sup> R. Nixon, Address to the Nation About National Energy Policy.

examine both the domestic and the international reactions to Nixon's independence agenda; and the final paragraph will provide evidence of the early closing window of the energy independence program.

If in the second chapter I outline the theory behind Project Independence, in the third, and last, chapter I go back to the research question. Therefore, it will describe what President Nixon, and then President Ford, did (or did not) do to support and achieve the objectives pronounced in the Project Independence agenda. The main paragraphs will discuss in which ways (if any) did Project Independence take shape: consumption, domestic production, research and development (both at the domestic and international levels), imports and trade policy. A last paragraph will provide the Administration's self-evaluation. Therefore, the chapter develops in six paragraphs where the promises made by American presidents between 1973 and 1976 will be put into relation with the actual results.

Finally, in the conclusions I will demonstrate that the "energy crisis" of the early 1970s in the United States was not exclusively due to the embargo (which played only a smaller part), but instead, it was a consequence of bad domestic politics. The American response through Project Independence was too ambitious and the large involvement of the government prevented markets from functioning properly. Moreover, domestic challenges and limitations of the Administration running from 1973 to 1976 challenged the achievement of the Project's goals leading it to failure.

## Chapter One

### The American Role in the 1970s World's Energy Market

The 1970s marked a pivotal decade in the global energy landscape with profound shifts in production, consumption and geopolitical dynamics. Energy emerged as a key instrument of foreign policy and, as such, the interplay between energy security and international relations during this period set the stage for ongoing debates about energy dependence and global stability.

Throughout most of the twentieth century, energy markets had several energy sources available such as wood, wind, coal, hydropower, oil, natural gas and, later, solar power and nuclear.

The relevance of oil as key source of primary energy is unquestionable, and it has demonstrated its force and effectiveness as a means of political pressure in situations of particularly high dependency. It has a relatively high energy content compared to other fuels - some 50 per cent more than coal on a weight basis and 170 times more than natural gas on a volume basis.<sup>15</sup> Moreover, it has entered international business as the largest single item in international trade (both as crude oil and as refined products) becoming a strategic commodity involved in politics and conflicts on a local, national, and global scale.<sup>16</sup> In fact, over the years, the international oil industry has welcomed many participants.

Another energy source which revealed its fundamental importance in the international scenario was natural gas: the “orphan of the oil industry”.<sup>17</sup> Natural gas required no complex engineering processes in order to be used. But it was little employed because, to get it into the market, long-distance pipelines were needed. Considered as useless at first, a lot of natural gas was being burned off both in the United States and in the Soviet Union – two rich-in gas countries. As soon as the “oil crisis” in the early 1970s created concerns on national security and dependency on foreign oil, natural gas became the best alternative. Its widespread use in electricity generation, heating, and as industrial fuel spread worldwide since the 1960s. Moreover, to facilitate its transmission, several pipelines were built and Liquefied Natural Gas (LNG) was soon transported by sea to markets without pipeline access, expanding global trade in natural gas.

Since the 1950s, there has been a significant change in the relationship between energy, economy and society. Post-war rapid industrialization, social and economic growth, new technologies – especially in transportation -, widespread electrification and the discovery of large

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<sup>15</sup> P. Stevens, “Oil Markets”, *Oxford Review of Economic Policy*, Vol. 21, No. 1, 2005, pp. 19-42. The author wants to demonstrate what elements in oil markets may attract concern and hence policy intervention. Despite the fact that his focus is over the debate emerged between different explanations from the relatively high oil prices of 2004, the paper analyses the possibility for a structural change in oil markets that would explain policy implications for a high-oil-price world.

<sup>16</sup> Ibid. p. 19.

<sup>17</sup> D. Yergin, *The Prize. The Epic Quest for Oil, Money & Power*, Simon & Schuster UK Ltd, 2012, p. 411.



reserves of oil particularly in the Middle East -, increased global energy consumption. Increasing reliance on petroleum-based products continued through the 1960s and 1970s. Nevertheless, in early 1970s, the sudden rise in energy costs made both energy conservation and efficiency the higher priorities in policy- and economic decision-making. The “energy crisis” led governments to adopt policies to reduce oil dependency, to promote alternative energy sources, and encourage energy conservation efforts.

This chapter will first demonstrate how global energy consumes had been rapidly growing in the twentieth century until the 1970s, because of a developing world and of the exploitation on a wide scale of fossil sources of energy. A second paragraph will zoom on the United States analysing its important role both as energy producer and consumer until early 1970s. Then, this chapter will introduce the other main global actors in the energy field, with a particular focus on the Soviet Union, Middle East and North Africa (MENA) countries in the 1970s. And, finally, the last section will examine the 1973-1974 “energy crisis” period, characterised by skyrocketing prices and cuts in production imposed by O(A)PEC countries, that led national governments to adopt security strategies – such as Project Independence in the United States – to deal with the challenging moment.

### **1. Global energy consumes until the 1970s**

Historically speaking, the increase in world population, together with a higher increase in production, had been supported by energy transitions. In particular, from the 1950s, world population (and therefore, world consumption), has been increasing exponentially. According to Myers (1997), since 1950 “the consumption of grain, beef and mutton has all but tripled and the same is true for water, while paper consumption has risen six times”.<sup>18</sup> With the same logic, the “burning of fossil fuels has grown nearly 4-fold, with carbon emissions likewise”.<sup>19</sup> From 1970, instead, the world’s energy consumption increased at “an annual average of 2.3%”.<sup>20</sup>

The spill-over of new energy sources on the economy and environment depends on its levels of consumption and the techniques of its exploitation.<sup>21</sup> With regard to the use of energy, ordinarily consumption is usually divided among three main sectors: domestic use, industries and transportation. As for the techniques of energy exploitation, three energy systems have replaced each other during the centuries; the first was that of the agrarian societies with traditional sources,

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<sup>18</sup>N. Myers, “Consumption in relation to population, environment and development”, *The Environmentalist*, Vol. 17, 1997, pp. 33-44 (p. 34).

<sup>19</sup>Ibidem.

<sup>20</sup> Ibid., p. 35.

<sup>21</sup>P. Malanima, “Energy, productivity and structural growth. The last two centuries”, *Structural Change and Economic Dynamics*, Vol. 58, 2021, pp. 54-65.

the second was that of modern societies characterised by the use of fossil fuels and the third saw larger use of nuclear energy and renewables.

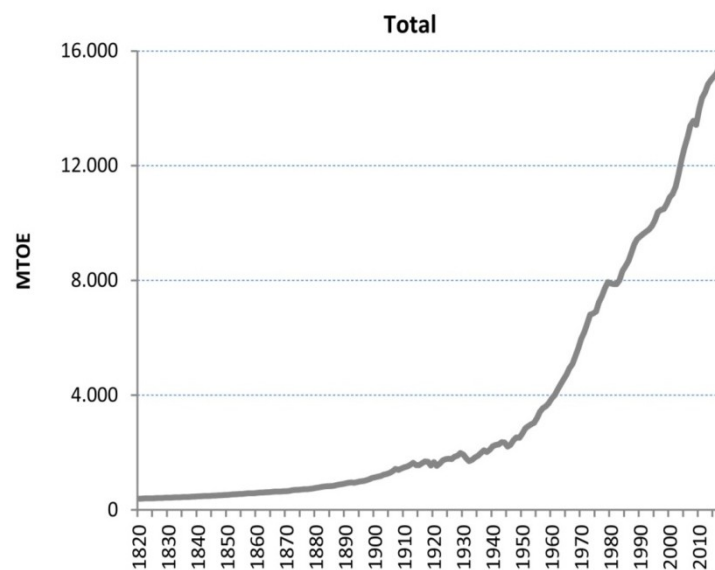
According to Malanima (2021), the energy system of pre-modern agricultural civilisations was mainly based on “food consumed by human beings, fuelwood, and fodder for working animals”<sup>22</sup>, showing an energy supply inelastic to the increase of the needs of a growing population.

The Industrial Revolution in the nineteenth century, marked the first significant shift in energy consumption, with coal becoming the dominant energy source, especially in Europe and North America. Coal was salient due to its energy density and efficiency in powering steam engines and industrial machinery. Until mid-twentieth century, coal accounted for more than half of global energy consumption.

The traditional system of energy reigned until the end of the nineteenth century, when oil began to supplant coal, especially in transportation and industry. After World War II, the global economy expanded and petroleum became crucial overtaking coal as the world’s leading energy source. Due to its generous availability, the world suddenly became heavily dependent on oil and fossil fuels.

At the same time, natural gas began to rise in importance, especially for residential heating and electricity generation. By the 1960s, to ease its transmission worldwide, natural gas pipelines were being built in North America, the Soviet Union and Europe, further increasing its role in the global energy mix.

As the image below shows, total consumption in 1820-2018 grew exponentially, with the top rate of increase (more than 4 per cent per year), between 1950 and 1973.



Source: P. Malanima, “Energy, productivity and structural growth. The last two centuries”, p.56. World total Energy consumption 1820-2018 in Millions of Tons of Oil Equivalent (MTOE).

<sup>22</sup> P. Malanima, “Energy, productivity and structural growth”, p. 55.

As a consequence, the introduction of the fossil system of energy overcame the share of the traditional system around 1900. Based on Malanima,

the new, non-Carbon or non-organic system of energy was born in the late 1880s, with the introduction of hydroelectricity; strengthened its rising path in the late 1950s, with the exploitation of nuclear power, and was progressing fast in the first decades of the twentieth century with the rise of renewables.<sup>23</sup>

The rapid growth in energy consumption was not evenly distributed. Obviously, industrialised countries consumed vast amount of energy, while developing nations had lower per capita consumption. Nevertheless, demand for energy grew across many countries as people get richer and populations increase.

By early 1950s, with the “tally of elephants discovered in the Middle East”<sup>24</sup>, the oil industry had clearly entered a new era where a billion barrels or so no longer made much difference. From early 1950s to the end of the 1960s, the world oil market was dominated by exceptionally rapid growth. During those two decades, oil prices reached their lowest level and the supply surplus continued to mount. As such, oil consumption overtook coal consumption in the 1960s, thanks largely to the expansion of rich countries’ road transport. Consumption grew at a pace that simply would not have been believable at the beginning of the post-war era. Yet, as rapidly as it grew, the availability of supplies grew even more rapidly. The increase in world oil production was massive: “from 8.7 million barrels per day in 1948 to 42 million barrels per day in 1972.”<sup>25</sup>

Huge oil availability was also a consequence of the aggressive marketing by the Soviet Union, which stepped up its drive to sell oil in the West, reducing prices and making barter deals. Nevertheless, in the 1970s, the Soviet Union provided also large quantities of gas, which, since the post-war period, was used mainly for household heating and cooking, and for industrial processes.

The rapid increase in total energy consumption between the 1950s and the 1970s, has been accompanied by radical structural changes in the shares of different fuels.<sup>26</sup>

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<sup>23</sup>P. Malanima, “Energy, productivity and structural growth.”, p. 56.

<sup>24</sup>D. Yergin, *The Prize*, p. 481. In the oil industry parlance, a giant oil field is called an “elephant”.

<sup>25</sup>D. Yergin, *The Prize*, p. 481. While major growth in oil production was registered in Africa, by far the most staggering part of the increase was in the new center of gravity, the Middle East.

<sup>26</sup>R. Krymm, “The World Energy Context”, *International Atomic Energy Agency*, no date, pp. 1-6. Available at <https://www.iaea.org/sites/default/files/publications/magazines/bulletin/bull15-5/15504000409.pdf>

	1950	1960	1970	1980	1990	2000
Solid Fuels	60.4	50	33.6	24.6	19.7	17.2
Liquid Fuels	24.6	30	39.6	42.4	42.1	34.5
Natural Gas	10.4	14.3	19.9	20.3	15.8	13.8
Hydro	4.6	5.7	6.5	6	5.8	6.9
Nuclear	-	-	0.4	6.7	16.6	27.6

Source: R. Krymm, "The World Energy Context", *International Atomic Energy Agency*.

The ratio of solid to gas and liquid fuels, which was close to 2/3 in 1950 was reversed by 1970, so that petroleum and natural gas accounted for more than 60 per cent of total energy consumption. The rise of liquid and gaseous fuels was mainly based on low pricing policies and was made possible by the development and exploitation of extremely large low cost reserves in the Middle East and North Africa.<sup>27</sup>

After 1970, oil consumption rose steadily both in rich and poor countries and, as Malanima (2014) reported, by the end of the twentieth century

per capita energy consumption, on a world scale, was about 50,000 kcal per day (...). About 82% of this consumption was represented by organic fossil sources [coal, oil and natural gas]. Nuclear energy represented 6% and hydroelectricity 2%. This 8% was the non organic contribution to the energy balance. The remaining 12% consisted of biomass, i.e. organic vegetable sources.<sup>28</sup>

The reliance on finite, geopolitically sensitive resources culminated in the energy crisis of the early 1970s. The 1973-1974 "oil crisis" exposed the vulnerabilities of the fossil-fuel-based energy system, underlining especially the global economic dependency on oil from the Middle East.

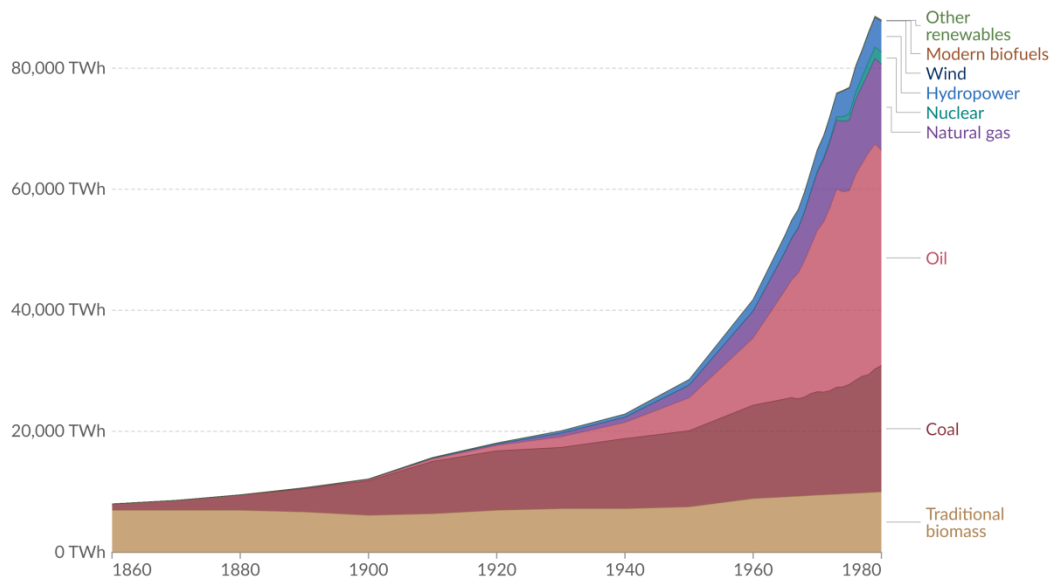
<sup>27</sup> R. Krymm, "The World Energy Context", p. 4.

<sup>28</sup> P. Malanima, "Energy in History", in M. Agnoletti and S. Neri Serneri (eds.), *The Basic Environmental History*, Vol. 4, Florence, Italy, Springer, 2014, pp.1-29.

## Global primary energy consumption by source

Primary energy<sup>1</sup> is based on the substitution method<sup>2</sup> and measured in terawatt-hours<sup>3</sup>.

Our World  
in Data



Data source: Energy Institute - Statistical Review of World Energy (2024); Smil (2017)

OurWorldinData.org/energy | CC BY

Note: In the absence of more recent data, traditional biomass is assumed constant since 2015.

1. **Primary energy:** Primary energy is the energy available as resources – such as the fuels burnt in power plants – before it has been transformed. This relates to the coal before it has been burned, the uranium, or the barrels of oil. Primary energy includes energy that the end user needs, in the form of electricity, transport and heating, plus inefficiencies and energy that is lost when raw resources are transformed into a usable form. You can read more on the different ways of measuring energy in our article.

2. **Substitution method:** The 'substitution method' is used by researchers to correct primary energy consumption for efficiency losses experienced by fossil fuels. It tries to adjust non-fossil energy sources to the inputs that would be needed if it was generated from fossil fuels. It assumes that wind and solar electricity is as inefficient as coal or gas. To do this, energy generation from non-fossil sources are divided by a standard 'thermal efficiency factor' – typically around 0.4. Nuclear power is also adjusted despite it also experiencing thermal losses in a power plant. Since it's reported in terms of electricity output, we need to do this adjustment to calculate its equivalent input value. You can read more about this adjustment in our article.

3. **Watt-hour:** A watt-hour is the energy delivered by one watt of power for one hour. Since one watt is equivalent to one joule per second, a watt-hour is equivalent to 3600 joules of energy. Metric prefixes are used for multiples of the unit, usually: - kilowatt-hours (kWh), or a thousand watt-hours. - Megawatt-hours (MWh), or a million watt-hours. - Gigawatt-hours (GWh), or a billion watt-hours. - Terawatt-hours (TWh), or a trillion watt-hours.

Available at: <https://ourworldindata.org/energy-production-consumption>

## 2. The United States as the main energy producer and consumer until the 1970s

In the United States, commercial oil production started in the mid-19th century when the dispossession of Native American tribes led to the conversion of land into private property; and the exploitation of natural resources paved the way to the modern oil industry. The first major oil discovery in America dates back to 1859 when the first modern oil well (the “Drake Well”) was drilled by Edwin Drake in Titusville, Pennsylvania. Due to the successful extraction of oil from this well, the American petroleum industry became increasingly populated: further discoveries took place in California, Texas, Oklahoma, Louisiana and other southwestern states a few decades later. As soon as 1866, the U.S. government understood the prominent potential of oil as a source for national wealth in the American economy.<sup>29</sup>

<sup>29</sup> V. McFarland, *Oil Powers. A History of the U.S.-Saudi Alliance*, Columbia University Press, 2020, p.31-33. The author examines how oil wealth shapes the behaviour of states and influences international relations and analyses the

In 1900 the Standard Oil of New Jersey (now Exxon), property of John D. Rockefeller, dominated the industry and became a real monopoly absorbing or driving to bankruptcy its competitors.<sup>30</sup> The U.S. covered the role of the world's largest oil producer by far, and even when the Standard Oil was split in antitrust suit in 1911, its successors - Standard Oil of New Jersey (now Exxon), New York (now Mobil), California (now Chevron), and others - remained the biggest companies.<sup>31</sup>

Back in the past, "The quest by America's oil giants and their rivals for new supplies of crude oil through control of foreign concessions began in the 1910s and 1920s".<sup>32</sup> Even though American oil-producing firms in the 1870s started what was later defined "multinational" or "transnational" enterprise, when in 1911 a U.S. Supreme Court declared the Standard Oil trust a monopoly, U.S. firms entered Mexico - where more oil than anywhere else in the world was being pumped.<sup>33</sup> Mexican oil output started slowly decreasing around 1920, leaving the primate to Oklahoma and Texas fields. As far as the Mexican impasse is concerned, and stated that it was endangering the position of the international oil companies there, other oil fields became very attractive.<sup>34</sup> In particular, U.S. firms were interested into Colombia and Venezuela, and into Iraq and the shores of the Persian Gulf.

As said, the need to control oil supplies dates back to the 1920s when new corporations entered the international oil business letting supplies growing faster than demand for oil. In 1928, the leading three enterprises (Jersey Standard, Royal Dutch/Shell and Anglo-Persian) tried to balance the market by joining with other firms to develop new oil discoveries in Iraq. The group "decided to act in concert within a 'red line' area that included almost all the former Ottoman Empire".<sup>35</sup> The "red line agreement" is usually perceived as the first corporate attempt to control oil supplies, along with the Achnacarry Accord that brought the three leaders in an effort "to stabilise world markets, to minimise competition, and to organise the market".<sup>36</sup> Notwithstanding, they found that they could not easily regulate the world's oil industry because of economic and political factors outside their control.<sup>37</sup>

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strategies employed by oil-rich nations to leverage their resources for political and economic gain, as well as the implications of oil dependency for both producing and consuming countries.

<sup>30</sup> D. Yergin, *The Prize*. For oil discoveries in North America see Part I, p.1-148.

<sup>31</sup> V. McFarland, *Oil Powers*, p.32.

<sup>32</sup> R. Vitalis, *America's Kingdom. Mythmaking on the Saudi Oil Frontier*, Verso, 2009, p. 48.

<sup>33</sup> *Ibid.*, p. 49.

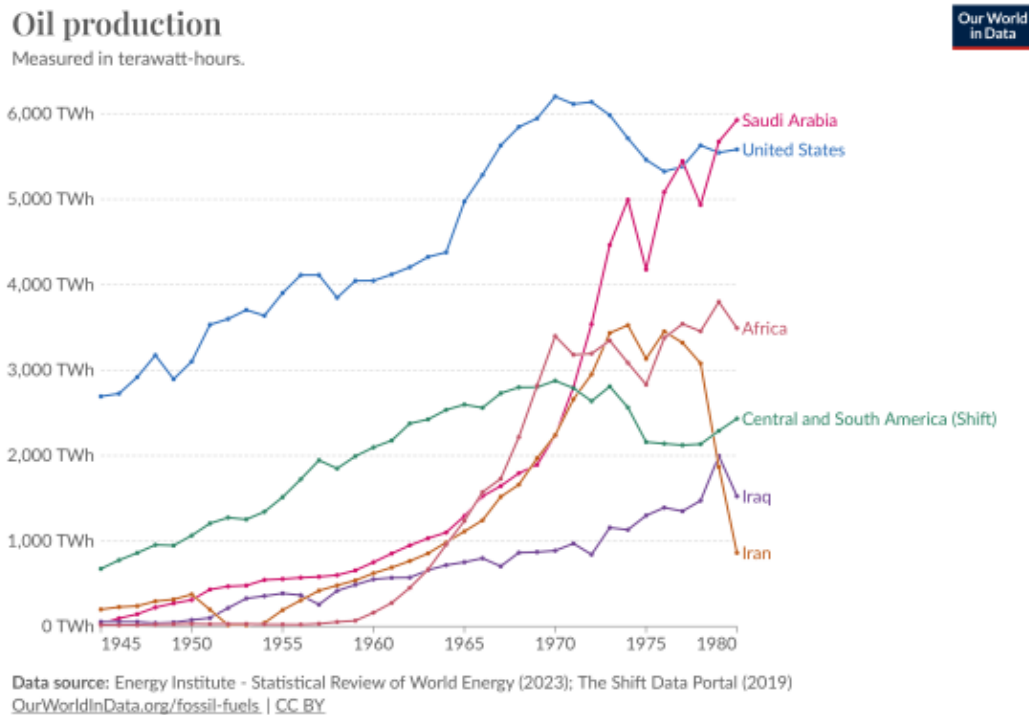
<sup>34</sup> G. Garavini, *The Rise and Fall of OPEC*, p.18.

<sup>35</sup> M. Wilkins, "The Oil Companies in Perspective", *Daedalus*, Vol. 104, No. 4, 1975, pp. 159-178.

<sup>36</sup> *Ibid.*, p. 160. According to the author, out of regard to Jersey Standard's concern over the antitrust laws, the American market was explicitly excluded from these arrangements. For deeper insights about the "Red Line" and "Achnacarry" see also G. Garavini, *The Rise and Fall of OPEC in the Twentieth Century*, Oxford University Press, 2019, p. 22-38.

<sup>37</sup> *Ibidem*. Among the reasons why multinational oil companies were not able to enforce their provisions we can mention: the oil discoveries in East Texas in 1930-31 that let oil price fall abruptly, the American oil tariff of 1932 that redirected from the U.S. to Europe the Venezuelan oil discoveries of the twenties; Anglo-Persian's new oil agreement in Iran in 1933 which demonstrated that host nations can cancel oil agreements; the entry of Gulf, Standard Oil of

After World War I, the U.S. was the major leader in the international oil market by far and large. In that moment, it was also “the first nation in the world where automobile ownership expanded beyond the rich to include middle-class and even working-class Americans”.<sup>38</sup> The growth of the American automobile industry accelerated the rise of the U.S. as a global power and Henry Ford’s Ford Motor Company reputation reached the Arabian Peninsula even prior the U.S.-Saudi relationship began.



As the graphic above shows, World War II created new opportunities for the United States to expand its global reach. Oil, once again, played an important role to develop air power and during the war no other nation could reach American oil power. In fact, the U.S. was producing twice as much oil as the rest of the world combined.<sup>39</sup> The wartime dejection about America’s recoverable oil resources gave rise to what became known as the “conservation theory”.<sup>40</sup> The theory said that the American government had to control and develop “extraterritorial” (foreign) oil reserves in order to reduce the drain on domestic supplies, conserve them for the future, and thus guarantee America’s security. Moreover, U.S. policy-makers arrived to the conclusion that the Middle East

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California, and the Texas Company into Middle Eastern concessions; the government expropriations in Bolivia (1937) and Mexico (1938); and host-government measures in developed and less-developed countries from import restraints to government-run cartels.

<sup>38</sup>V. McFarland, *Oil Powers*, p.33.

<sup>39</sup>Ibid., p.36.

<sup>40</sup>D. Yergin, *The Prize*, p. 377.

was central for its needs. This marked the end of “energy independence”, as the United States started to import more oil, especially in peacetime, in order to preserve domestic resources for harder times. In post-war years, technology opened new domestic frontiers for exploration and development. In particular, drilling and offshore production were increasing energy availability.

The American political economy of energy naturally falls into three periods, corresponding to conditions of energy supply and price that affected issues of public policy. The first period runs from 1945 through 1958 and saw the U.S. economy shifted from its primary dependence on solid fuels to fluid fuels. The price of coal fell, adjusted for inflation, by 7.4 per cent but its share of the domestic energy market shrunk from 43 to 22 per cent. On the other hand, demand for natural gas boomed largely contributing to energy consumption (from 14 to 30 per cent). Domestic and foreign oil shared the rest of coal’s loss. Even though in the late 1940s an oil shortage drove oil prices up sharply, the real price declined during the 1950s thanks to domestic reserves able to outstrip demand.<sup>41</sup> In those years, President Eisenhower had also imposed an oil-import quota that resulted in higher prices in the United States than in the rest of the world.

The second period, from 1959 to 1968, was a decade of “stasis” in energy policy, and apparently also in energy markets. Natural gas, oil and coal market shares and prices were quite stable, although natural gas floated higher. However, this stability was owed to public policy, and business and government were preoccupied with the tactical issues of administering it: import quotas and “pro-rationing” for crude oil, cost-based rate regulation for natural gas, and a weak pilot-plant program for coal-derived synthetic fuels. Meanwhile, economic growth and domestic depletion eroded the surplus. As a consequence, the United States started to import modest quantities of petroleum from the Middle East, Canada and other non-OPEC countries. Despite the fact that the U.S. was still producing the biggest part of petroleum consumption domestically, facing with a looming gasoline shortage, in April 1973, President Nixon announced he was ending the Mandatory Import Program.<sup>42</sup> Oil imports that represented about 30 per cent of American consumption in 1973, increased to nearly 50 per cent of consumption within four years.

The third period, from 1969 to 1980, saw the depletion of cheap domestic reserves of petroleum and natural gas. As soon as the Arab countries of OPEC started the embargo in October 1973, also the

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<sup>41</sup> R. Vietor, *Energy Policy in America since 1945: A Study of Business-Government relations*, Cambridge University Press, 1984, p.3.

[https://books.google.it/books?hl=it&lr=&id=baNCePrxpSkC&oi=fnd&pg=PR10&dq=Richard+Vietor%27s+%22Energy+Policy+in+America+Since+1945%22&ots=qNQAI8DH6&sig=DgcrVqyV4iLjPYGN7jtSKs6hEe4&redir\\_esc=y#v=onepage&q&f=false](https://books.google.it/books?hl=it&lr=&id=baNCePrxpSkC&oi=fnd&pg=PR10&dq=Richard+Vietor%27s+%22Energy+Policy+in+America+Since+1945%22&ots=qNQAI8DH6&sig=DgcrVqyV4iLjPYGN7jtSKs6hEe4&redir_esc=y#v=onepage&q&f=false)

<sup>42</sup> It is important to notice that in that occasion Nixon rejected recommendations to implement conservation efforts and develop fuel alternatives – two main points of Project Independence.



entire world suffered from some of the embargo side effects.<sup>43</sup> The early 1970s are, in fact, remembered for long lines of cars queuing in front of filling stations, or signs saying “sorry, no gas” (a side effect of bad domestic politics), new speed limits and car-free Sundays (mainly in Europe).<sup>44</sup>



Short documentary: Long lines, no gas: 1979's odd-even gas rationing.

Available at

[https://www.google.it/url?sa=i&url=https://m.youtube.com/watch?v=5\\_E9HWSomyk&psig=AOvVaw3UI2HP7ZXaaL1skJRygQWi&ust=1711960326390000&source=images&cd=vfe&opi=89978449&ved=0CBQQjhxqFwoTCND\\_wLyMnoUDFQAAAAAdAAAAABAE](https://www.google.it/url?sa=i&url=https://m.youtube.com/watch?v=5_E9HWSomyk&psig=AOvVaw3UI2HP7ZXaaL1skJRygQWi&ust=1711960326390000&source=images&cd=vfe&opi=89978449&ved=0CBQQjhxqFwoTCND_wLyMnoUDFQAAAAAdAAAAABAE)

In the United States, the national energy policy changed and adapted to redistribute oil revenues, raise the price of natural gas, develop synthetic fuels, utilize coal, and finally, curb demand. The new priorities of American Administrations starting from Nixon's (and ending with Carter's), tried to implement solid and effective countermeasures: from conservation to independence, from renewables to nuclear energy sources.

According to McFarland (2020), in March 1971, the American spare capacity fell to zero. For many years the American oil industry was backed up by the Texas Railroad Commission (TRC) which was able to provide a margin of safety in responding to supply disruptions, such as the 1951-53 Iranian nationalisation crisis and the 1967 Arab Israeli War.<sup>45</sup> Clearly, with the end of that shield, the United States and, subsequently, its allies became far more vulnerable to any cutoff of foreign oil.<sup>46</sup>

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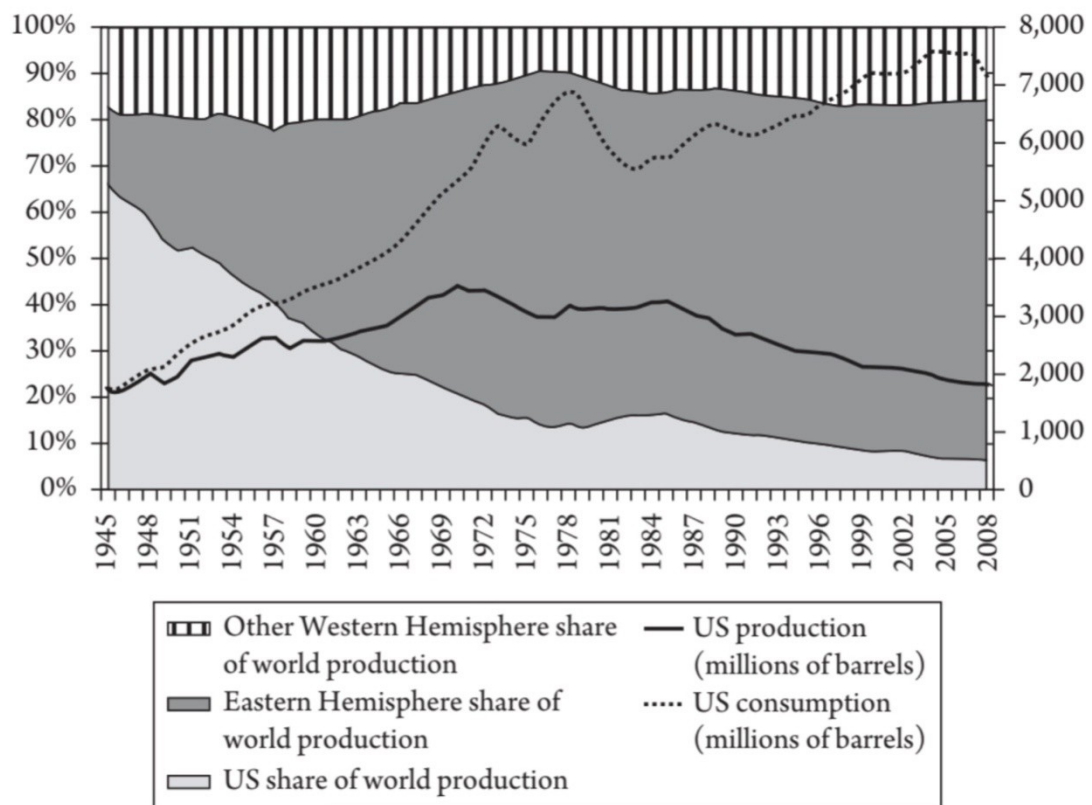
<sup>43</sup>President Nixon's Energy Policy Address, *Richard Nixon Foundation*, 25 November 1973. During his speech, the President underlined the fact that “shortages in Europe, for example, are far more critical than they are in the United States. Already seven European nations have posed a ban on Sunday driving. Fortunately, the United States is not as dependent upon Middle Eastern oil as many other nations: we will not have a ban on Sunday driving”. However, American citizens were asked to reduce heating, avoid using Christmas decorations, respect new speed limits, and were forced to queue to fill in tanks.

<sup>44</sup>C. Whitney, “4 European Countries and West Berlin Spend a Car-Free Sunday”, *The New York Times*, 26 November 1973. Even though the Nixon administration never implemented Car-free Sundays, it approved stricter speed limits.

<sup>45</sup>V. McFarland, *Oil Powers*, p. 107.

<sup>46</sup>Ibidem. According to Graf, when in January 1970 the U.S. delegation to the Organization for the Economic Cooperation and Development (OECD) warned other member States that the American cushion could no longer help them in extreme circumstances (like the recent 1967 embargo), Europeans companies and governments backed down from their confrontation with Libya. (R. Graf, *Oil and Sovereignty : Petro-Knowledge and Energy Policy in the United States and Western Europe in the 1970s*, New York, Berghahn Books, 2018).

If taken into consideration on its own, the decline in U.S. production was relatively modest, even though the United States still remained the world's biggest producer. Production fell from 11.3 million barrels per day (mdb) in 1970 to 10.9 mbd in 1973 (something like a 3 per cent total decline).<sup>47</sup> The decline, however, needs to be taken into more serious account when compared to the ongoing rapid growth in U.S. oil consumption. As McFarland (2020) reported, “from 12.6 mbd in 1967, it rose almost 38 per cent to 17.3 mbd in 1973”, for an average consumption of more than three gallons of crude oil per day.<sup>48</sup> He argued that the reasons why Americans consumed that much were because they owned bigger cars and drove more than people in other countries, and also because they lived in large, detached houses that required more energy to heat, cool, and illuminate.<sup>49</sup>



The US and the world oil economy, 1945–2010

Source: DeGolyer and MacNaughton, *Twentieth-Century Petroleum Statistics* (2009).

<sup>47</sup>V. McFarland, *Oil Powers*, p.108. The BP, *Statistical Review of World Energy, 1951-2011*, in 1971, the US produced 469.9 million tons of oil (9.4Mb/d) but only added another 0.7 million in the following year. Consumption, by contrast, hit 719.3 million (14.5Mb/d) in 1971 and demand grew by another 56.9 million in 1972. US oil output was no longer growing but demand was increasing at more than 5% per year. In 1973, the gap widened even further with consumption hitting 814.7 million (16.3Mb/d) and output falling to 456.2 million (9.2Mb/d).

<sup>48</sup>Ibidem.

<sup>49</sup>Ibidem.

As said, by 1971, the U.S. imported a quarter of domestic consumption (twice what they had been in 1950) and officially became dependent on foreign oil.<sup>50</sup> With respect to Japan and Europe, the U.S. was clearly less dependent on the Middle East but still it could not be indifferent to the oil economy of the Middle East, and policy-makers recognised that America's direct dependence on Middle Eastern oil was destined to increase. As Sargent (2015) wrote, "experts projected that the United States would be importing half of its oil from the Middle East before the decade was out".<sup>51</sup>

The inability of the American government to deal with the challenging situation represented by the curb in oil supplies and the petroleum price increase, became even more clear when the U.S. simply accepted the higher prices imposed by OPEC, proving unable to do nothing more. As McFarland reported, "The U.S. government had no coherent strategy for dealing with the producers' demands".<sup>52</sup>

According to Yergin (2012), "in the United States, the issue of energy security often gets framed in terms of energy independence".<sup>53</sup> Conservation might have, in fact, mitigated America's reliance on foreign oil but it certainly could not prevent it. The "energy independence" was a political mantra that finally had been concretized by President Nixon in his November 1973 "Project Independence" energy policy speech. That expression not only was quite often repeated in the speech (despite Nixon's speechwriters cut the reference to 'independence' several times in vain as the President kept putting it back), but it also remained part of the political vocabulary ever since.<sup>54</sup> In fact, the 1970s U.S. presidents (Nixon, Ford and Carter) all insisted on promoting plans for regaining "energy independence". They were also probably guided by the pessimistic forecasts of oil scarcity that soon associated oil to the concept of power.<sup>55</sup>

During the five years following the 1973 embargo, Congress and three successive administrations responded with an extensive set of laws and regulations based on the expectation that the solution laid in a stronger intervention by the federal government.

In any case, as Basosi (2023) explained, the main problem of U.S. energy policy in early 190s, was that the number of national consumers was constantly increasing and it became very difficult to

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<sup>50</sup>V. McFarland, *Oil Powers*, p.136. In the 1950s, U.S. policy-makers undertook protectionist measures, in the form of oil import quotas, following a global supply glut. In 1969, the then Secretary of State Shultz proposed replacing the import quota with a tariff to protect domestic producers while allowing imports to flow in expanded quantities. On the contrary, Kissinger, who was more attentive to US's allies interests, warned that by insulating the U.S. from disruptions to Middle Eastern supply would convey a lack of concern about NATO's vulnerability. (p.137).

<sup>51</sup>D. Sargent, *A Superpower Transformed: The Remaking of American Foreign Relations in the 1970s*, Oxford University Press, 2015, p. 137.

<sup>52</sup> V. McFarland, *Oil Powers*, p. 133.

<sup>53</sup> D. Yergin, *The Quest. Energy, Security, and the Remaking of the Modern World*, Penguin Books, 2012, p. 269.

<sup>54</sup> *Ibid.*, p. 270.

<sup>55</sup> S. Roger, "Oil Scarcity Ideology in U.S. Foreign Policy, 1908-97", *Security Studies*, Vol. 25, No, 2, 2016, pp.214-257. See also Alan Greenspan's thoughts about oil scarcity and the rise of energy prices remarked before the Economic Club of Chicago on 28 June 2001; and Michael Klare, *Blood and Oil: The Dangers and Consequences of America's Growing Dependency on Imported Petroleum*, New York, 2004.

find huge energy quantities.<sup>56</sup> For the same reasons, as Priest (2016) wrote, “Op-ed pieces released in 2013, on the fortieth anniversary of the 1973 ‘oil shock’, replayed the dirge about how the US, after 40 years, is still dangerously dependent on foreign oil, with differing opinions about whether we can ‘frac’ our way to independence or find deliverance only through a radical shift to ‘renewable’ energy.”<sup>57</sup>

### 3. Global Energy Actors in the 1970s

In the years until the 1970s, energy became a top priority for many countries. Starting from the United States which, as previously outlined, was still covering the role of major producer of oil and gas globally, other countries, such as the Soviet Union, some North African nations, and Persian Gulf countries<sup>58</sup>, emerged gaining more and more relevance as energy producers from the end of the 1950s through the 1970s. Moreover, as more and more producing countries started nationalizing their oil production and trade, both in North Africa and the Middle East, the “Western-controlled global energy companies started losing direct access to petroleum sources”,<sup>59</sup> fuelling fears that undermined the security of Western energy supply.

By 1939 the big three companies (Standard Oil of New Jersey, later Exxon; Royal Dutch Shell; and Anglo-Persian Oil Company, later BP) were joint in the oil industry by Standard Oil of California, the Texas Company, Socony-Vacuum (now Mobil), and Gulf becoming the seven giants. Since finding new oil sources used to take time, “by 1952 the seven major companies were still producing 90 per cent of the crude oil and marketing 75 per cent of the oil products outside North America and the Communist countries”.<sup>60</sup>

As Garavini (2019) reported, “Global oil output grew by four times between 1950 and the end of the 1960s; by 1968 oil and gas had overtaken coal and accounted for 60 percent of global commercial energy consumption”.<sup>61</sup>

While the Great Acceleration of fossil fuel consumption was taking place, an oligopoly of mainly Anglo-American companies had become dominant over global petroleum production and exports. But, with time passing, the giants’ preeminence was even more difficult to maintain because new firms were joining the market and by 1968, the majors were producing a little more

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<sup>56</sup>S. Roger, “Oil Scarcity Ideology in U.S. Foreign Policy, p.165. See also D. Yergin, “Us Energy Policy: Transition to What?”, *The World Today*, Vol. 35, No. 3, 1979, pp. 81-91.

<sup>57</sup>T. Priest, “Shifting Sands”, p. 118.

<sup>58</sup> In the 1970s, Europe imported almost 80 per cent of its oil consumption from the Middle East and North Africa and a further 7 per cent from the Eastern bloc. Despite these large amounts of energy imports, Europeans did not show concern about their large reliance on foreign supplies. See J. Perović, “The Soviet Union’s Rise as an International Energy Power: A Short History”, in J. Perović (eds.), *Cold War Energy. A Transnational History of Soviet Oil and Gas*, Palgrave Macmillan, 2018, pp. 1-43, (p.15).

<sup>59</sup>J. Perović, “The Soviet Union’s Rise as an International Energy Power”, p. 13-14.

<sup>60</sup>M. Wilkins., p. 162.

<sup>61</sup> G. Garavini, *The Rise and Fall of OPEC*, p. 88.

than 75 per cent of the crude oil outside North America and the Communist countries.<sup>62</sup> As such, the late 1960s and early 1970s were the turning point for the global energy market.

The domestic U.S. oil industry run out of surplus capacity, meaning that the “security margin” upon which the Western world had depended was gone.<sup>63</sup> During that same period, “free world oil demand had grown by 21 million barrels per day” while “production in the Middle East (including North Africa) had grown by 13 million barrels per day” meaning that “two-thirds of the huge increase in oil consumption was being satisfied by the wells in the Middle East”<sup>64</sup>, and the majority of the rest was provided by wells in North Africa and in the Soviet Union. These countries, moreover, were taking more control over their own natural resources while raising the price of petroleum reaching the economic boom by early 1970s.

The enlargement of more integrated corporate operations failed to maintain the price of oil: with growing supplies the market price dropped. Due to its cheapness, Western Europe and Japan became highly dependent on foreign oil imports, and because of both its desirability compared to coal, and its cheapness, also in the United States reliance on it grew rapidly.

As the graphic below shows, in early 1970s, the second leading oil producing country was the Soviet Union. In the post-Stalinist period of the so-called Cold War, Nikita Khrushchev – the seventh Soviet Premier -, focused on the country’s oil and gas resources and chemical materials as significant assets for modernizing the Soviet economy.<sup>65</sup> Khrushchev’s quest for an effective strategy to use domestic energy as means towards modernization was encapsulated in his “petrochemical project”,<sup>66</sup> that aimed at the construction of institutional and economic measures to

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<sup>62</sup>G. Garavini, *The Rise and Fall of OPEC*. The author also stresses that “every part of the oil industry - concession areas, proven reserves, production, refining capacity, tanker capacity, and product marketing - the percentage held by the top seven companies declined in the fifties and sixties”.

<sup>63</sup> Ibid. In the period from 1957 to 1963, the United States had totalled about 4 million barrels per day as surplus capacity. By 1970, it remained only a million barrel per day. Therefore, with heavier cars that were now carrying more extras like air-conditioning and were now running more miles as people started travelling more by car, not to mention petroleum products burned in factories, power plants and homes, the U.S. had to turn to the world oil market to satisfy the demand.

<sup>64</sup>D. Yergin, *The Prize*, p. 550.

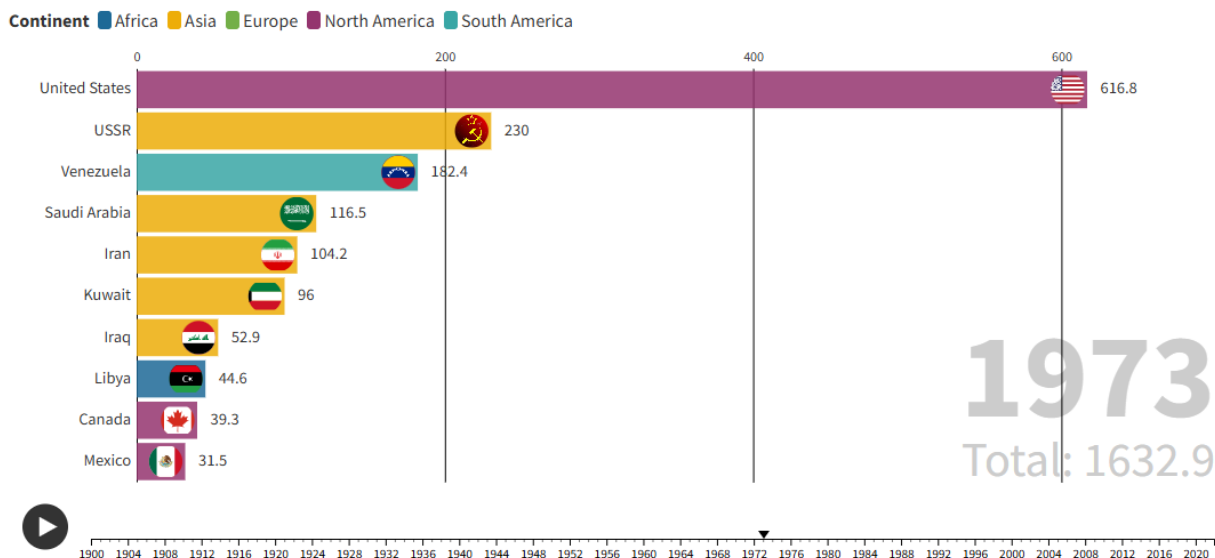
<sup>65</sup> V. Nekrasov, “Decision-Making in the Soviet Energy Sector in Post-Stalinist Times: The Failure of Khrushchev’s Economic Modernization Strategy”, in J. Perović (eds.), *Cold War Energy. A Transnational History of Soviet Oil and Gas*, Palgrave Macmillan, 2018, pp. 165-199, (p.165). In the immediate period following Stalin’s death, there was a consensus among the Soviet collective leadership (Nikita Khrushchev, Georgii Malenkov, and Viacheslav Molotov) as to the priorities for the development of the country’s fuel and energy complex. Debates over coal and hydroelectricity vs the introduction of greater diversity in the fuel mix (petroleum, gas, hydropower, and coal), made it difficult for the leading party to decide over an energy strategy.

<sup>66</sup>Ibid., p. 170. Khrushchev’s “petrochemical project” was quite ambitious and represents an example of an attempt to match the production and use of oil and gas resources and chemical materials in the leading capitalism countries. It forecasted the construction of 140 new enterprises and the reconstruction of a further 130 existing plants between 1959 and 1965. The goal was to increase natural gas production from 3 to 51 per cent, while reducing the share of coal from 60 to 43 per cent. Petroleum extraction was to be increased reaching 230-240 million tons in 1965.

leverage the country's hydrocarbon resources and chemical materials. The final purpose was to lead the population toward a “bright communist future”.<sup>67</sup>

## Leading oil producing countries, 1900-2022

Cumulative oil production measured in exajoules.



Source: Our World in Data  
Boston University Institute for Global Sustainability | visualizingenergy.org | CC BY 4.0

visualizingEnergy

By the beginning of the 1960s, some concrete results had been achieved from Khrushchev's project. The allocation of capital investment spending defined the priorities for a structural transformation of the economy and the Soviets reached the second position globally after the U.S.<sup>68</sup> – surpassing Venezuela in oil production. Some new chemical enterprises had been built to accelerate development of chemical industry and the oil and gas complex, new centres of chemical and petroleum refining industries had been created both in the Baltic and Volga regions, Siberia, and Central Asia. As such, during the XXII Congress of the Communist Party, Khrushchev proudly reported that oil and gas resources covered 42 per cent of the country's fuel balance.

But, in the sphere of energy politics, the Soviet decision-making was still driven by a complex interplay of domestic, regional, and global factors. What is more, the development of the chemical industry and the oil and gas complex encountered a series of infrastructural and institutional problems. The “petrochemical project”, in fact, was not backed up by rational technical and

<sup>67</sup> V. Nekrasov, “Decision-Making in the Soviet Energy Sector”, p. 166. These measures eventually failed. The author argues that, far from being able to dictate policy, Khrushchev had to manage lobby groups that opposed to his “petrochemical project”.

<sup>68</sup> J. Perović, “The Soviet Union's Rise as an International Energy Power”, p.2-3 . The author explains also that, despite the fact that by the 1960s many European countries – with Italy being the world's largest purchaser of Soviet oil – started to import Soviet oil, given high global surplus supply of oil at the time, it was easy for consuming countries to switch among suppliers.

economic evidence to determine the efficiency performance of the new energy resources and chemical materials.<sup>69</sup> The Soviet Union needed to produce great quantities of energy not only to fuel modernization and industrialization, but also to sustain its ambitions as a great power.<sup>70</sup> To achieve a major role internationally, the Soviet Union had to increase openness of its economy while stimulating foreign trade and international cooperation.

At the domestic level, Khrushchev opposed to an accelerated construction of oil and gas pipelines because he did not want the Soviet Union to become a mere supplier of raw materials to world markets. He criticized that raw materials were exported to capitalist countries where they were turned into finished products and sold at higher prices. What, instead, he wanted was to export packages that could have been sold as finished products. In the second half of the 1960s, the Soviet leader gave priority to intensifying the extraction of oil and natural gas (leaving aside the chemical industry), with a modest increase in the production and imports of equipment for the petrochemical industry, including large-diameter pipes.

At the international level, as soon as the embargo was imposed by OAPEC countries as a protest against the support given to Israel during the Yom Kippur War in October 1973, the fear of the Soviet Union jeopardizing Europe's energy supply did not materialize. In fact, some European countries such as Italy,<sup>71</sup> France and Germany, that had been receiving modest quantities of cheap Soviet oil starting from the end of the 1950s and during the 1960s, ended by strengthening their commercial ties with the Soviets even during the embargo. When the 1973-1974 Arab curb in production ended, Moscow was aspiring to use global oil scarcity as an opportunity for economic reconciliation, not only with the Europeans, but with the Americans as well.<sup>72</sup> In general, the geographical options for Soviet exports in the first years of the 1970s were not limited to Europe.

The Soviet Union was perceived by the U.S. and the UK "not as an energy power in the true sense, but rather as an adversary and potential disruptive factor in their global oil interests".<sup>73</sup> As a matter of facts, little if any attention was paid to the fact that in the second half of the 1960s, the Soviets had started to develop new oil and natural gas reserves in Western Siberia and Central Asia. The Western (meaning mainly American) perception, that persisted into the 1970s as well, was that Moscow would have attempted to gain more influence in the Middle East.

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<sup>69</sup> V. Nekrasov, "Decision-Making in the Soviet Energy Sector", p. 175-176.

<sup>70</sup> But it was only by late 1970s, the "Soviet leadership finally decided to expand investments into energy-rich Western Siberia", allowing for a major exploitation of natural gas and oil fields. J. Perović, "The Soviet Union's Rise as an International Energy Power", p. 2.

<sup>71</sup> The first contract between ENI and the Soviet Union in 1958, shortly after the Suez crisis, further strengthened this trend, bringing crude oil at very reasonable prices, lower than those for Middle Eastern crude.

<sup>72</sup> V. Nekrasov, "Decision-Making in the Soviet Energy Sector", p. 15.

<sup>73</sup> J. Perović, "The Soviet Union's Rise as an International Energy Power", p. 14.

However, under the Nixon presidency, Soviet-American relations improved with the “détente policy”, which aimed for increased trade relationships to facilitate East-West rapprochement.<sup>74</sup> Moreover, just as Leonid Brezhnev, the General Secretary of the Communist Party of the Soviet Union (CPSU), believed in the economic benefits of cooperation, he also hoped that closer energy relations “would make people realize that the Soviet Union was not cutting itself off from the outside world”.<sup>75</sup> Nevertheless, the American mislead focus made Western observers underestimate the potential of West Siberia’s oil and gas, which became decisive by the 1980s.<sup>76</sup>

During the 1960s and 1970s, U.S. dominance in oil and gas equipment and technology and the world’s need for credits seemed to offer the U.S. a golden opportunity to influence both energy consumers and producers’ policies. As such, a way to weaken other countries’ economies, was for the U.S. to deny oil and gas technology and equipment.<sup>77</sup> In fact, when the economic viability and construction of the Soviet project for raw material transportation under the Arctic conditions across thousands of kilometres through the swamps of the tundra and taiga (the “North Star” project) was put into doubt, there emerged the increasing fear of the expansion of economic ties with the capitalist West. In particular, Baibakov, one of the most influential figures in the field of energy policy at the time, warned against an excessive dependence on Western foreign currency earnings. The West was offering to supply pipelines, fully constructed liquefaction plant and tanker vessels, to solve the transportation problem, but what the Soviet Head of State Nikolai Podgornyι feared was that the large-scale cooperation projects with the West could have made the Soviet Union appear to be “planning to sell off the whole of Siberia [while demonstrating to be] technologically helpless”.<sup>78</sup>

Actually, due to extended hopes in the U.S. to find alternatives to oil and energy dependency from the Middle East through Research and Development (R&D) measures, American companies were at the forefront in exploring large investment options in the case of West Siberian gas. However, due to strong U.S. domestic political opposition, and following a general worsening of U.S.-Soviet relations in the second half of the 1970s, these projects failed.

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<sup>74</sup>Brezhnev promised to use all his personal influence to ensure the Soviet Union’s meeting and satisfaction of the high demand for natural gas not only of socialist countries, but also of Germany, Austria, France, and above all, the United States. J. Perović, “The Soviet Union’s Rise as an International Energy Power”, p. 16.

<sup>75</sup>Ibidem. .

<sup>76</sup>Ibidem.

<sup>77</sup>As Painter argues, in the 1970s, the U.S. sought to implement a strategy that would have linked American trade with the Soviet Union to changes in Soviet foreign policy. However, the American strategy failed because the Soviets were able to acquire the equipment, technology, and credit they needed from other Western countries. D. Painter, “From Linkage to Economic Warfare: Energy, Soviet-American Relations, and the End of the Cold War”, in J. Perović (eds.), *Cold War Energy. A Transnational History of Soviet Oil and Gas*, Palgrave Macmillan, 2018, pp. 283-318.

The same strategy was applied towards Arab producers during the 1973-74 oil embargo. The U.S. imposed some restrictions on the export of certain oil and gas technologies to Arab States, even though it was part of a broader set of economic and geopolitical strategies.

<sup>78</sup>Ibid., p. 17.



Another region of great importance in oil production from the 1960s and long into the 1970s, was the Middle East and North Africa (MENA) region. From the first years until the middle of the twentieth century, almost every country in the Persian Gulf was under direct or indirect British control.<sup>79</sup> Between WWI and the 1950s, Britain maintained military security in the Persian Gulf region and guaranteed Western access to the region's oil. However, from mid-1950s on, several international events influenced the relationship between the Persian Gulf producers and the Western consumers of oil.<sup>80</sup>

Although the world oil market was in surplus, Middle Eastern oil (particularly that of Saudi Arabia) “provided an important margin of safety for the oil companies if production was disrupted elsewhere”.<sup>81</sup> When in 1960 the Organization of the Petroleum Exporting Countries was formed, the purpose was to counterbalance the power of a Cartel of international oil companies that imposed on them a very similar governance of the oil sector.<sup>82</sup> Very few predicted at the time that the Baghdad meeting would be the beginning of the end of the majors monopoly control over global oil exports. But things changed when, while commenting on the international oil price structure at the second Arab Petroleum Congress in October 1960, Abdullah Tariki (the first oil minister of Saudi Arabia) argued that the “companies had essentially stolen no less than 5 billion dollars from the producers: one merely had to look at the difference between the Middle East oil prices and those prevailing in the United States”.<sup>83</sup>

Iran and Saudi Arabia were the champions of OPEC's moderate front. The majors handsomely rewarded the two countries for their cooperation by steadily increasing their production to nearly 4 million barrels per day in 1970—practically doubling their 1965 output. Nevertheless, in the 1960s, OPEC was still not recognized by the majors as an international organization.

In 1967, some Arab oil-producing countries imposed a brief embargo on Western nations, particularly the United States and the United Kingdom, during the Six-Day War between Israel and its Arab neighbours (Egypt, Syria, and Jordan). Arab producers hoped that, through cutting off supplies, they could pressure Western nations to withdraw their support for Israel. However, the global availability of oil was still generous, demand for petroleum was still contained, and the embargo did not obtain the expected results.

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<sup>79</sup>D. Chapman and N. Khanna, “The Persian Gulf, Global Oil Resources, and International Security”, *Contemporary Economic Policy*, Vol. 24, No. 4, 2006, pp. 507-5019.

<sup>80</sup>In a chronological order, the Suez Canal crisis of 1956, the creation of the Organization of Petroleum Exporting Countries (OPEC) in 1960, the first embargo during the Six-Day War in 1967, the second embargo during the Yom Kippur War in 1973-74, and the Iranian Revolution in 1979.

<sup>81</sup>V. McFarland, *Oil Powers*, p. 62.

<sup>82</sup>In fact, OPEC cannot be considered as cartel on its own as no one of its member directly controlled neither oil production, nor oil prices.

<sup>83</sup>G. Garavini, *The Rise and Fall of OPEC*, p. 128.

The failure of the first Arab oil embargo emboldened U.S. observers, who were skeptical of OPEC's power to influence energy security. Yet the episode illustrated how a political issue could galvanize the support of producers, some of whom were anxious to use the "oil weapon" as a way of pressuring the United States to abandon its support for Israel. It also demonstrated how the oil world's center of gravity had shifted.

In the early 1970s, OPEC began using its collective bargaining power to set oil production quotas and establish a more favorable pricing mechanism for its members. By controlling the supply of oil, Middle Eastern countries were able to drive up prices and ensure a steady stream of revenue to finance their domestic development.

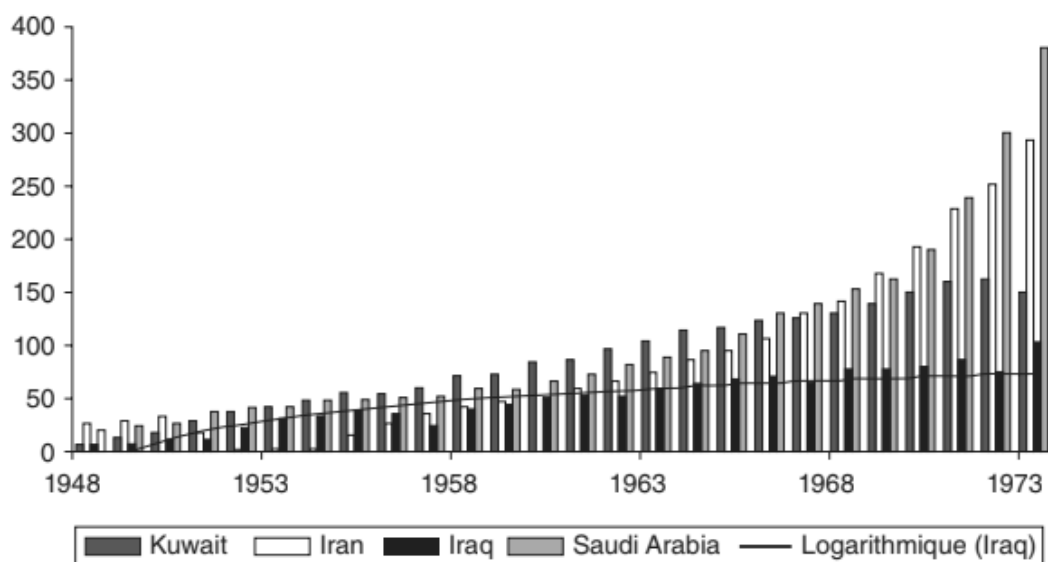


Fig. 3.1. Comparative oil production in the Middle East (1948-73).

(Petroleum Press Service).

Source: G. Garavini, *The Rise and Fall of OPEC*, p. 141.

Arab countries in the Persian Gulf were not alone in the nationalization initiative: also North African countries follow that path.

In 1971, Algeria, under the leadership of President Houari Boumédiène, took a major step by nationalizing its oil industry. The government seized control of oil production from foreign companies, particularly the French multinational Elf Aquitaine and other Western firms. The state-owned oil company, Sonatrach, was given full control of Algeria's oil and gas resources. This move allowed Algeria to keep a larger share of the revenues from its oil exports, which was crucial for funding its development projects. In 1969, it joined OPEC and opened negotiations for higher prices while unilaterally increased its prices in 1970. When it became active part of the

Organization during the 1970s, Algeria collaborated with other oil-producing countries in regulating production levels and maintaining high oil prices.

The first oil reservoirs in Libya were discovered by New Jersey Standard in 1956, and were quickly followed by the discovery of the giant Zelten oilfield (eventually renamed “Nasser field” after the death of the Egyptian leader). With the Suez Crisis and the closure of the canal, discoveries speeded up spurred by the fact that Libyan oil’s direct access to the Mediterranean was now much more appealing than before. Production continued to increase and by July 1968, Libyan oil output had surpassed that of Kuwait. The following year, little more than a decade after the first commercial oil discovery, “production would reach an output of 3.3 million barrels per day, making Libya the fourth largest oil exporter in the world (...).”<sup>84</sup>

In 1969, a revolt of army officers overthrew the pro-Western monarchy and installed a new regime led by Muammar Qaddafi. Libya’s new government demanded that the companies operating inside the country agree to an immediate increase in the price of exported Libyan oil. Qaddafi was in a unique position and he was able to struck the first major blow against the Seven Sisters. Most of the companies operating in Libya were smaller “independents” that relied on access to Libyan crude. This dependence made them vulnerable to pressure from Qaddafi. Finally, as a country with a small population and a large currency reserve, Libya could afford to reduce or even end its oil exports without suffering immediate economic catastrophe.

Changing economic conditions, including the devaluation of the US dollar in 1971 and a tightening supply–demand balance, encouraged the OPEC states to ask for greater concessions from the companies.<sup>85</sup>

If in the 1960s “strategic reserves” of petroleum worldwide were approximately equal to 40 and 50 percent of global production, in 1970 no oil producing country, with the possible exception of Saudi Arabia, had “strategic reserves” that could immediately stabilize the market (even if they had been willing to do so).<sup>86</sup> This new scenario generated what was immediately identified as an “energy crisis” (particularly in the United States). As a consequence, when in October 1973 OAPEC members started another embargo, the “energy crisis” became the first incarnation of the “oil shock”.<sup>87</sup>

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<sup>84</sup> G. Garavini, *The Rise and Fall of OPEC*, p. 161.

<sup>85</sup> For more on oil producers, see G. Garavini, *The Rise and Fall of OPEC in the Twentieth century*, Oxford University Press, 2019. And also G. Brew, “OPEC, International Oil, and the United States”, *American History*, 2019. Available at <https://oxfordre.com/americanhistory/display/10.1093/acrefore/9780199329175.001.0001/acrefore-9780199329175-e-719>

<sup>86</sup> G. Garavini, *The Rise and Fall of OPEC*, p. 191.

<sup>87</sup> *Ibidem*.



Heads of delegations to the Baghdad meeting of September 1960 from top to bottom: Fuad Rouhani (Iran), Tala'at al Shaibani (Iraq), Ahmed Sayed Omar (Kuwait), Abdallah Al-Tariki (Saudi Arabia), Juan Pablo Pérez Alfonzo (Venezuela).  
Source: G. Garavini, *The Rise and Fall of OPEC*, p. 121

#### 4. The “energy crisis”

The 1970s saw a dramatic shift in world oil as “Demand was catching up with available supply, and the twenty-year surplus was over”.<sup>88</sup>

The 1970s witnessed significant upheaval in the global political and economic landscapes.<sup>89</sup> Various aspects such as monetary policies, arms negotiations, trade dynamics, and other key areas underwent substantial and politically relevant transformations. These changes led to significant economic gains and losses for different players on the international stage. The “energy crisis” of 1973-74 symbolises, in fact, the difficult decade of the 1970s, however, the literature on the subject is exceptionally inhibited.<sup>90</sup>

A critical review written by Wilson (1987), based on a more theoretically oriented approach, underlined that all the works he had analysed - though operating at several levels of analysis -

focus on the politics of energy, especially (on) its international dimensions, and they all share certain common assumptions about economic, political, and institutional behavior (...). They are all concerned (...) with the changing structures and dynamics of the international oil market and with the responses of national governments to those changes.<sup>91</sup>

Therefore, sufficient shared traits can be found among these works to speak of a discrete subfield of energy policy. Wilson also argued that the absence of a solid policy paradigm for energy might have been the cause of “flying blind” government proposals and programs.<sup>92</sup>

As Vitalis (2020) skeptically noted, the “oil crisis” of 1973 is usually explained as being triggered by Arab oil exporters using the “oil weapon” against importing Western countries by introducing a price shock into these economies. However, the term “crisis” is argued to be an

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<sup>88</sup>D. Yergin, *The Prize*, p.548-549.

<sup>89</sup>See E. Bini, G. Garavini and F. Romero, *Oil Shock. The 1973 Crisis and Its Economic Legacy*, Taurus Academic Studies, 2016. According to these authors, the 1973 oil shock was a real key turning point. It transformed international relations, reshaped energy policies, and impacted economies around the world marking, for most Western industrialized countries, the end of an era. See also N. Ferguson, “Crisis, What Crisis?”, in N. Ferguson, C. Maier, E. Manela and D. Sargent (ed.), *The Shock of the Global. The 1970s in Perspective*, Harvard University Press, 2010, pp. 1-21.

<sup>90</sup>E.J. Wilson, “Review: World Politics and International Energy Markets”, *International Organization*, Vol. 41, No. 1, 1987, pp. 125- 149. The author provides an insightful analysis of the intricate relationship between global politics and international energy markets. Wilson further examines how geopolitical dynamics influence energy policies and market trends, emphasizing the interconnectedness of political decisions and energy supply and demand. Through a comprehensive review of nine scholar works, the author sheds light on the complexities of energy geopolitics and their implications for international relations.

<sup>91</sup>*Ibid.*, p. 126.

<sup>92</sup> *Ibid.*, , p. 128. Notwithstanding, the author justifies this problem by arguing that it is the very nature of oil, as an extremely volatile market, that impedes the easy reach of a theoretical and descriptive energy work.

exaggeration of an embargo that never reached its intended goals.<sup>93</sup> He further underlined that “The embargo is best understood as a political theatre whose effects on its target audience - Western and Arab citizens (or subjects) - were psychological”.<sup>94</sup> In fact, most Americans experienced the decade as one of economic limits rather than opportunity.<sup>95</sup>

Broadly speaking, the events of this time served, on the one hand, to illuminate a set of tensions about the place of oil in American life - tensions that had been growing in importance throughout the twentieth century - and, on the other hand, to presage the conflicts about oil production and consumption that would mark the global politics of the late twentieth and early twenty-first centuries.<sup>96</sup>

Since the 1960s there were two main forces pushing world oil prices upward: first, American oil saw the convergence between decline in the productivity of the sector and rising oil consumption increasingly met by imports from OPEC states; second, oil exporting nations pushed for higher crude oil prices.<sup>97</sup> As for the U.S. oil production, it was basing its success on further development of old fields, but soon the “growth of development costs surpassed that of exploration costs”.<sup>98</sup> Development costs came to be seen as the main drivers of what Moore (2010) called “capitalization of nature” in the sector, and thus of the upward trend in the cost of American crude.<sup>99</sup> Capitalist expansions have always been rooted in cheapness (i.e. supply of cheap food, cheap raw materials, and low-cost energy) to maximise the extraction of surplus value from workers and long-run profitability.<sup>100</sup> Therefore, “the increase in oil production costs, (...) would depress overall profits by contributing to the undermining of cheap inputs throughout the economy (...)”.<sup>101</sup>

A very important source of disequilibrium that happened during the structural shift in oil supply and demand behind the early 1970s price rise, was that the U.S. government was aiming at protecting domestic refiners from Middle Eastern oil; and this contributed to the depletion of the country’s reserves.<sup>102</sup>

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<sup>93</sup>R. Vitalis, *Oilcraft. The Myths of Scarcity and Security That Haunt U.S. Energy Policy*, Stanford University Press, 2020, chapter 3. The author also takes care of a deep explanation about the right organisation that caused the embargo: not OPEC, but OAPEC (emphasising the fact that it was Arab countries).

<sup>94</sup>Ibid., p. 63.

<sup>95</sup>M. Karen, *The Oil Crisis of 1973-1974. A brief history with documents.*, 2007. Though not the last oil crisis faced by this country, it was the first and only one to force Americans at all levels to question so deeply the very material basis of U.S. economic might and America’s political position in the world.

<sup>96</sup>Ibid., p. VII-VIII.

<sup>97</sup>R. Ortiz, “Weathering the Crisis. Oil, Financialization, and Socio-Ecological Turbulence since the 1970s”, *Journal of World-Systems Research*, Vol. 29, Issue 2, pp.431- 456.

<sup>98</sup>Ibid., p. 437.

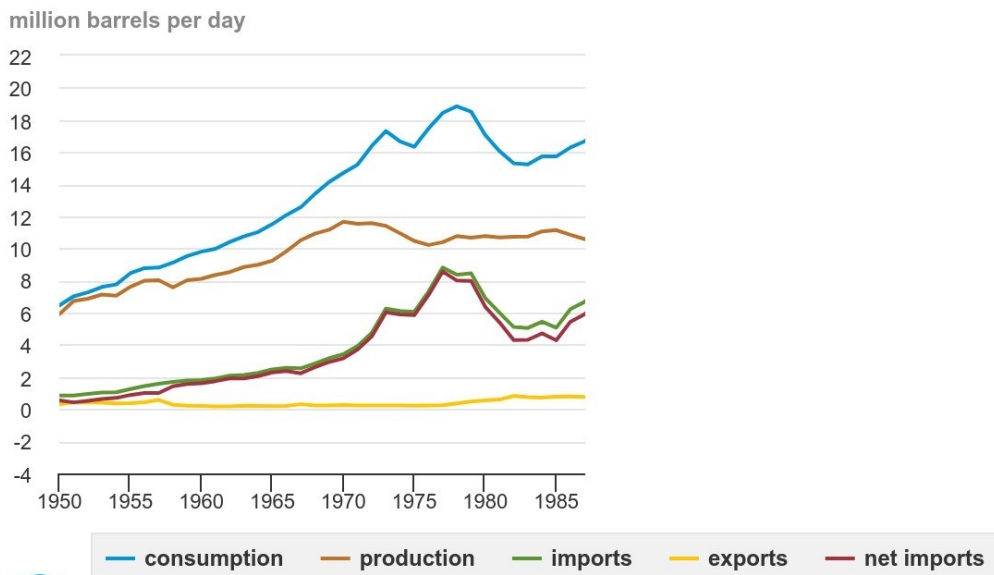
<sup>99</sup>Ibidem. See also J. W. Moore, “The End of the Road? Agricultural Revolutions in the Capitalist World-Ecology, 1450-2010”, *Journal of Agrarian Change*, Vol.10, No.3, 2010, pp. 389-413.

<sup>100</sup>R. Patel and J. W. Moore, *A History of the World in Seven Cheap Things: A Guide to Capitalism, Nature, and the Future of the Planet*, University of California Press, 2017.

<sup>101</sup>R. Ortiz, “Weathering the Crisis”, p. 437.

<sup>102</sup>R. Vitalis, *Oilcraft*, p.66.

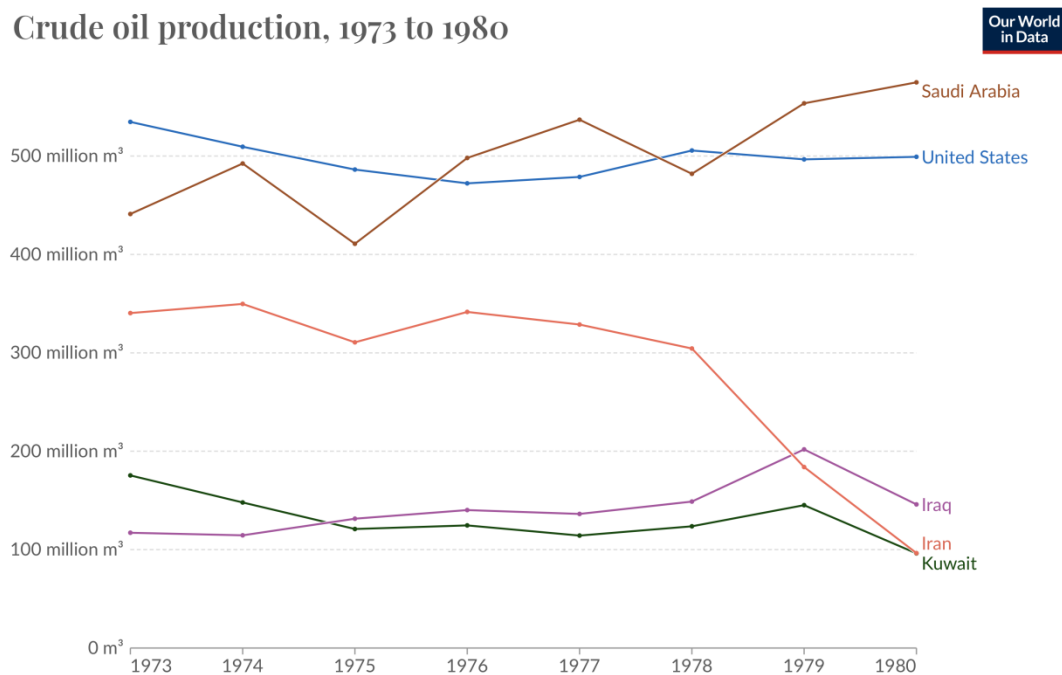
## U.S. petroleum consumption, production, imports, exports, and net imports, 1950 - 1985



eia Data source: U.S. Energy Information Administration, *Monthly Energy Review*, Table 3.1, September 2023

The graphic was originally based on an average of time from 1950 to 2022. I have customised the temporal window according to my needs (from 1950 to 1985), but data have not been changed.

## Crude oil production, 1973 to 1980



Data source: US Energy Information Analysis (EIA)  
 Note: This includes the production of crude oil, including lease condensate.

CC BY

The graphic clearly shows that the country which benefitted

more from the increase in oil demand and the pressure on the global oil market was Saudi Arabia. The Kingdom certainly took advantage of the new situation - like other leftist and nationalist producing countries did - increasing the tax rate on Aramco to 55 per cent. See V. McFarland, *Oil Powers*, p. 111.

In both the above graphics, it is evident that the U.S. faced a real decline in production during the decade, and that gap had to be made up by oil imports. In 1970, the oil market “shifted quite suddenly from a buyer’s to a seller’s market”.<sup>103</sup> Petroleum had, in fact, already become highly fundamental in industrialized countries which, therefore, at the beginning, seemed to have no other choice than paying more for it. As a consequence, “petrostates” started exerting forms of power while negotiating with oil consumers; and OPEC, as the producing and exporting countries organisation, became a highly-debated actor in the international scenario.<sup>104</sup>

As previously seen, through their revolutions, oil producing countries wanted to achieve more control over the petroleum industry and more decisional power over the price-formation mechanism. Despite having already tried to settle an embargo against the United States, Britain and West Germany in 1967 - which did not succeed because of the large surplus in the world petroleum market that was available at that moment -, in 1973, the embargo was slightly more successful - they at least obtained a fourfold increase in oil prices - owing to the tight market.<sup>105</sup>

The Middle East and Gulf countries’ oil still remained at the centre of the international oil market showing the deep dependence of consuming countries on their petroleum.<sup>106</sup>

As McFarland (2020) repeatedly reported, when the October War broke out, consumers’ negotiating position was further undermined and the physical security of oil installations in the Middle East was put at risk.<sup>107</sup> The situation degenerated as soon as the oil-producing countries met in Kuwait City on 16 October 1973. The outcome of that consultation was a “71 per cent increase in the posted price, bringing it to \$5.11 per barrel”.<sup>108</sup> Therefore, if American-owned oil companies were ready to face a slight increase in oil prices, they were certainly not prepared to such rise.

The moment rapidly assumed great symbolic significance because, “for the first time oil producers had set their own price without negotiating it with the oligopoly of Anglo-American companies that had dominated the industry for decades”.<sup>109</sup>

Despite the fact that the disruption of the oil market had a substantial impact on the United States, the embargo cannot be considered successful.<sup>110</sup>

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<sup>103</sup>G. Garavini, *The Rise and Fall of OPE*, p. 180.

<sup>104</sup>See G. Garavini for “petrostates” definition, but also D. Yergin, *The Quest. Energy, Security, and the Remaking of the Modern World*, Penguin Books, 2012, chapter 5 “The Petro-State”. By the end of the 1960s, Arab members of OPEC were already at the centre of international debates due to anti-imperialist revolutions.

<sup>105</sup>*Ibid.*, p. 286.

<sup>106</sup>For deeper insights about U.S. increasing dependence on foreign oil see the section below.

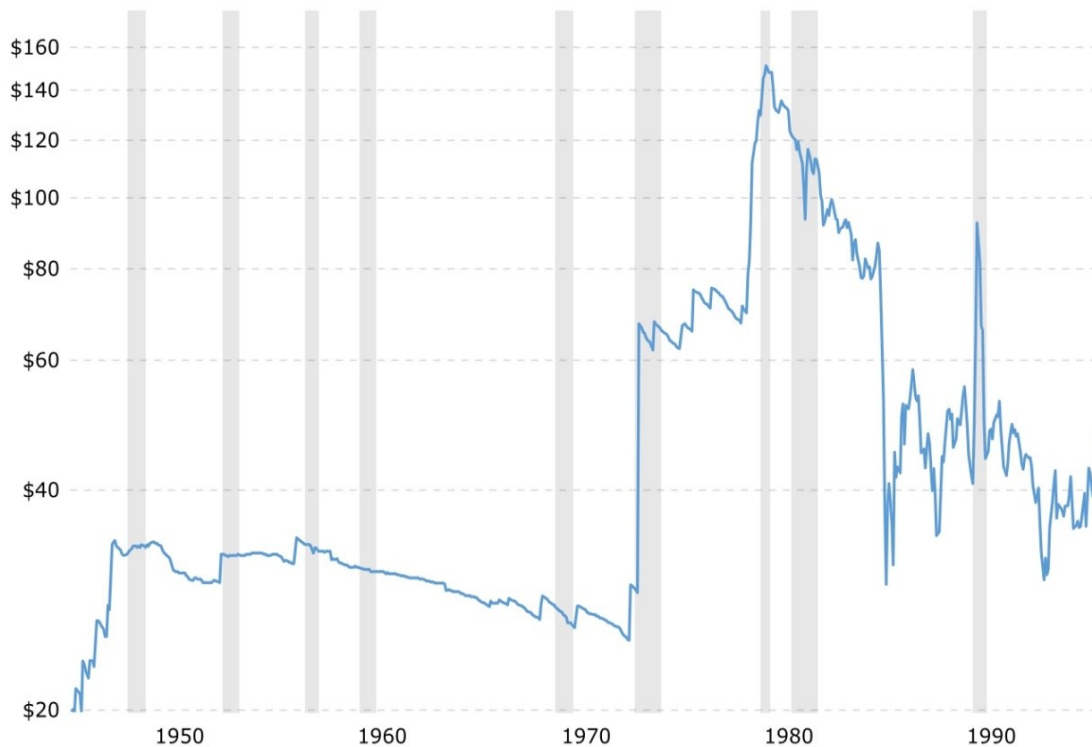
<sup>107</sup>V. McFarland, *Oil Powers*, p. 132.

<sup>108</sup>*Ibid.*, p.133.

<sup>109</sup>V. McFarland, *Oil Powers*, p.133.

<sup>110</sup>Among the authors supporting this thesis we can mention: V. McFarland, *Oil Powers*, p.137, R. Vitalis, *Oilcraft*, and R. Graf, “Making Use of the ‘Oil Weapon’: Western Industrialized Countries and Arab Petropolitics in 1973-1974”, *Diplomatic History*, Vol. 36, No. 1, 2012, pp.185-208.





Macrotrends, “Crude Oil Prices - 70 Years Historical Chart”. The graphic originally pictured oil price data from 1950 to 2020, however, the time period has been artificially limited by me according to my needs. It is very eye-catching the maximum peak occurred in the first years of the 1970s (though it clearly was not the general maximum peak which was reached right before the 1983-1985 counter-shock). For more details on the counter-shock see D. Basosi, G. Garavini and M. Trentin (ed.), *Oil Counter-Shock. The Price Collapse of the 1980s*, I.B.Tauris& Co. Ltd, 2018. Available at [https://www.macrotrends.net/1369/crude-oil-price-history-chart#google\\_vignette](https://www.macrotrends.net/1369/crude-oil-price-history-chart#google_vignette)

McFarland (2020) defined the embargo as “a shocking and disorienting experience for U.S. policymakers” who remained “deeply irritated that a small country in the developing world could impose such costs on the American economy”.<sup>111</sup>

The embargo certainly made America look weak and even Kissinger, who at first left the oil shortage aside, came to see it as a threat to American global power.<sup>112</sup> Also according to Karen (2007), to many people in the United States and abroad, OPEC’s effective use of the “oil weapon ” weakened the nation’s standing internationally.<sup>113</sup>

The Organization of Arab Petrol Exporting Countries (OAPEC)’s decision to start the embargo was obviously motivated by shared points; in fact,

<sup>111</sup>V. McFarland, *Oil Powers*, p.138. Despite oil producers, among which Saudi Arabia was the major beneficiary, profited at the expense of the oil consumers, the price hike strengthened the U.S.-Saudi alliance. The Kingdom wealth increased allowing it to become a precious investor to the United States.

<sup>112</sup>Ibid., p.140.

<sup>113</sup>M. Karen, *The Oil Crisis of 1973-1974. A brief history with documents.*, 2007. p.3. The oil crisis was not the only factor suggesting to many that America’s postwar power was waning; the formal end to American participation in the Vietnam War and the emerging Watergate scandal in Richard Nixon’s presidency influenced that thought.

(F)rom the perspective of the Arab countries, these policies had clear goals: to change America's pro-Israel stance and force the United States to discontinue sales of military armaments to Israel; to force Israel to retreat from its territorial ambitions; to build international support for the Palestinian cause; and to pressure other countries that were more dependent on Arab oil than the United States to back Arab positions in their foreign policy.<sup>114</sup>

However, despite the fact that OPEC's decision did certainly not lack in clear goals, it did not mean that the Arab members of OPEC reached a consensus about the use of the embargo as a "political weapon".<sup>115</sup> In fact, during a six-month period between October 1973 and March 1974, OPEC countries were quite divided "especially as the United States became a central player in working out the terms of the Egyptian-Israeli disengagement in the wake of the Yom Kippur War". For example, as Karen outlined, while "Saudi Arabia [a moderate member] wanted to link the lifting of the embargo to American diplomatic efforts in the disengagement negotiations, (...) others, such as Libya [a radical member, like Iraq], believed that the embargo should be continued despite these efforts."<sup>116</sup>

When analysing the first "oil crisis", one finds that it consisted of two interconnected processes: the skyrocketing oil price increase (implemented by OPEC) and the coinciding oil embargo and production cuts (organised by OPEC).<sup>117</sup> However, as Vitalis (2020) explained, the price shock had very little to do with the declaration of an embargo; therefore, he treated these two processes separately. He explained that the OPEC oil embargo announcement followed, rather than preceded, OPEC's "successful effort to increase the tax rate the companies would have to pay".<sup>118</sup> In his words, "the decision by the Arab-producing states to try to use their oil resources to force Israel and the United States to negotiate a settlement had nothing to do with OPEC's efforts to get more out of the companies".<sup>119</sup> Vitalis, in fact, underlined the fact that prices on the spot market would still have increased even if the hypothetical resistance of Saudi and Kuwaiti rulers to the pressure to threaten the United States over its support to Israel would have taken place. The reason for increasing prices was deeply connected to the accelerated turn to the nationalisation of the oil companies' assets, because it was taking place everywhere the oil companies had foreign

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<sup>114</sup>M. Karen, *The Oil Crisis of 1973-1974*, p. 22.

<sup>115</sup>Ibidem. For "embargo" definition, related to the OPEC decision, as a sender-target policy model, see R. Graf, "Making Use of the 'Oil Weapon'", p. 186-187. promptly explains, embargoes happen because "perfect information can never be obtained, and it is unclear how the target will react", p. 188.

<sup>116</sup>M. Karen, *The Oil Crisis of 1973-1974*, p. 22.

<sup>117</sup>F. Bösch and R. Graf, "Reacting to Anticipations: Energy Crisis and Energy Policy in the 1970s. AN Introduction", *Historical Social Research*, Vol. 39, No. 4, 2014, pp. 7-21 (p. 9).

<sup>118</sup>R. Vitalis, *Oilcraft*, p. 67.

<sup>119</sup>Ibidem.

concession, not just in the Middle East. Therefore, the regional shortages and gas lines in the U.S. were the result more of the price and allocation controls imposed in 1971, than of the embargo itself.<sup>120</sup>

On the one hand, the idea of nationalising U.S. oil interests everywhere came from the Iraqi government,

the only way to force Washington to truly listen to the Arab world would be to nationalize US oil interests everywhere (US companies still controlled approximately 36 per- cent of oil in the Middle East), to withdraw all funds from US banks, and to break off diplomatic relations with Washington.<sup>121</sup>

On the other hand, the Iraqi government opposed curtailing oil production, because they considered themselves to have been already sufficiently penalised by Iraq Petroleum Company (IPC).<sup>122</sup>

The OAPEC meeting was presided by the Algerian Prime Minister Belaid Abdessalam who promptly derided Iraqi proposals defining them “as radical as they were impractical”.<sup>123</sup> The dominant model was the one promoted by Saudi Arabia: King Faisal proposed a generalised production cut to ease the resistance of consumers and motivate them to apply diplomatic pressure on both the Nixon administration and Israel.<sup>124</sup> As a consequence, under Kuwaiti government influence, on 17 October 1973, OAPEC announced a minimum 5 per cent reduction in crude exports with the particular clause that each month the same percentage would have be applied until the Israeli withdrawal from the Arab territories occupied in June 1967 was completed.<sup>125</sup> As Stork (1974) reported,

On October 19, President Nixon requested that Congress earmark \$2.2 billion in aid for Israel. This was not a loan, but a gift and a demonstration of unwavering support. The next day Saudi Arabia, along with the rest of the Arab states, proclaimed a total embargo on all direct oil shipments to the United States and to a few other countries, including the Netherlands. The embargo eventually extended

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<sup>120</sup>R. Vitalis, *Oilcraft*, p. 68. The famous gas lines did not happen in the Netherlands (which was the other embargoed country).

<sup>121</sup>G. Garavini, *The Rise and Fall of OPEC*, p. 218. These measure would have eventually fallen on the other Arab oil exporters since Baghdad had already nationalised most of its concessions, held no funds in U.S. banks, and had already broken diplomatic relations with Washington.

<sup>122</sup>The Iraq Petroleum Company was a consortium of U.S., British and French oil firms operating in northern Iraq that was finally nationalised in June 1972 after 11 years of disputes. For more about this see P. Tristani, “Iraq and the Oil Cold War: A Superpower Struggle and The End of the Iraq Petroleum Company, 1958-72” in E. Bini, G. Garavini and F. Romero (ed.), *Oil Shock. The 1973 crisis and its Economic Legacy*, Taurus Academic Studies, 2016, pp.63-88.

<sup>123</sup>G. Garavini, *The Rise and Fall of OPEC*, p. 218.

<sup>124</sup>Ibidem.

<sup>125</sup>Ibidem.

to Portugal, Rhodesia, and South Africa. One of the two pillars of Washington's grand strategy in the Gulf seemed to have turned its back on Richard Nixon.<sup>126</sup>

By 22 October, all the producers had embargoed shipments to the U.S., and on 4 November, during another meeting of oil ministers, the overall cutback was fixed at 25 per cent in order to standardise the embargo and the production cuts.<sup>127</sup> They further created three distinct classes of costumers: “preferred countries, which would receive all of requested shipments at pre-October levels; neutral countries, which would receive less than their September quotas; embargoed countries, subject to a complete ban”.<sup>128</sup> At a meeting on 9 December, the Arab oil ministers, Iraq excepted, decreed a further 5 per cent cutback for January, which would amount to a loss of some 750,000 b/d and a total reduction, on paper at least, of more than five million b/d.<sup>129</sup>



OAPEC's 1973 meeting in Kuwait City.

Source: D. Basosi and G. Garavini, “The Oil Revolution: The myths and realities of the oil price shock of 1973”, *Phenomenal World*, 2023. Available at <https://www.phenomenalworld.org/analysis/the-oil-revolution/> last accessed on 25 March 2024.

According to Garavini, as far as the oil market faced increasing tightness, several OPEC nations, including Iran, Iraq, Nigeria, and Venezuela, exerted considerable efforts to boost production, trying to soften the most severe effects of the embargo. In total, the global reduction in production during the embargo period did not exceed 5 percent.<sup>130</sup> Additionally, it is important to highlight that some of the countries targeted by the embargo proved to be among the most resilient to its impacts.

<sup>126</sup>J. Stork, “Oil and the International Crisis”, *MERIP Reports*, No. 32, 1974, pp. 3-20.

<sup>127</sup>Ibid, p. 6.

<sup>128</sup>G. Garavini, *The Rise and Fall of OPEC*, p. 219.

<sup>129</sup>J. Stork, “Oil and the International Crisis”, p. 7.

<sup>130</sup>G. Garavini, *The Rise and Fall of OPEC*, p. 219.

For instance, the Netherlands consumed only 15 percent of its oil imports, as much of the imported crude was processed in Rotterdam refineries before being re-exported. Furthermore, the Netherlands possessed the largest natural gas field in Europe, providing additional energy security. Conversely, in the United States, 6.7 percent of oil imports originated from the Middle East, indicating that the embargo could have significant implications. However, the decentralised nature of the oil trade, characterised by flexible distribution networks, made controlling the flow of crude challenging.<sup>131</sup>

These events came as a shock to consulting economists like Adelman - who based their theories on the Ricardian rent model and who believed that OPEC was engaged in a futile enterprise - not to mention the governments of the consuming countries; all of their theoretical models proved to be fundamentally flawed and unable to fully grasp the complexities of the situation. Moreover, as Mommer (2016) explained, considering OPEC as a “non-actor”, the “real” subjects - such as international oil corporations or the American government - were believed to be operating covertly, often with perceived malevolent or misguided intentions.<sup>132</sup>

As Basosi and Garavini (2023) correctly summarised through a citation taken from Sampson’s *The Seven Sisters*:” the price-hike and the embargo [...] proved a deadly combination to the West. But the coincidence, surprisingly enough, was accidental”.<sup>133</sup> The coincidence forecasted two distinct but interrelated crisis: one “political”, which was the six-month embargo shaped by the Arab–Israeli conflict; and one “economic”, concerning the renegotiation of oil agreements, beginning in 1971, which increased the level of payments to host governments.<sup>134</sup>

Therefore, the real significance of the “oil crisis” of 1973, was the shift from participation (of oil producing countries) to 100 per cent nationalisation of oil firms. The oil majors cannot be considered co-conspirators with OPEC, especially taking into account the accelerating renegotiation and nationalisation of oil concessions in the early 1970s; however, they were clearly unprepared for the new reality thrust upon them. In fact, as previously recalled, the OPEC embargo had psychological effects that fuelled the idea of (U.S.) ”foreign oil dependency” that could threaten the national security. But it was not all foreign oil; it did not include imports from Canada, Mexico and Venezuela.<sup>135</sup>

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<sup>131</sup> Ibidem.

<sup>132</sup>B. Mommer, “The Shocking History of Oil”, in E. Bini, G. Garavini and F. Romero (ed.), *Oil Shock. The 1973 crisis and its Economic Legacy*, Taurus Academic Studies, 2016, pp.13-35 (p. 24).

<sup>133</sup>D. Basosi and G. Garavini, “The Oil Revolution”, note 7.

<sup>134</sup>T. Priest, “Shifting Sands: The 1973 Oil Shock and the Expansion of Non-OPEC Oil Supply”, in E. Bini, G. Garavini and F. Romero (ed.), *Oil Shock. The 1973 crisis and its Economic Legacy*, Taurus Academic Studies, 2016, pp. 117-141 (p. 118).

<sup>135</sup>R. Vitalis, *Oilcraft*, p.69. Vitalis insists on “foreign oil” as a real euphemism.

In fact, as Basosi (2018) wrote, “not unsurprisingly (if one thinks of the developments in Alaska, Mexico and the North Sea), several publications of the time were not suggesting a transition away from oil, but a more limited one from ‘OPEC oil’”.<sup>136</sup>

As Priest (2016) underlined, gasoline shortages were mistakenly attributed to the embargo when, in fact, the long lines at gas stations were mostly “caused by the misguided policy of price controls and emergency supply allocations imposed by Nixon between 1971 and 1973”.<sup>137</sup>

The “energy crisis” led to the creation of many alternative projects like oil shale and coal gasification, a factor which was strengthened by the vast subsidies promised under Nixon's Project Independence.

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<sup>136</sup>D. Basosi, “A Small Window: The Opportunities for Renewable Energies from Shock to Counter-Shock”, in D. Basosi, et al. (ed.), *Counter-Shock: The Oil Counter-Revolution of The 1980s*, I.B. Tauris & Company, 2018, pp. 336-356, (p. 342).

<sup>137</sup>T. Priest, “Shifting Sands”, p.118. For more details on American policies of the early 1970s see the section below.

## Chapter two

### Project Independence in words: the birth of America's energy independence dream

The changing geography of global oil supply had profound implications for American relations with the world and for the domestic political economy. As already outlined in the previous chapter, from the 1960s, the United States had already lost its auto sufficiency in domestic oil production, but the energy consumes continued to raise constantly. The same fate occurred to gas: the demand was increasingly high but the productive capacity was no longer able to satisfy it.<sup>138</sup>

On 4 June 1971 Nixon gave an important speech, later identified by himself as the first message on energy policies ever submitted by an American President.<sup>139</sup> The purpose was to commit the United States to a clean energy policy.<sup>140</sup> During his speech to the Congress, he outlined that

the assumption that sufficient energy will always be readily available has been brought sharply into question within the last year. The brownouts that have affected some areas of our country, the possible shortages of fuel that were threatened last fall, the sharp increases in certain fuel prices and our growing awareness of the environmental consequences of energy production have all demonstrated that we cannot take our energy supply granted any longer. A sufficient supply of clean energy is essential if we are to sustain healthy economic growth and improve the quality of our national life.<sup>141</sup>

The existing policies and programs were not able to properly respond to either the new environmental imperatives or to the economic and technological necessities to use domestic energy resources more efficiently.<sup>142</sup> This crisis represented the challenges associated with a transition from a long era of abundant and cheap indigenous energy and uncontrolled deterioration of the environment, to one of scarcity of acceptable clean fuels and growing dependence on foreign energy imports.

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<sup>138</sup> R. Morton, "The Nixon Administration Energy Policy", *The Annals of the American Academy of Political and Social Science*, Vol. 410, 1973, pp. 65-74 (p. 66).

<sup>139</sup> Office of the President, *Executive Energy Document*, Washington, D.C.: Government Printing Office, 1978, p. 14.

<sup>140</sup> G. Peters and J. Woolley, "Richard Nixon. Special Message to the Congress on Energy Resources", *The American Presidency Project*. Available at <https://www.presidency.ucsb.edu/documents/special-message-the-congress-energy-resources> Last accessed on 18 April 2024. It is very important to notice that Nixon talked about "clean energy" and not about "renewable energy". This distinction reflects the different preoccupations in the Administration.

<sup>141</sup> G. Peters and J. Woolley, "Richard Nixon. Special Message to the Congress on Energy Resources", *The American Presidency Project*. Available at <https://www.presidency.ucsb.edu/node/240214>

<sup>142</sup> Ibidem.

Nixon further complained that the task of providing sufficient clean energy could have taken long time and therefore, the expansion of the supply of clean energy in America should have immediately stepped up.<sup>143</sup> Among the alternatives he proposed one can mention: oil shale, coal gasification, nuclear energy, natural gas (not very “greeny” sources), geothermal and renewable energy. Also according to Strain (1974), assuming that “energy is one of the primary limiting factors to the continued culturization of mother earth”, the alternative energy sources left were: solar energy (composed of radiant, wind, photosynthesis, water and fossil fuels), geothermal, nuclear, and gravitational (tides).<sup>144</sup> To succeed, the program would have required “the cooperation of the Congress and of the State and local governments”, in his words. It would have also depended on the willingness of industry to meet its responsibilities in serving customers and in making necessary capital investments to meet anticipated growth. Of course, also consumers were called into action by learning how to conserve energy, as they came to understand that the cost of environmental protection must be reflected in consumer prices.

The President proposed that all major energy programs be consolidated in a new Department of Natural Resources. However, despite the President’s claims for “cleaner energies”, what he suggested was to find ways to produce “liquid fuel and gas of pipeline quality from coal, recover oil from oil shale, and develop advanced nuclear reactors on a commercial basis”.<sup>145</sup>

In June 1973, he again urged the Congress to take action on his energy legislation, but this time the new motivations were largely shaped by geopolitical events, especially the increasing reliance on foreign oil and tensions in the Middle East.<sup>146</sup>

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<sup>143</sup> According to the estimates he mentioned in his message, to move from geological exploration to oil and gas well production, it required from three to seven years; to find new coal mines, it required three to five years to reach the production stage and five to seven years to complete a large steam power plant.

<sup>144</sup> B. Strain, “Project Independence: Its Ecological and Sociological Implications”, *The High School Journal*, Vol. 58, No. 1, 1974, pp. 11-20 (p.14).

<sup>145</sup> H. Risser, *The U.S. energy dilemma: The gap between today’s requirements and tomorrow’s potential*, Illinois State Geological Survey, Environmental Geology Notes, No. 64, 1973. The amount of 95 percent of the total energy that was consumed during 1972 came mainly from oil, gas, and coal. The remainder was provided by hydroelectric, nuclear, and geothermal sources. An estimated 19.7 percent of the crude petroleum and more than 29 percent of the total petroleum supply during the year came from foreign sources (a percentage that increased quite rapidly: in 1969, imports had accounted for only 22.4 per cent). In 1972, energy imports included also 5 per cent of the natural gas consumed that year. As previously seen, the early 1970s crude oil imports came from Africa and the Middle East: imports of oil totalled 198 million barrels more than 1971, with 53 percent of the amount coming from Africa, 16 percent from the Middle East, and only 22 percent from the Western Hemisphere. The remaining 9 percent came from Indonesia. This study demonstrates that imports from Africa and the Middle East were growing three times as fast as imports from nearer sources like Canada and South America (p.10). The mentioned alternative sources are typical of what could be defined “Nixon’s trap”: he tried to promote clean energy but at the same time he proposed an increment in coal, nuclear energy, liquid fuels and gas; rather than promoting solar, thermal and renewable energy.

<sup>146</sup> If in 1971, the President’s call was focused primarily on ensuring clean energy and addressing the growing demand for energy while minimizing environmental impacts, by 1973, Nixon’s repeated calls for action on energy legislation were driven by more urgent and different reasons, particularly the growing threat of an energy crisis.



The reputation of Nixon was that of a President with more interests in foreign affairs than domestic ones.<sup>147</sup> Yet, on 20 February 1969, the President sent a memorandum to Secretary of the Interior Walter Hickel stating that: “I am (therefore) reassuming full responsibility for oil import policies. (...) This undertaking will include a full review of the nation’s oil import policies by the Executive Offices of the President.”<sup>148</sup> This demonstrates how, with a different context emerging, the priority of Nixon was slightly passing from “clean energy” to “independent energy”. Nixon and his government created several regulations to ensure that the United States would not be too damaged by the crisis and could achieve its independence. He was aware of the fact that Americans feared the potential of an economic collapse and reassured them that their country was better off than others; so, many regulations adopted in the U.S. were less intrusive than the ones promoted in some European states.

According to a recent study, “In bringing up this to the American people, Nixon attempted to reassure them that they could in fact be in a worse situation, and that because they were not, it was more possible to recover quickly”.<sup>149</sup>

The curious notion of “energy independence” has deep connections in the U.S. geopolitics of energy, and much of this discourse tends to conflate “energy” with “oil.” However, it is important to underline that before the 1970s, the (small amount of) oil imported into the U.S. was purchased abroad because it was cheaper to import it from places like the Middle East, not because the U.S. lacked oil. It was the peaking of American oil production in 1970, the Arab oil embargo of 1973, and the Iranian revolution of 1979 that upset the United States’ sense of primacy in the global oil market.<sup>150</sup> In fact, as Kissinger stated on 11 October 1973 during a Conversation with French Foreign Minister Jobert, “Our problem on oil is that we do not have a strategy”.<sup>151</sup>

In this chapter, I will first analyse the purposes, logics and contents of Project Independence, and then, in the second section, I will highlight the genesis of the speech. The third paragraph will analyse the environmental approach of Nixon and I will try to explain how, in reality, Project Independence was not an environmental agenda. The fourth section will study both the domestic and international reactions to Project Independence; and the last paragraph will conclude the discourse explaining how the speech had a failed rally ‘round the flag effect and how it led to a closure of the “energy independence” window.

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<sup>147</sup>M. Haluga, “The Oil Crisis of 1973: President Nixon’s Actions to Maintain American Prosperity”, *American Studies Forum*, 2017, pp. 1-22. (p.1). This statement is based on Nixon’s unprecedented cooperation with countries like China and the Soviet Union, which were historically hostile to the United States.

<sup>148</sup>FRUS Volume XXXVI, Energy Crisis, 1969 – 1974, Editorial note (*Public Papers: Nixon*, 1969, page 122). Available at <https://history.state.gov/historicaldocuments/frus1969-76v36/d1>

<sup>149</sup>M. Haluga, “The Oil Crisis of 1973”, p. 4.

<sup>150</sup>Ibid., p. 337.

<sup>151</sup>Foreign Relations of the United States (from now on FRUS), Vol. XXXVI, Energy Crisis, 1969-1974, Memorandum of Conversation No. 211. Available at <https://history.state.gov/historicaldocuments/frus1969-76v36/d211>

## 1. A Critical Analysis of Nixon's Speech

Two years after the quotas established by Eisenhower had been finally lifted, and after the U.S. had turned to the world (in particular Middle East and North Africa<sup>152</sup>) oil markets to satisfy the growing demand, on October 1973, the oil producing countries started an embargo on the United States and the Netherlands who were supporting Israel during the Yom Kippur war. And, as said, despite the fact that the United States could still rely on available domestic energy resources, the embargo and its consequences hit consuming countries in different ways.

Back in April 1973, Nixon directed to the Congress with a discourse stating that “America [was] in a period of transition (...) and new problems (...) require[d] vigorous action. Nowhere is this more clearly true than in the field of energy”.<sup>153</sup> Because of the rapid increases in energy demand, the President explained that “in the years immediately ahead, we must face up to the possibility of occasional energy shortages and some increase in energy prices”.<sup>154</sup> At that time, before the real “energy crisis” hit the importing countries, the fear of such a challenge was still a supposition and could still be prevented especially because the U.S. possessed the capacity and the resources to meet their energy needs “if only [they took] the proper steps [immediately]”.<sup>155</sup>

The first proposal was to exploit domestic coal resources that were able to provide the U.S. for enough energy to satisfy their needs for well over a century. During the speech, the President outlined that the United States possessed more than half of the world's total reserves of coal. Subsequently, there was the possibility to use oil domestic stocks and billions of barrels of shale oil. The third energy source mentioned was gas – more than 2,000 trillion cubic feet were at disposal. This last one was also the “best” in terms of sustainability; in fact, Nixon classified it as “the cleanest fuel and the most preferred one to protect the environment” – however, the Federal Government's regulations of natural gas prices had caused scarcity of such fuel. Quite the opposite was represented by coal: it was a persistent environmental problem and, by 1973 it represented less than 20 percent of U.S. energy source. According to the speech, held just six months before the embargo, Nixon seemed to care to the environmental aspect.

He also asserted that “in determining how we should expand and develop these resources, along with others such as nuclear power, we must take into account not only our economic goals, but also our environmental goals and national security goals”.<sup>156</sup> Despite being quite focused on the reach of

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<sup>152</sup> New production had come from Indonesia and Nigeria (especially after the Nigerian civil war that ended in early 1970). However, African output was dwarfed by the growth of the Persian Gulf production.

<sup>153</sup> Special Message to the Congress on Energy Policy, April 18, 1973. Note 128. Public papers of the presidents of the United States 1973, p. 302-319.

<sup>154</sup> Ibidem.

<sup>155</sup> Ibidem.

<sup>156</sup> Ibidem.

energy independence – or at least this is what emerges from the previous 10 pages of speech -, this time Nixon depicted imports as a concrete option to avoid a short term fuel shortage and to keep fuel costs as low as possible. Actually, what he suggested was for the U.S. to increase their fuel imports, while encouraging the exploration of domestic oil and the construction of refineries to process it.

The importance of the 18 April speech is particularly owed to the fact that Nixon recognised that the Quota System for oil imports – the Mandatory Oil Import Program, that had been established when the U.S. could produce more oil at home than the amount it used to import – was no longer suitable. Instead, it had “the very real potential of aggravating our [American] supply problems”.<sup>157</sup> The President therefore, removed by proclamation all existing tariffs on imported crude oil and products, and suspending all direct control over the quantity of crude oil and refined products that could be imported. All these strict measures were then substituted by a license-fee quota system. The particularity of the new system saw holders of import licenses able to import petroleum exempt from fees up to the level of their 1973 quota allocation; while for imports in excess a fee should have been paid by the importer.

On 17 October 1973, while the oil ministers were meeting in Kuwait City, Nixon and Kissinger received four Arab foreign ministers led by the Saudi Omar Saqqaf.<sup>158</sup> Among the key topics of the encounter, there were Nixon’s desire to strive for a ceasefire to make it possible to work under Resolution 242,<sup>159</sup> and the weapons’ resupply matter that was mainly connected to the U.S.- Soviet rivalry. Therefore, the American President reassured the Arabs who should have not perceived it as an American strategy against them and in support of Israel.

What was surprising was that no mention to oil had been made, and the American Administration believed that it was unlikely that the Arabs would have used the “oil weapon” against the United States.<sup>160</sup> However, far from the White House, that was exactly what the Arab oil ministers were contemplating in Kuwait City, and on 20 October 1973, “the three-decade-old postwar petroleum order had died its final death”.<sup>161</sup>

As a matter of facts, keeping in mind that the United States in the early 1970s imported limited quantities of oil from the Middle East, the oil shortage and the embargo represented an surprising,

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<sup>157</sup>Special Message to the Congress on Energy Policy, April 18, 1973.

<sup>158</sup>D. Yergin, *The Prize*, p. 588.

<sup>159</sup>On 22 November 1967, the UN Security Council passed Resolution 242 for the establishment of a just and lasting peace in the Middle East. The two main principles outlined were: first, the withdrawal of Israel armed forces from territories occupied in the recent conflict; second, the termination of all claims or states of belligerency and respect for and acknowledgement of the sovereignty, territorial integrity and political independence of every State in the area and their right to live in peace within secure and recognized boundaries free from threats or acts of force.

<sup>160</sup>D. Yergin, *The Prize*, p. 589.

<sup>161</sup>*Ibidem*.

but no tragic, break with America's past, undermining U.S. confidence in the future. The curbs in Arab production were, in fact, a serious issue and the embargo did worry the public opinion; however, it was the skyrocketing prices of Arab oil that most preoccupied the Administration.

Along with the Arab cuts in production, importing countries had to face also OPEC's decision to raise petroleum prices, and the only (apparent) certain thing was that they were destined to rise even more. That situation forced the American government to deal directly with the rising prices of imported oil. The political factor, which until that moment had played an infinitesimally small role compared to economic factors in the calculation of oil movement, had come to have the same weight, if not even greater, of the economic variable.

The U.S. was the only country that had domestic price controls at the time of the embargo. This price control derived from a legacy of the Nixon administration's fight against inflation and protected consumers from higher prices; however, such price control made it difficult to use the market for economic adjustment. In fact, oil companies were gaining excessively with wide profit margins that were not being passed on to consumers. Senators Henry Jackson and Hubert Humphrey requested the *Federal Trade Commission* (FTC) to investigate the enormous profits of the oil companies, as Humphrey believed they had irresponsibly abused their market power.

After analysing the behavior of the oil companies, the FTC also criticized the support, whether voluntary or involuntary, of federal policies for these practices. In fact, Senator Edward Kennedy emphasized how the U.S. government had regarded the oil companies as instruments of American foreign policy and how the companies' interests had been equated with national interests. Senator Jackson, in fact, said, right in front of oil companies' executives, that "The American people want to know why the prices of home heating oil and gasoline have doubled when the companies report high inventories of these stocks".<sup>162</sup>

Always on 17 October, during a meeting on the Middle East, the Director of Energy Policy Office, Governor Love, admitted that "If the President goes on TV and lays out a whole program, that will create a sense of urgency."<sup>163</sup> Considering the fact that during the embargo months the "missing imports" amounted to a scarce 10 per cent, probably Nixon and his Administration actually wanted to create a sense of drama to promote their objectives.

Few weeks later, on 7 November 1973, President Nixon addressed the nation on television and radio from the Oval Office of the White House and unveiled Project Independence. It was a domestic response to the energy crisis - that he compared to the Manhattan Project and the space

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<sup>162</sup> R. Sherrill, "The Case Against the Oil Companies", *The New York Times*, 14.10.1979.

<sup>163</sup> FRUS, Vol. XXXVI, Energy Crisis, 1969-1974, Minutes of Washington Special Actions Group Meeting. Available at <https://history.state.gov/historicaldocuments/frus1969-76v36/d219>

program - which purpose was identified as “the strength of self-sufficiency”.<sup>164</sup> The rapid and ongoing disappearance of surplus capacity in the United States meant that the “security margin” upon which the Western world had depended on was no longer a certainty, and the U.S. was no longer able to provide “stand-by-supply”.<sup>165</sup>

Nixon’s energy address was directed towards an alarmed and fearful nation. He went

Let us unite in committing the resources of this Nation to a major new endeavor, an endeavor that in this Bicentennial Era we can appropriately call ‘Project Independence.’ Let us set as our National goal, in the spirit of Apollo, with the determination of the Manhattan Project, that by the end of this decade we will have developed the potential to meet our own energy needs without depending on any foreign energy sources. Let us pledge that by 1980, under Project Independence, we shall be able to meet America’s energy needs from America’s own energy resources (...).<sup>166</sup>

It is important to notice that, with respect to the 1971 “Program to Insure an Adequate Supply of Clean Energy in the Future” (that marked the first time an American president formally addressed the country’s energy policy under the light of “clean energy”), in 1973 Nixon promoted “independent energy”.

This change in the used language represents the key aspect in Nixon’s energy focus shift. In fact, to promote the goals of this plan (rapid increase of energy supplies, conservation by eliminating nonessential energy use, and development of new technologies through energy research and development programs), the President further recommended a relaxation in air quality standards to meet the goals of Project Independence.<sup>167</sup>

The key point of Project Independence was the achievement of energy self-sufficiency by 1980 and it was mainly driven by economy and security related factors. In fact, Nixon wanted both to protect the U.S. economy, and to achieve national security from external shocks; and it sought to tackle these issues through a comprehensive approach that combined diversification of energy sources, regulatory reforms, technological innovation and conservation efforts.

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<sup>164</sup>FRUS, Vol. XXXVI, Energy Crisis, 1969-1974, Editorial Note No. 237. Available at <https://history.state.gov/historicaldocuments/frus1969-76v36/d237> last accessed on 22 April 2024.

<sup>165</sup>D. Yergin, *The Prize*, p. 550.

<sup>166</sup>Nixon’s nuclear energy vision, *Domestic Policy Nixon Today*, 20 October 2016.

<sup>167</sup>S. Levy, “Project Independence”, p. 20. This change of direction with respect to the 1971 speech, marks the new goals of the American Administration.

Having been defined “an ambitious plan”, it required huge technological advances, a lot of money, and a sharp deviation away from the new road of environmentalism, leaving his own administration quite skeptic about the Project’s success.<sup>168</sup>

What was probably not so clear (though probably Americans were supposed to know) was the fact that “energy independence” has remained a remarkably confusing, ambiguous, indeed often-incoherent policy concept. It was (and is) quite confusional what policymakers, advisers and citizens mean when they refer to “energy independence”. The most shared opinion is that independence had to do with the elimination or drastic reduction of U.S. dependence on oil imports while gaining energy (or just oil) self-sufficiency.<sup>169</sup>

Differently, other times “energy independence” was depicted as a way to overcome oil price volatility, or to achieve “energy security” (another ambiguous expression). However, apart from the general assumption that oil imports should be reduced or completely eliminated, the precise definition and criteria for achieving energy independence remained ambiguous. Despite its ambiguity, there have been few pieces of legislation that claimed to turn the policy goal into law. Clearly, and not surprisingly, none of the attempts could have achieved “actual or even potential self-sufficiency or guaranteed price stability even if they had been backed by staggering levels of expenditure”.<sup>170</sup>

Although Nixon’s plans for Project Independence were never given a legislative test, the cost of achieving them have been estimated by the National Academy of Engineering in the spring of 1974. The research group affirmed that Project Independence would have cost somewhere between \$490 billion and \$610 billion; and probably still would not have achieved Nixon’s goals.<sup>171</sup> Nevertheless, Gerald Ford, who succeeded Nixon, announced a legislative initiative that aimed at operationalising Project Independence. In 1975, in fact, the Energy Independence Act amended Nixon’s agenda and the purpose was to reach energy independence not in seven years but in ten, so by 1985.<sup>172</sup>

Significant challenges - that highlighted the complexities and trade-offs involved in transforming the nation’s energy landscape – led many to define the Project as overly ambitious<sup>173</sup>. Moreover,

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<sup>168</sup>D. Yergin, *The Prize*, p. 599.

<sup>169</sup>P. Grossman, “The Four-Decade Quest for an “Energy Independence” Policy: Chasing a Trope Through Time”, *Journal of Policy History*, Vol. 33, No. 1, 2021, pp. 93-110 (p. 94).

<sup>170</sup>*Ibid.*, p. 101.

<sup>171</sup>*Ibidem.*

<sup>172</sup>Grossman argues of “policy inheritance” – the legacy of choices made in the past - to explain what was at work in the United States policy circles. This aspect will be further analysed in Chapter Three of my research.

<sup>173</sup>The characterization of Nixon's Project Independence as overly ambitious was a consensus that emerged from a wide range of critiques and evaluations by scholars, policymakers, and media commentators. This perspective reflected the understanding that while the goal of reducing dependence on foreign oil was laudable, the technological, economic, and political hurdles made achieving complete energy independence a daunting and unlikely prospect in the near term. Media coverage, newspapers, think tanks and reports (like Brookings Institution) criticised the plan's ambitious timeline and the substantial financial and technological investments required.

technological and economic constraints of the early-to-mid 1970s, together with environmental implications of increased coal and nuclear energy production, raised some concerns that were not fully addressed in the original plan of the Project. Both Jacobs (2017) and Yergin (2009) recognised some technological limitations – as the technology needed to achieve true independence was not yet fully developed or economically viable -; political oppositions – mainly from various stakeholders, including the oil industry<sup>174</sup> and environmental groups, which complicated the implementation of proposed measures -; and economic constraints regarding the financial challenges posed by high costs associated with developing new energy sources and infrastructures.<sup>175</sup> Yergin also added the issue of the market obstacle, as the dynamics of the global oil market, including fluctuating prices and the actions of OPEC, complicated the efforts to achieve energy independence.

According to these studies, it is clear that the Project did not succeed – and could have not been met – not only because the right conditions were not available, but also because they could not even be created.

Nevertheless, despite these complexities, Project Independence provided the stimulus for policy innovation; though it clearly was not enough. Being the Project a long-term goal, it left space for incrementalism to set in before a comprehensive policy could develop.<sup>176</sup>

As a matter of fact, Nixon’s plan could be described as the “high-cost dirty path to energy independence”<sup>177</sup> and implementing that plan would have saddled the United States with high-cost energy supplies and very high emissions of harmful global warming gases.<sup>178</sup>

## 2. The Genesis of the Speech

From mid October 1973 onward, the two highest priorities to be managed were the urgency for a Presidential speech to announce the emergency oil program, and the control of oil companies’ reactions and intentions. As Joseph Sisco - the then Assistant Secretary of State for Near Eastern and South Asian Affairs – said, what the U.S. Administration was trying to avoid was a confrontation between the oil companies and the Arab producers. And, therefore, a governmental guidance ought to be in the direction of accommodation in terms of the oil companies with the

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<sup>174</sup>See Kissingers’s main preoccupations during the official meetings. FRUS, Vol. XXXVI, Energy Crisis, 1969-1974.

<sup>175</sup>More details on the Nixon and Ford Administrations intentions and actions will be provided in the third chapter.

<sup>176</sup>Quite similarly to what Levy (1979) argued, for “incrementalism” here I refer to the theory of public policy making, according to which policies result from a process of interaction and mutual adaptation among a multiplicity of actors advocating different values, representing different interests, and possessing different information. This concept was first developed by an American political scientist - Charles E. Lindblom – in the 1950s, in response to the then prevalent conception of policy making as a process of rational analysis culminating in a value-maximizing decision. For more details see the *Britannica* definition and explanation available at <https://www.britannica.com/topic/incrementalism>

<sup>177</sup>P. Verleger, “The Amazing Tale of U.S.,” *The Magazine of International Economic Policy*, 2012, pp. 8-62.

<sup>178</sup>An aspect that might appear clashing with Nixon’s good intentions and care for the environment.

producers.<sup>179</sup> For that reason, William Casey – the then Under Secretary of State for Economic Affairs – proposed for the Government to subsidize all type of sources of production.<sup>180</sup>

During a 16 October 1973 meeting, Kissinger asked the President’s Assistant for Energy, Love, to draft the President’s speech taking advantage of the crisis situation to clearly transmit “never again” to the people. The Secretary of State also outlined the main points for the speech:

The speech should make four points: 1) what is the crisis? 2) what do we do now? 3) what are our next steps? 4) what as a nation can we do to be sure we are never blackmailed in this fashion again? Then we’ll go to the Congress and ask for what we need and we would have a chance of getting it.<sup>181</sup>

As the OAPEC embargo started on 17 October, the idea was to announce the American plan as soon as the ceasefire was reached<sup>182</sup>, and the participants in the meeting agreed that it would have been better if Governor Love would have draft Presidential speech into a message to the Congress. In the first part of a memorandum of 19 October, entitled “The Oil Weapon and Its Effects”, it is reported that,

From the point of view of United States vulnerability, it is perhaps fortunate that this particular crisis occurred now rather than a few years hence. It had been predicted that we would be importing nearly 5 million barrels per day of Arab oil or 21%–22% of our consumption by 1980. With this level of exports an Arab cutoff would severely affect our economy. Even now there are domestic as well as foreign pressures for policy changes as a result of the current cutoff. In any event, the rapid increase in the price of imported oil should dampen our consumption and make other domestic energy sources more attractive, for example oil from Colorado shales and coal gasification.<sup>183</sup>

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<sup>179</sup> FRUS, Vol. XXXVI, Energy crisis, 1969-1974, Minutes of the Secretary of State’s Staff Meeting, Number 220, 18 October 1973.

<sup>180</sup> Ibid.

<sup>181</sup> FRUS, Vol. XXXVI, Energy Crisis, 1969-1974, Minutes of Washington Special Actions Group Meeting, October 16, 1973.

<sup>182</sup> See Kissinger statement on 19 October 1973. FRUS, Vol. XXXVI, Energy crisis, 1969-1974, Minutes of Washington Special Actions Group Meeting, Number 221, 19 October, 1973.

<sup>183</sup> FRUS, Vol. XXXVI, Energy crisis, 1969-1974, Memorandum Prepared in the Office of Economic Research, Central Intelligence Agency, Number 223, 19 October 1973.



The U.S. response to the oil embargo was quite ambitious and included several minor bureaucratic reorganizations implemented in the following years. The measures aimed to increase the federal government's attention to energy, oil price controls, petroleum allocation and rationing, conservation measures and increase in energy security by stabilising a Strategic Petroleum Reserve and enactment of Corporate Average Fuel Economy (CAFE) standard for motor vehicles.<sup>184</sup>

The significant problems that followed the embargo needed to be faced by President Nixon and the American government who showed that changes regarding the use and production of oil and other forms of energy were necessary.<sup>185</sup>

Project Independence was developed by the staffs of Nixon's Office Management and Budget and Federal Energy Administration (FEA, which replaced the Federal Energy Office in 1974) together, and the effort involved three main points. The first was increasing domestic energy supplies from all sources including renewable ones; the second was stimulating energy conservation and efficiency; and the third was developing alternative energy sources and new technologies for fossil fuels. As Solomon and Krishna (2011) argued, "the achievement of all three required higher energy prices, which substantially contradicted other policies"<sup>186</sup> like subsidizing domestic oil companies and protecting uneconomic small domestic refineries. There were also softer presidential goals like, for example, when the FEA interpreted the self-sufficiency purpose to mean no more than 15 per cent for total oil and gas imports, and to rely instead on the market to achieve it.

The foundation of Project Independence was to ensure a reliable energy supply during both wartime and peacetime. After evaluating risks such as high domestic energy prices, inflation, supply interruptions, potential declines in the real gross national product, environmental degradation, and the depletion of domestic reserves, Dr. Sawhill<sup>187</sup> – who wrote the first Project Independence report

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<sup>184</sup> B. Solomon and K. Krishna, "The coming sustainable energy transition: History, strategies, and outlook", *Energy Policy*, Vol. 39, 2011, pp. 7422-7431 (p. 7427). The Energy Policy and Conservation Act (EPCA) of 1975, signed into law by President Ford on December 22, 1975, established the CAFE standards as a response to the energy crisis of the 1970s. The EPCA mandated the establishment of fuel economy standards for passenger cars and light trucks sold in the United States, with the goal of reducing dependence on foreign oil and promoting energy conservation. For more about CAFE standards, see Y. Wanga and Q. Miaob, "The impact of the corporate average fuel economy standards on technological changes in automobile fuel efficiency", *Resource and Energy Economics*, Vol. 63, 2021.

<sup>185</sup> Other measures that were instigated by the 1973 oil embargo were the successful development of commercial nuclear power for electricity generation adopted in France, and Brazil's crush program that successfully developed sugarcane-based ethanol to substitute for imported petroleum to transport fuel. Project Independence was certainly as ambiguous as the programs of Brazil and France, but decidedly less focused. The success of Brazil's program was due to three main factors: multiple government objectives were met by supporting a major ethanol program; widespread stakeholder support coalesced for the program (despite initial opposition from Petrobras and carmakers); and the government's emphasis on technology innovation (Lehtonen, 2007; Gee and McMeekin, 2011). In the case of France, despite facing strong opposition initially, the nuclear project was successful in achieving its goal of significantly reducing its energy dependence on oil imports. Having contributed 43% of its total energy supply in 2008, nuclear power displaced oil as France's primary energy source (IEA, 2010).

<sup>186</sup> B. Solomon and K. Krishna, "The coming sustainable energy transition", p. 7427.

<sup>187</sup> Mr. Sawhill was deputy energy secretary under President Jimmy Carter, then became chairman and chief executive of the United States Synthetic Fuels Corporation. He used to believe that crisis require new approaches to be managed and Under Presidents Richard M. Nixon and Gerald R. Ford, he was administrator of the Federal Energy Administration,

that was delivered to Congress in November 1974 - asserted that the United States could achieve energy independence without being entirely self-sufficient. Sufficient and secure supplies, coupled with a significant reduction in imports, would have provided the required degree of independence, provided that the sources of oil imports did not engage in political manipulation of this vital commodity.

The United States was also concerned with the West European countries' attempt at forming a common position regarding the oil cutback.<sup>188</sup> Moreover, there was the issue of the large shipping distances for countries that depended more on North African oil, such as France, Italy and West Germany. Italy already had imposed an embargo on refined oil exports outside the European Community - a move detrimental to American supplies. In fact, the U.S. feared that the Italian move could have been emulated by other Community members if the supply situation worsened. There were some inconsistencies between the European desire to minimize association with U.S. political policy in the Middle East crisis and European awareness that some form of cooperation arrangement for coping with oil shortage must necessarily involve U.S. - European conversation. This inconsistency was both real and apparent.<sup>189</sup> The Europeans tried to resolve it insofar as they could, by working for quiet talks within OECD forum on oil matters, while avoiding political initiatives unless and until the time seems ripe for a mediation role that would not alienate the Arabs. Nevertheless, as John Love said, taking advantage of the crisis to do what was needed to be done domestically was just a matter of good policy.

It was clear that everybody was trying to pursue their own interests, and Kissinger's priority was to develop some comprehensive oil strategy.<sup>190</sup>

During the 1973 Washington Energy Conference, held one month after Nixon's speech, Kissinger defined the American position in the global system as one of interdependence, and introduced the term "Project Interdependence" which later became former President Ford's policy foundation. Kissinger emphasized that Project Independence was only an intermediate goal, with Project Interdependence as an overall long range goal for the survival of the world economic system.<sup>191</sup>

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deputy administrator of the Federal Energy Office, and associate director for energy and environmental matters in the Office of Management and Budget. His role, especially under Ford's administration, will be further called into analysis in Chapter Three.

<sup>188</sup> More on foreign reactions will be analysed in section 5.

<sup>189</sup> Ibid.

<sup>190</sup> FRUS, Vol. XXXVI, Energy crisis, 1969-1974, Minutes of the Secretary of State's Staff Meeting, Number 226, 24 October 1973.

<sup>191</sup> Henry A. Kissinger, "The Washington Energy Conference, The American Challenge," *Atlantic Community Quarterly*, 12, No. 1, (Spring 1974), p. 23.

In American soil, Canada was acting like “the Arabs of the North” in the Western Hemisphere<sup>192</sup>- though, without American capital and access to market, they were not able to develop their resources - and the Secretary of State wanted to pursue a plan to get them to behave like U.S. allies instead.<sup>193</sup> He was also trying to communicate the world that “if everyone knows you cannot tackle the United States, people will stop trying to tackle us”.<sup>194</sup> What Kissinger was searching was a great cooperation among importing countries because

if it would be pursued even if they couldn't cooperate, and, therefore, if they learn, as they will learn, that if everyone in the world, including the United States, pursues their self-interest they are going to be the losers, then I think we are going to be able to get a re-establishment of a partnership concept, which I far prefer.<sup>195</sup>

Julius Katz, the then Acting Assistant Secretary of State for Economic and Business Affairs, suggested two solutions to face the long-term problem of demand-supply balance. As the United States was not in the position to affect supply, the only way to get a handle on prices, or on ownership, was to affect the demand balance. To achieve such a result, the United States was autonomous, as it loomed so large in the picture. Their demand, in fact, was growing so large that they were taking up all of the increase in supply. Therefore, what Katz suggested was letting “the price do it. [It] will serve as a rationing function.”<sup>196</sup> On the other hand, the other solution, was influencing the demand-supply balance by physical controls, through an international rationing system. This second way was more difficult to negotiate. Americans would have had to allocate supplies internationally, and of course other countries would have looked at them to take the largest part of the burden, since they were representing so much of the increase in demand.<sup>197</sup>

While the United States represented the key of the demand side, the Kingdom of Saudi Arabia represented the key on the supply side. The Americans tried their best to diplomatically persuade

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<sup>192</sup>Henry A. Kissinger, "The Washington Energy Conference". Mr. Casey, under Secretary of State for Economic Affairs, used this expression during a meeting held on 24 October.

<sup>193</sup>In the Memorandum From the President's Assistant for National Security Affairs (Kissinger) to President Nixon of 12 November 1973, Kissinger reports that Canada's Prime Minister Trudeau confirms that the Canadian Government will act in consultation with the United States and will seek in every way to minimize disruption of supply to the United States consistent with meeting Canadian requirements. The tone of the Prime Minister's letter is notably different from that of some recent public statements of his Energy Minister, whose line has been narrowly nationalistic and seemed to foreshadow ready capitulation to Arab pressure. FRUS, Vol. XXXVI, Energy crisis, 1969-1974, Number 240.

<sup>194</sup>FRUS, Vol. XXXVI, Energy crisis, 1969-1974, Minutes of the Secretary of State's Staff Meeting, Number 226, 24 October 1973.

<sup>195</sup>Ibidem.

<sup>196</sup>FRUS, Vol. XXXVI, Energy crisis, 1969-1974, Minutes of the Secretary of State's Staff Meeting, Number 229, 26 October 1973.

<sup>197</sup>Ibidem.

the Saudis to reverse the situation, lift the embargo, and convince them that their pressure was counterproductive.<sup>198</sup> The U.S. engaged in intensive diplomatic efforts, involving high-level negotiations and attempts to leverage its strategic relationship with Saudi Arabia. These efforts were aimed at highlighting the mutual benefits of lifting the embargo and the negative consequences of continued pressures both on oil prices and global economic stability.<sup>199</sup> Eventually, the United States did not get to obtain what they wished for and, as a consequence, the presidential speech was re-drafted with no mention of the Middle East, and no numbers to avoid any jurisdictional disputes. In a memorandum written by Under Secretary of State for Economic Affairs William J. Casey – who was quite skeptic on Faisal’s (the King of Saudi Arabia) ability to terminate the embargo before there was tangible evidence of commitments on a settlement, and that any approach to the Arabs would be ineffective -, he outlined that “a strong drive to self-sufficiency is fundamental and paramount and that diplomatic initiative is necessary to buy time and to cope with the financial imbalances already inherent in the present situation”.<sup>200</sup> His plan aimed at communicating to the Arabs that once the U.S. made the immense effort and investment to start in that direction, their market for oil could have been permanently impaired. He further explained that Americans were in a position to begin a process of engaging the Saudis in a continuing exploration of where their real interest lied in the period of transition to a world in which liquid hydrocarbons will inevitably share the world energy market with increasing proportions of hard hydrocarbons in the form of coal, shale and tar sands and new technologies based on the atom, hydrogen, and the sun.

To survive the shortfall prospect of 3 million barrels a day required forcing further consumption cuts through rationing. Due to peculiarities in the distribution system and time lags, the expectancies forecasted in Nixon’s speech were not likely to be fully achieved. Casey was a real supporter of self-sufficiency; however, it was not enough.

He proposed four strategic alternatives: control the companies; use of diplomatic, security and other leverages on the producing countries; reorganize the market through consumer cartels or a system of consumer country import controls or through a supply and price commodity agreement between consumer and producer countries, and, of course, rely primarily on building self-sufficiency.<sup>201</sup>

The control of oil played a vital role in establishing and maintaining U.S. preeminence in the international system. According to Painter (2014), the U.S. military established a vast archipelago of overseas bases that “allowed it to project its power into almost every region of the world. The

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<sup>198</sup>FRUS, Vol. XXXVI, Energy crisis, 1969-1974, Memorandum of Conversation, Number 230, 26 October 1973.

<sup>199</sup>American diplomatic efforts were a partial success. Even though the Arab producers eventually lifted the embargo in March 1974, it still lasted several months during which time oil prices quadrupled, causing significant economic disruptions.

<sup>200</sup>FRUS, Vol. XXXVI, Energy crisis, 1969-1974, Memorandum From the Under Secretary of State for Economic Affairs (Casey) to Secretary of State Kissinger, Number 235, 3 November 1973.

<sup>201</sup>Ibidem.

forces that carried out this strategy were oil-fuelled and could also be used to maintain access to overseas oil reserves".<sup>202</sup>As Graf (2014) argued on his study on sovereignty, analysing the oil crisis of 1973/74 as a challenge to sovereignty, one may hold the view that the "oil weapon" was not powerful enough to really threaten the sovereignty of Western industrialized countries, but this does not mean it was not perceived as threatening. The Nixon administration perceived the crisis as matters of sovereignty and therefore, the U.S. government tried to demonstrate and increase its domestic sovereignty in the field of energy by institutional reorganization and the use of expert knowledge, specifically the development of state expertise.<sup>203</sup> In his work, Graf explained that there were two basic, yet fundamentally different strategies to overcome the energy crisis: "increasing domestic oil/energy production or curtailing demand".<sup>204</sup> The National Petroleum Council (NPC), an advisory body to the Department of the Interior that consisted of representatives of the oil industry, opted for the first solution. Despite the fact that the need for energy conservation was widely acknowledged among the NPC experts, they still argued that only increased domestic production offered a long-term solution.<sup>205</sup>

Nixon's Energy Statement of 7 November had no direct reference to the Arab oil embargo. He in fact, said that

Even before war broke out in the Middle East these prospective shortages were the subjects of intensive discussions among members of my administration. (...) From these discussions has emerged a broad agreement that we as a nation must set upon a new course.<sup>206</sup>

He then proposed some short and long-term plans to achieve the new, and less-dependent, energy phase. Among the proposals there was ten per cent less fuel allocated for aircraft and 15 per cent less for space heating. A new national speed limit of 50mph was instituted, along with speeding up licensing and the construction of new nuclear power plants. He further called for legislation to enable the construction of the Alaskan pipeline from the North Slope to Valdez, to accelerate the development of the country's energy resources, and fund a \$10 billion dollar research and

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<sup>202</sup>D. Painter, "Oil and geopolitics: the oil crises of the 1970s and the Cold War", *Historical Social Research*, Vol. 39, No. 4, pp. 186-208 (p.188).

<sup>203</sup>R. Graf, "Claiming Sovereignty", p. 46.

<sup>204</sup>*Ibid.*, p. 51.

<sup>205</sup>*Ibidem.*

<sup>206</sup>Address to The Nation About Policies to Deal With the Energy Shortages November 7, 1973, Public Papers of the Presidents, United States Government Printing Office, pp. 916-922.

development program.<sup>207</sup> Finally, he announced Project Independence – something that ended up being more of a gesture.<sup>208</sup>

The “crisis” created a “urgency for data” and an effort to increase governmental energy expertise and Project Independence was the first outcome of these efforts. In terms of government strategies, Project Independence offered an apparent contradictory mixture of technocracy and grassroots democracy to enhance the government’s credibility.<sup>209</sup>

### 3. An Environmentalist Agenda?

During the 1970s the world also faced the rise of “modern environmentalism” fuelled by huge quantities of wastes and pollution generated by the abuse of energy and other materials that revealed fundamental for the postwar economic boom.<sup>210</sup> The rapid spread of protesters campaigns around the globe demonstrated how deeply “the world was integrated and interdependent from the ecological viewpoint and that issues such as population growth, energy consumption, industrial pollution and resources depletion could not be addressed as national problems”.<sup>211</sup> International forums were, in fact, the perfect scenarios where governments could find an elusive balance between energy conflict and cooperation.

Environmental impact analysis and the quest to scout the future for the sake of the environment was urged by George Perkins in March in the 1960s.<sup>212</sup> In the United States, environmental concerns can be traced at least as far back as mid 18<sup>th</sup> / early 19<sup>th</sup> century.<sup>213</sup> Between 1950 and 1970 the American population grew by 37% to 200 million doubling the gross energy consumption and generating massive quantities of air and water pollutants and other toxic chemicals with adverse effects on human health and the environment.<sup>214</sup> It was thanks to *Silent Spring* of Rachel Carson (1962) that a nationwide re-examination of the use of chemical pesticides was generated.

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<sup>207</sup>F. Parra, *Oil Politics: A Modern History of Petroleum*, I.B. Taurus, 2003, p. 186.

<sup>208</sup>The idea of achieving energy-sufficiency by 1980 was wildly unrealistic and everybody in energy circles knew it. In the fall of 1974, John C. Sawhill, who became the head of the new Federal Energy Administration (FEA), admitted that such self-sufficiency was unattainable - notwithstanding the fact the Ford administration was asking Congress to pass something called the Energy Independence Act of 1975.

<sup>209</sup>More on the Administration, involving both Nixon and Ford, will be analysed in the Third Chapter.

<sup>210</sup>A. Santese, “The Rise of Environmentalist Movements and the Debate on Alternative Sources of Energy during the Oil Crisis in the United States”, in D. Basosi, et al. (ed.), *Counter-Shock: The Oil Counter-Revolution of The 1980s*, I.B. Tauris & Company, 2018, pp. 299-316 (p.299).

<sup>211</sup>*Ibid.*, . 300.

<sup>212</sup>R. Clark, and L. Canter, *Environmental Policy and NEPA, Past Present and Future*, CRC Press LLC, 1997, p. IX.

Available at

[https://www.google.it/books/edition/Environmental\\_Policy\\_and\\_NEPA/YDzotaO9Hl4C?hl=it&gbpv=1&dq=the+Natio+nal+Environmental+Policy+Act+\(NEPA\)&printsec=frontcover](https://www.google.it/books/edition/Environmental_Policy_and_NEPA/YDzotaO9Hl4C?hl=it&gbpv=1&dq=the+Natio+nal+Environmental+Policy+Act+(NEPA)&printsec=frontcover)

<sup>213</sup>*Ibid.*, p.4.

<sup>214</sup>*Ibid.*, p. 10.

Growing fears and preoccupations over the environment and pollution intertwined soon with the “energy crisis”, and, as Smith (2002) recalled, “the historic event most central to environmentalism was the energy price shock of 1973 (and 1979)”.<sup>215</sup> The rapid increase in oil price was followed by fears of natural resources depletion and concerns about the possible exhaustion of oil reserves - being the major consequences of an unrestricted economic growth. As a result, the need to reduce the share of energy from oil led governments to consider both conservation measures and alternative energy sources.

As Blake (2016) reported,

when political scientist Michael Ross wrote about the 40th anniversary of the 'Arab Oil Embargo' in the pages of *Foreign Affairs* in October 2013, he was not setting up a 'teasing' moment for others to ponder. The title of his article makes his point absolutely clear, when he writes: 'How the 1973 oil embargo saved the planet: OPEC gave the rest of the world a head start against climate change'. Not only was he proposing that the 1970s energy crisis had, in fact, significantly altered patterns of energy use, he additionally argued that these general shifts would help nations face each future environmental challenge, including climate change.<sup>216</sup>

Historian McNeil (2001) explained that the 1970s “energy crisis” awakened humans to the reality that life in the twentieth century had become predominated by a specific “energy regime” and, by using the macro-historical view, urges us to realise the centrality of energy in all of human life.<sup>217</sup>

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<sup>215</sup>E. Smith, *Energy, the Environment, and Public Opinion*, Lanham, MD Rowman & Littlefield, 2002, p.3. The author, who mentions Robert Paehlke, looks at the fragile interplay by analysing the history of energy development and policy in the United States. He surveys the history of energy issues in the U.S. from Abraham Gesner's invention of a distilling process for kerosene to the oil spill in Santa Barbara in 1896 until analysing the present dependence on foreign oil sources. The author notes two particular events that changed public opinion on environmental issues: the first was the 1962 publication of Rachel Carson's *Silent Spring* that forced President Nixon to pass sweeping pieces of environmental legislation such as the National Environmental Protection Act and the Clean Air Act; the second was the awakening public awareness of American dependence on foreign oil (after the 1973-74 embargo).

<sup>216</sup>B. Blake, “Energy Hinge? Oil Shock and Greening American Consumer Culture since the 1970s”, in E. Bini, G. Garavini and F. Romero (ed.), *Oil Shock. The 1973 crisis and its Economic Legacy*, Taurus Academic Studies, 2016, pp. 198-221 (p. 200). What Ross wanted to transmit in his book *The Oil Curse: How Petroleum Wealth Shapes the Development of Nations* is that humans have somehow learned valuable lessons about energy from the 1973 embargo and ensuing 'crisis' that have led to significant changes in energy consumption patterns. In other words, that we have learned the lesson from the over-consumption and wasteful energy patterns of the post-World War II world. While scholars, including Ross, may have been willing to extend this status to many European nations, the US has actually significantly increased consumption in the aftermath of the embargo, which has led most critics to dub the reaction to the energy crisis a 'failure'.

<sup>217</sup>J. McNeil, *Something New Under the Sun: An Environmental History of the Twentieth-Century World*, New York: W.W. Norton and Company, 2001, p. 298.

Already back in the 1960s the reality of petroleum dependence had begun to emerge in many ways: some came out from the advance threads of new scientific understanding, ranging from oil spills to acid rain, while others grew from the wake of a complex social movement to re-examine patterns of consumption.<sup>218</sup> In the late 1960s, the magazine *The Whole Earth Catalog* promoted the emergence of a green alternative - the so-defined “counter culture” by Blake - as a consumer, sustainable choice.<sup>219</sup> And soon, the emergent green-thinking proved to be a crucial stimulus for the energy transition from petroleum dependence.<sup>220</sup>

The “renewables”, despite emerging from grassroots environmental groups and being somewhat sidelined by governments, were the most-spoken suggestions of the period. Conversely, the “energy conservation” issue became the focus of “both intellectual works and pronouncements by public authorities”.<sup>221</sup> In the U.S., energy economists discouraged the government from pursuing any active energy policy while promoting diversification where national oil, coal, natural gas and nuclear were picked as the best alternatives.<sup>222</sup>

The environment, in fact, seemed to be linked to a variety of problems that threatened national, regional and global stability and, therefore, offered a lot of potential for international cooperation.<sup>223</sup> Environmental non-governmental organisations (NGOs) proliferated in the 1970s working to reform national environmental policies and international institutions and becoming a real bridge between citizens and governments.<sup>224</sup>

In the United States, the Nixon administration initiated a number of policies that aimed at creating a global consensus between countries on environmental issues and at bringing about a global architecture of environmental protection. In fact, Nixon crafted its approach around three fundamental policies.

First, Nixon called for the creation of an environmental component of NATO, the Committee on the Challenges of Modern Society (CCMS), which he

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<sup>218</sup>B. Blake, “Energy Hinge?”, p. 204.

<sup>219</sup>Ibid, p. 209. In developed societies, humans developed new ideas about our place in nature; for example, climate change emerged from being merely a concept of consideration in the 1980s to inform policy decisions and city planning today.

<sup>220</sup>D. Yergin, *The Quest*, chapter 13. The author argues that conservation is a primary component of any secure nation’s future. In the current culture of energy, conservation has become technology directed by an environmental ethic and guided by consumer choices.

<sup>221</sup>D. Basosi, “A Small Window”, p.342.

<sup>222</sup>Ibidem. For example, as reported in D. Yergin, *The Quest*, after the 1973 oil crisis France made nuclear power a priority; and today nuclear power provides almost 80 per cent of French electricity, p.245 .

<sup>223</sup> S. Macekura, “The limits of the global community: The Nixon administration and global environmental politics”, *Cold War History*, Vol. 11, No. 4, 489-518. In that period of détente the United States was moving towards institutionalising multipolarity and the environmental issue was *de facto* a way to encourage international cooperation as a means to stabilise the turbulent international system.

<sup>224</sup> W. Longhofer et al., “NGOs, INGOs, and Environmental Policy Reform, 1970-2010” *Social Forces*, Vol. 94, No. 4, 2016, pp. 1743-1768.



described as a ‘third dimension’ to NATO’s political and military component. Second, the administration sought a bilateral environmental protection agreement with the Soviet Union, which Nixon viewed as a valuable symbol and useful starting point for negotiation détente. Third, and most ambitious, the administration assumed a leadership position at the 1972 United Nations Conference on the Human Environment at Stockholm and promoted the establishment of the United Nations Environmental Programme (UNEP).<sup>225</sup>

Nixon’s team of environmental diplomats was formed by D. Moynihan (the leader of mid-level policymakers), representative to CCMS, R. Train, the head of the Council on Environmental Quality (CEQ), and C. Herter, Assistant Secretary of State for Environmental Affairs. They were deeply convinced that “environmental protection would benefit all nations (...) and the United States and Soviet Union could [even] transcend political and ideological conflicts to agree on environmental protection agreements because both nations shared problems with excessive pollution”.<sup>226</sup>

Nixon’s environmental record was the evidence of an activist domestic agenda long overshadowed by Watergate and Vietnam. Richard Nixon was seen attaching a lot of importance to the environment<sup>227</sup> - to the extent that he was defined the “greenest American President” - and the U.S. role in international environmental programs was seen not only as an “opportunity for positive U.S. leadership in world affairs”, but it also provided “a major potential market for the export of U.S. pollution abatement technology”<sup>228</sup>. Nevertheless, as Flippen (2000) argued, many historians have unjustly overlooked at the Nixon administration’s major environmental accomplishments recalling the excess of issues faced by the American president.

While Nixon was at the White House, he had to deal with overpopulation, offshore oil drilling<sup>229</sup>, the Alaska oil pipeline, the 1970s energy crisis, the national forest policy and the alleged "timber famine," park and wilderness preservation policy, air pollution, water pollution, solid wastes, urban sprawl, the creation of the Environmental Protection Agency (EPA) and reorganization of federal environmental policy, the Miami jetport proposal that threatened the Everglades, and the Tennessee-

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<sup>225</sup> S. Macekura, “The limits of the global community”, p. 491.

<sup>226</sup> Ibidem.

<sup>227</sup> J. Flippen, Nixon and the Environment, *University of New Mexico Press*, 2000, p.

<sup>228</sup> Richard Nixon Presidential Library, Memorandum for Mr. John Ehrlichman, “Subject: US Role in International Environmental Programs”, 20 September 1971.

<sup>229</sup> As for the marine environment, in the 1960s, dramatic episodes of oil tanker spills took place. In 1967, *Torrey Canyon* - a Liberian-flagged tanker – ran aground near England’s Land’s End and became the first supertanker accident (and still among history’s worst oil tanker spills). Two years later, in 1989, the *Exxon Valdez* grounded in Alaska’s Prince William Sound, causing the largest U.S. oil spill ever. After only a month into Nixon’s first term, the Santa Barbara oil offshore well blew out, fouling many miles of beach and drawing the nation’s attention to (oil) pollution.

Tombigbee Waterway, among others.<sup>230</sup> The American “environmental wave” lasted during the whole 1970s decade until Jimmy Carter’s presidency (included), who was convinced that “environmental problems do not stop at national boundaries” and always urged international efforts to protect “our common environment”.<sup>231</sup>

Nixon’s efforts enhanced environmental protection in many cases, and during the five and one-half years of the Nixon administration, from 1969 through 1974, the creation of the National Wilderness Preservation System was achieved. The President sought to win the environmental vote quite often, but remained convinced that environmentalism threatened the economy and alienated his natural conservative constituency. In fact, Nixon was often unwilling to risk economic dislocation on behalf of environmental quality.<sup>232</sup> However, coming into office after Johnson who had made only modest proposals for additions to the environmental system, environmental pressures were mounting.

From the 1960s, the decade of intense congressional concern with U.S. environmental policy culminated with the National Environmental Policy Act (NEPA), passed by Congress at the end of 1969 and signed by President Nixon on the first day of January 1970.<sup>233</sup> During this decade, several measures had been taken to produce major legislation to improve the quality of water and air, to protect the environment and ensure that environmental concerns “were to be taken into account in any federal government legislation and federal government programs”.<sup>234</sup>

During his initial State of the Union address in 1970, President Nixon identified the environment as the pivotal concern of the new decade. He stated, “The great question of the Seventies is...shall we make our peace with nature and begin to make reparations for the damage we have done to our air, to our land, and to our water.”<sup>235</sup> Despite a politically divided atmosphere, Nixon managed to

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<sup>230</sup>S. Dewey, “Review: Nixon and the Environment”, *The Journal of Southern History*, Vol. 68, No. 2, 2002, pp. 510-511.

<sup>231</sup> Jimmy Carter Presidential Library, National Environmental Policy Act – Memorandum to heads of agencies, Charles Warren, “Subject: Application of the National Environmental Policy Act to Federal Activities Abroad”, 19 January 1978.

<sup>232</sup> J. Flippen, “The Nixon Administration, Timber, And The Call of The Wild”, *Environmental History Review*, Vol. 19, No. 2, 1995, pp. 37-54.

<sup>233</sup> J. Hart, “The National Environmental Policy Act and the Battle for Control of Environmental Policy”, *The Journal of Policy History*, Vol. 31, No. 4, 2019, pp. 464-487 (p. 467).

<sup>234</sup> *Ibidem*.

<sup>235</sup> Richard Nixon Foundation, *The Environmental Legacy of President Nixon*, 21 April 2022. On April 22, 1970 the Earth Day was celebrated in the U.S. for the first time as symbol of the beginning of a “greener” era. Twenty million Americans participated in Earth Day with festivities, rallies and protests; and, during the first anniversary of such an important date, president Nixon proclaimed the establishment of the Earth Week. Aware of (and probably, satisfied by) the success of Earth Day, he wanted to promote further education and awareness of environmental issues. From that moment on, each year, in September, President Nixon used to transmit to the Congress the Annual Report of the Council on Environmental Quality. The first one was submitted in 1970 and it marked “a great environmental awakening in the U.S.”

garner bipartisan backing, establishing himself as the architect of contemporary environmental policy.

The establishments of the Environmental Protection Agency (EPA) on 2 December 1970, through an executive order signed by President Nixon, aimed at formulating a response to growing concerns about environmental pollution and its impacts on public health and the environment. Following Carson's "alarm" launched through her book *Silent Spring*,<sup>236</sup> important international initiatives occurred to protect both the marine and the mainland environments. According to Train,

By 1973, the president could point to the passage into law of major legislative proposals of his administration, including: air quality legislation, strengthened water quality and pesticide control legislation, new authorities to control noise and ocean dumping, and legislation establishing major national recreation areas at New York City and San Francisco as well as regulations to prevent oil and other spills in ports and waterways.<sup>237</sup>

During the 18 April 1973 Special Message to Congress on Energy Policy, Nixon stated that "in determining how we should expand and develop [available domestic resources], we must take into account not only our economic goals, but also our environmental goals (...)"<sup>238</sup>

The 18 April 1973 message recalled some points of the first message on energy policy ever submitted to Congress in 1971. In that message, Nixon had proposed a number of specific steps to meet the nation's needs by increasing domestic supply of clean energy. Among the measures, he proposed expanded research and development to obtain more clean energy, increased availability of energy resources located on Federal lands, increased efforts in the development of nuclear power, and a new Federal organization to plan and manage American energy programs.<sup>239</sup>

However, if in 1971 the major preoccupation of Nixon was the supply of clean energy, and despite the fact that both the 1971 and 1973 messages to Congress somehow recalled Project Independence, during the 7 November 1973 speech Nixon clearly demonstrated a change in the Administration's priority. After the embargo, the purpose was no longer that of a clean energy

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<sup>236</sup> R. Carson, *Silent Spring*, Houghton Mifflin Company, 1962. This book is widely credited with launching the modern environmental movement by raising public awareness about the dangers of pesticides and their impact on the environment and human health.

<sup>237</sup> R. Train, "The Environmental Record of the Nixon Administration", *Presidential Studies Quarterly*, Vol. 26, No. 1, 1996, pp. 185-196.

<sup>238</sup> R. Nixon, Special Message to Congress on Energy Policy, 18 April 1973.

<sup>239</sup> R. Nixon, Special Message to Congress on Energy Resources, 4 June 1971.

supply to respect the environment; rather, it was that of securing enough energy supply without heavily relying on foreign imports.

Moreover, the promotion of alternative energy sources included nuclear power, coal and gas (not the greenest options), and the exploration of fuel domestic availability.

Conservation measures, if correctly implemented could have helped with a regulated environmental pollution. However, the purpose with which Nixon adopted conservation steps was to reduce consumption of available energy supply.

#### **4. Domestic vs International reactions to Nixon's Project Independence**

As Akins (1973) put it "Oil shortages were predicted in the 1920s, again in the late 1930s, and after the Second World War".<sup>240</sup> Despite these previsions, none occurred and supply forecasters went to the other extreme: "past predictions of shortages had been wrong, they reasoned, therefore all such future predictions must be wrong and we could count on an ample supply of oil for as long as would need it".<sup>241</sup>

In the 1960s, the most popular and almost universal theory that the abundant supply of oil would have soon be sold at its "proper economic price" (\$1.00),<sup>242</sup> was forecasting that this price would have prevailed in the Persian Gulf by 1970. According to Akins, President Nixon's Task Force on Oil Imports assumed, in late 1970, that world price rises would be modest and that the United States could remain essentially self-sufficient in oil. During a conversation between President Nixon and his assistant for National Security Affairs, Kissinger stated that "We mustn't give the impression that every time there's a crisis in the Middle East, it's our crisis".<sup>243</sup> As a consequence, following the oil crisis and Nixon's Project Independence speech, the urgency for an energy policy emerged.

The 7 November speech was, in fact, a response to the embargoing nations; Nixon said, "Let us pledge that by 1980, under Project Independence, we shall be able to meet America's energy needs from America's own energy resources". According to Grossman (2021), "Energy independence became an explicit goal of American energy policy thereafter, not just during Nixon's remaining time in office but for all his successors into the 2010s".<sup>244</sup>

When the embargo was declared, the main responsible for the conduct of the U.S. foreign policy was Kissinger. Even though he admitted several times that oil and energy related issues were not his

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<sup>240</sup>J. Akins, "The Oil Crisis: This Time the Wolf is Here", *Foreign Affairs*, 1973, pp. 1-29 (p.1). James E. Akins, who would become U.S. ambassador to Saudi Arabia that fall, warns that "the threat to use oil as a political weapon must be taken seriously."

<sup>241</sup> Ibidem.

<sup>242</sup> Ibidem.

<sup>243</sup>FRUS, Vol. XXV, Arab-Israeli Crisis and War, 1973, Conversation Between President Nixon and his Assistant for National Security Affairs (Kissinger). Available at <https://history.state.gov/historicaldocuments/frus1969-76v25/d22>

<sup>244</sup>P. Grossman, "The Four-Decade Quest for an "Energy Independence" Policy: Chasing a Trope Through Time", p. 94.

best topics of interest, Kissinger was well aware of the consequences of the oil crisis for sovereignty and power politics. When American oil experts, and Kissinger's advisers, explained that the situation faced by the United States was far less serious than its European allies (in terms of dependency from Middle East oil), Kissinger said that "we might even turn this crisis into a certain kind of an asset, if we could take a leadership position".<sup>245</sup>

The embargo challenged U.S. international sovereignty to a much greater extent than the economically more important price hikes. Since America's European allies were affected by the production cuts, the oil crisis also tested the stability of the Atlantic alliance and U.S. hegemony in the West. Most consuming countries – U.S. included – pursued a mixture of three different strategies to face the new situation. First, bilateral negotiations with the producing countries; second, the formation of a consumer block against the producers; and third, a multilateral approach involving both producing and consuming countries.<sup>246</sup> The United States put particular effort at creating a strong consumer cooperation, even though this implied the sacrifice of some sovereign rights. On 13 October 1973, during a conversation between Kissinger and Cooper – a member of the National Security Council staff – based on the topic of "oil sharing", the two suggested the negotiation of a public statement with major European countries, Japan and Canada. The purpose of the statement was to deter Arab cutbacks by forming a united front among consuming countries, while demonstrating that there was "real substance in the Western alliance" and providing a "political framework for the very difficult position of negotiating a cooperative approach to the threatening crisis".<sup>247</sup>

Two days later, on 15 October 1973, the then Deputy Secretary of State Kenneth Rush explained that, despite the Europeans were siding with the Arabs to keep the oil flowing - diplomatically unhelping the U.S.- , there still was a limit beyond which they could not push the U.S. without losing their NATO relationship. Therefore, Kissinger outlined that the feasible alternatives for U.S. allies were two

- (1) the Arabs may cut off oil to the US only; there would be some resolutions in the Security Council we would have to veto, but we wouldn't be that badly hurt;
- (2) the Arabs cut off oil to Europe. The Europeans would gain nothing, and they couldn't be doing anything worse to us than they are already doing. And if the Europeans try to do to us what we did to them at

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<sup>245</sup>R. Graf, "Claiming Sovereignty", p. 58.

<sup>246</sup>R. Graf, "Claiming Sovereignty", p. 57-58.

<sup>247</sup>FRUS, Vol. XXXVI, Energy Crisis 1969-1974, Memorandum From Charles A. Cooper of the National Security Council staff to Secretary of State Kissinger. Available at <https://history.state.gov/historicaldocuments/frus1969-76v36/d213>

Suez, we could do more to them in retaliation. They can't afford to go into open opposition to us.<sup>248</sup>

The United States was emerging from the problematic events of summer 1973 that had led to a belief all around the world that the American authority had been weakened. In that context, Kissinger's purpose was to demonstrate that the U.S. was still a "giant", if they get into a confrontation. In his words, "We have to win! I don't expect us to get into a confrontation, but we should look at everything we could do if we did. It may help us next time."<sup>249</sup>

At the domestic level, even before OPEC hit the United States with the oil embargo in October of 1973, domestic concerns about oil production and consumption were not uncommon in America.<sup>250</sup> Nevertheless, in order to try to reduce the embargo's effects, Nixon and his Administration passed several new domestic policies in response to the oil crisis of 1973 and to help the nation achieve the goal of energy independence. Many of these new policies required the participation of the (discontent) American public in order to be successful. As previously anticipated in this chapter, Nixon brought the nation-wide economic problem to a personal level and made ordinary citizens feel as though their actions truly had an impact on the country.

While there was shared support for the idea of achieving energy independence, the willingness to cooperate and the overall happiness with the initiative was quite various. Nixon's patriotic appeal found the American population prone to reduce dependence on foreign oil; the crisis had, in fact, highlighted the vulnerabilities and risks associated with relying on foreign energy sources. However, citizens were worried about the significant changes in consumption habits, energy conservation, and possibly lifestyle adjustments required to achieve independence. Economic concerns were also part of people skepticism, especially because there was the shared doubt of a lack of government expertise in the energy sector.

When Nixon came into office on 20 January 1969, U.S. – European relations were at their lowest point since the end of World War II. He, in fact, had inherited that situation from his predecessor, Lyndon Johnson, who had spent the bulk of his time and political capital between the Vietnam War and his Great Society initiatives.<sup>251</sup> Contrary to Johnson, Nixon made U.S. – Europe relations an early priority of his presidency. He wanted to demonstrate that the U.S. could be a force for peace

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<sup>248</sup> FRUS, Vol. XXXVI, Energy Crisis 1969-1974, Minutes of Washington Special Actions Group Meeting, Number 215, 15 October 1973.

<sup>249</sup> FRUS, Vol. XXXVI, Energy Crisis 1969-1974, Minutes of Washington Special Actions Group Meeting, Number 215, 15 October 1973.

<sup>250</sup> M. Haluga, "The Oil Crisis of 1973: President Nixon's Actions to Maintain American Prosperity", *American Studies*, 2017, pp. 1-22.

<sup>251</sup> L. Nichter, "Introduction to Richard Nixon and Europe: The Reshaping of the Postwar Atlantic World", *Cambridge University Press*, 2015, pp. 1 – 5.

and constructive activity again. Nixon made some important revelations about the way he saw the world and how he intended to govern (these remarks became known as the Nixon Doctrine).<sup>252</sup> As he wanted to strengthen the NATO alliance<sup>253</sup> and shifted NATO's purpose from collective defense to collective security. He engaged in stronger transatlantic relations, also with the European Community, under the guides of the 1941 Atlantic Charter. As for the EC, he strongly believed that Europe should have played a bigger role in the world, but it should not have developed in an anti-American direction. However, the structure of negotiations that Nixon and Kissinger used did not always work well with allies. In fact, it is well known how they saw more exciting opportunities with China or the Soviet Union, leaving Europe aside.

The embargo happened during the devaluation of the dollar, and a global recession seemed imminent. U.S. allies in Europe and Japan had stockpiled oil supplies, and thereby secured for themselves a short-term cushion, but the long-term possibility of high oil prices and recession precipitated a rift within the Atlantic Alliance. European nations and Japan found themselves in the uncomfortable position of needing U.S. assistance to secure energy sources, even as they sought to disassociate themselves from U.S. Middle East policy.<sup>254</sup> The OPEC embargo proved that politics played into virtually every aspect of international relations, even when alliances seemed to be in order.

With respect to oil, the United States' diplomacy followed a twofold goal: first, the embargo should have ended as soon as possible, and the future increase in Middle Eastern production had to be secured in accordance with American needs; second, a break between the U.S. and its more energy dependent European and Asian allies had to be avoided, and American hegemony maintained.<sup>255</sup> Together with Project Independence, the United States also engaged in intensive diplomatic efforts among its allies, promoting a consumers' union that would provide strategic depth and a consumers' cartel to control oil pricing. However, both of these efforts were only partially successful.

American allies' reactions to Project Independence were different reflecting different perspectives on energy security, economic implications, and geopolitical considerations.<sup>256</sup>

According to Parra (2003), the "immediate reaction in most (other) consuming countries to the Arab oil embargo was highly defensive".<sup>257</sup> In general, Japan and Western European governments sought

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<sup>252</sup>L. Nichter, "Introduction to Richard Nixon and Europe", p. 3.

<sup>253</sup>By the end of the 1960s, France had already left NATO and Nixon established bilateral relations, in terms of defense, with De Gaulle.

<sup>254</sup>FRUS, Milestones, Oil Embargo, 1973 - 1974.

<sup>255</sup>R. Graf, "Claiming Sovereignty", p.58.

<sup>256</sup>Important inputs on U.S. Allies reactions to Project Independence can be found in D. Yergin, *The Prize*, 1991; B. Simon. "The United States and the Control of World Oil", *Government and Opposition*, Vol. 40, No. 2, 2005, pp. 225-255; B. Cyrus. "The Economics of the Oil Crisis", *International Journal of Political Economy*, Vol 15, No. 2, 1985, pp. 54-79.

<sup>257</sup>F. Parra, *Oil Politics: A Modern History of Petroleum*, I.B. Taurus, 2003, p. 186.

to reduce consumption by a “mixture of mild regulations and strong exhortation”<sup>258</sup>, and a series of measures, lasting usually one year.

Convinced that the Europeans and Japan were seeking bilateral deals with Middle East producers, weakening the consumers’ position, on 9 January 1974 President Nixon invited the major industrial nations to participate in an energy conference in Washington. The purpose of the American president was to develop a consumer group to improve the position of bargaining position of the oil consuming countries.

Representatives of most consuming nations met in Washington from 11 to 13 February and European countries wished for a more independent role for Europe; though they would have not followed France’s extreme opposition to U.S. policies. Not being able of persuading into cooperation the Europeans, Nixon resorted to threats and warnings to try to gain cooperation. As Painter recalled, “In his toast at the beginning of the conference, Nixon suggested that failure of Europe and Japan to follow U.S. leadership on energy matters encouraged isolationism in the United States”.<sup>259</sup> Similarly, Kissinger warned that failure to solve the energy problem cooperatively “would threaten the world with a vicious cycle of competition, autarky, rivalry, and depression such as led to the collapse of world order in the 1930s.”<sup>260</sup>

## 5. The Closing Window of the “Energy Independence” Programs

The embargo discombobulated Americans from the President down to citizens on the street. The price of oil soared, there were lines at gas stations, and Americans feared that the use of oil as a geopolitical weapon would be repeated painfully for years.

In Grossman (2023) words, the “policy disaster”<sup>261</sup> began with Nixon’s speech on 7 November 1973, three weeks after the embargo was announced. Consequently, Project Independence never succeeded because Nixon “was never clear not only about what it would cost or how it could be achieved, but even about what, exactly, ‘energy independence’ meant”.<sup>262</sup> Would it apply to all energy, or really just oil? Would it mean having only the potential to meet our own needs, as he suggested initially, or actually doing so, as he claimed a few months later?<sup>263</sup>

Assessing whether Project Independence can be defined as a "rally ‘round the flag effect" involves understanding both concepts in depth and examining scholarly perspectives on the matter. The rally ‘round the flag effect refers to a phenomenon where public opinion becomes more

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<sup>258</sup>F. Parra, *Oil Politics*, p. 186.

<sup>259</sup>D. Painter, “Oil and geopolitics”, p.193.

<sup>260</sup>Ibidem.

<sup>261</sup>P. Grossman, “The Fantasy of Energy Independence”, *The New Atlantis*, Fall 2023. Available at <https://www.thenewatlantis.com/publications/the-fantasy-of-energy-independence>

<sup>262</sup>Ibidem.

<sup>263</sup>More on this will be argued in the Third Chapter.



supportive of political leaders during times of crisis or external threats. It suggests that in moments of national crisis, citizens tend to rally behind their leaders, setting aside political differences and displaying increased solidarity and support.<sup>264</sup>

Focusing on practical examples and teachings of figures such as Machiavelli and Hobbes, it had already been argued that social groups tend to become more cohesive when faced with an external threat.<sup>265</sup> It was only several years later that this socio-psychological theory was extended to the behavior of citizens of nation-states in response to particularly dramatic events of international nature directly involving the country.

According to Downs (1957), the so-called "rally points" emerged as temporary but inevitable remedies for the President's "job approval index"<sup>266</sup> and they can be summarised with the following characteristics: the event should be "a) international; b) involving the United States and particularly the President directly; c) specific, dramatic, and suddenly emerged".<sup>267</sup>

Following these measures, in the opening of Nixon's speech of 7 November 1973, we can clearly identify both the second and third characteristics above mentioned – taken for granted the first one: being the "oil crisis" a topic of international relevance *per se*, as mostly every country was importing petroleum from the Gulf. Concerning point *b*, it is clear that the crisis hit the United States, since it had recently become an important consumer and importer of oil from the Middle East (being this last one the cheapest on the market); and, as a consequence, the President was called into primary action. As for point *c*, despite Nixon affirmed that "(...) even with our best efforts, we knew that a period of temporary shortages was inevitable"<sup>268</sup>, the crisis arrived quite unexpectedly.<sup>269</sup> As such, the aspect of being an event that "suddenly emerged" should be taken into

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<sup>264</sup>M. Baum, "The Constituent Foundations of the Rally-Round-the-Flag Phenomenon", *International Studies Quarterly*, Vol. 46, 2002, pp. 263 – 298.

<sup>265</sup>G. Simmel, *Sociologie*. Untersuchungen über die Formen der Vergesellschaftung, Berlin, Duncker & Humblot, [1898] 1908. trad. it. di Giorgio Giordano. *Sociologia*, Milano, Edizioni di Comunità, 1989, cap. 4 e 8. and L. Coser, *The Functions of Social Conflict*, New York, Free Press, 1956 trad. it. di Paolo Demartis, *Le funzioni del conflitto sociale*, Milano, Feltrinelli, 1967.

<sup>266</sup>A. Downs, *An Economic Theory of Democracy*, New York, Harper & Row, 1957, trad. it. di Giorgio Brosio, *Teoria economicadellademocrazia*, Bologna, il Mulino, 1988. The approval rating for the President's work, or "presidential popularity index," the dependent variable in Mueller's work, is given to us by the percentage of respondents from the American Institute of Public Opinion, better known as Gallup, who answer "approve" to the question "Do you approve or disapprove of the way (current President's name) is handling his job as president?"

<sup>267</sup>J. Mueller, "Presidential Popularity from Truman to Johnson", p. 21.

<sup>268</sup>Address given by Richard Nixon (7 November 1973) Weekly Compilation of Presidential Documents. Presidential Documents, Richard Nixon, 1973. Dir. of publ. Office of the Federal Register. 12 November 1973, No 45, Volume 9, pages 1309-1328. Washington: US Government Printing Office. "The Energy Emergency", p. 1312-1318. Available at [http://www.cvce.eu/obj/address\\_given\\_by\\_richard\\_nixon\\_7\\_november\\_1973-en-1158015d-8cf9-4fae-8128-0f1ee8a8d292.html](http://www.cvce.eu/obj/address_given_by_richard_nixon_7_november_1973-en-1158015d-8cf9-4fae-8128-0f1ee8a8d292.html)

<sup>269</sup>Also Yergin in *The Prize* wrote "The embargo came as an almost complete surprise", p. 590.

consideration since the Nixon Administration was quite uncertain on the Middle East willingness of using the “oil weapon” against them.<sup>270</sup>

The idea of creating a rallying point to achieve “a cohesive effect in getting people together” was proposed by Clements, the Deputy Secretary of Defense under Presidents Nixon and Ford, during a meeting held on 15 October 1973.<sup>271</sup> However, DiBona, the Special Assistant to the President for Energy together with Love, reassured him that the rallying was indeed a good solution.<sup>272</sup>

The rally matter was raised again in a meeting on the Middle East subject held on the following day, when Clements stated that “I don’t think the President can rally the country and bring about any real response on a voluntary basis without saying that we are doing these things now, we are hopeful that they will help, but rationing is inevitable”.<sup>273</sup> Few lines below, we can read again the then Deputy Secretary of State Rush saying “We need a strong, affirmative program so as to avoid it happening again” and Governor Love promptly replied “Also, it’s good for the President to have something to rally people around with. We need to get a sense of urgency”.<sup>274</sup>

At first sight, there might be connections between the objectives of Project Independence and the rally ‘round the flag effect. In a meeting held on 6 November 1973, while discussing on the last changes for the official Presidential speech, the Deputy Secretary of Defense William Clements outlined that “[sic] I think they need more of the patriotic approach—that everyone needs to cooperate—than is in there now”.<sup>275</sup>

As outlined, the crisis created a sense of urgency and national concern, potentially fostering a more unified approach to address energy security concerns. However, the strong relationship is not that clear. The problem is that the rally ‘round the flag effect typically pertains to responses to external threats with clear adversaries; while the “energy crisis” primarily involved economic and geopolitical factors making it difficult to create a more direct sense of national unity in response to a perceived threat. Moreover, considering the fact that the United States imported only a 5 per cent from Arab countries, the “international” relevance of the embargo was very limited in America.

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<sup>270</sup>By “unexpected” here I mean from the U.S. point of view. In D. Yergin, *The Prize*, and M. Jacobs, *Panic at the Pump*, the authors explain how the suddenness and severity of the embargo caught the U.S. and the rest of the world off-guard, while the use of the “oil weapon” from producing countries had been largely underestimated. The embargo, in fact, exposed significant vulnerabilities in the U.S. energy policy and highlighted the unpreparedness of the U.S. government to handle such a crisis.

<sup>271</sup>FRUS, Vol. XXXVI, Energy Crisis, 1969-1974, Minutes of Washington Special Actions Group Meeting, October 15, 1973.

<sup>272</sup>Ibidem.

<sup>273</sup>FRUS, Vol. XXXVI, Energy Crisis, 1969-1974, Minutes of Washington Special Actions Group Meeting, October 16, 1973.

<sup>274</sup>Ibidem.

<sup>275</sup>FRUS, Vol. XXXVI, Energy crisis, 1969-1974, Minutes of Washington Special Actions Group Meeting, Number 236, 6 November 1973.

According to Yergin (2009), President Richard Nixon's dramatic announcement of Project Independence framed the initiative as a national effort akin to the Manhattan Project that intended to mobilize resources and galvanize public and political support to address the energy crisis. The parallels between Project Independence and the rally 'round the flag effect can be considered in terms of responding to a crisis and fostering national unity. However, the unique nature of the energy crisis and the mixed success of the initiative suggest that a definitive classification is not straightforward and would require careful consideration of various scholarly perspectives and historical contexts.

Despite Nixon's calls to actions requiring goodwill and a sense of patriotic sacrifice, people questioned the different economic opportunities among society. Grassroots activists mobilized to defend the rights of the poor, while other black leaders feared that the energy crisis would serve as the "all-purpose alibi to justify further erosion of black rights".<sup>276</sup> These fears included, in particular, unemployment. As future prospects grew worse, citizens became angry at government officials in Washington. And as the shortages continued, it appeared that Washington was lacking solutions. This resulted in a finger-pointing towards politicians and increased blame for business and government.

A massive demonstration of discontent happened on 4 December when, right after the announcement of the new energy-czar Simon, hundreds of truckers came to a halt on Interstate 80 in Pennsylvania. The truckers were angry about their search for fuel, the crazy prices and the scarce availability, and the person they held responsible for the situation was, of course, Richard Nixon.<sup>277</sup> The trucker blockades captured national attention, and they lamented in particular weight and length limitations on their trucks, which cut into their earnings.<sup>278</sup> The reason why the truckers' revolt was so powerful was that their injustices matched American politics at that moment. In other words, the energy crisis revealed that there was no permanent new conservative majority, let aside the Republican one.<sup>279</sup> The truckers wanted to back government off, and in that way their political ideology resonated with Nixon's. Project Independence, which amounted to the deregulation of the oil industry, aimed its free-market rhetoric at them. As the journalist Harry Maurer reported, the crisis led to a real shock of the truckers' philosophical and political framework. They believed in free enterprise, and they had voted eagerly for Nixon, but he was now ignoring them. They defined themselves as "independent", but their survival largely depended on the Government, the oil companies, and the Arabs.<sup>280</sup>

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<sup>276</sup>M. Jacobs, *Panic at the Pump*, p. 67.

<sup>277</sup>*Ibid.*, p. 74.

<sup>278</sup>S. Terkel, "Truck Power: A Steel Hauler Speaks Out", *New Times*, 28 December 1973, pp. 20-27.

<sup>279</sup>M. Jacobs, *Panic at the Pump*, p. 75.

<sup>280</sup>H. Maurer, "Organizing the 'Gypsies'", *Nation*, 11 January, 1975.

Despite the chaotic situation, Congress passed a national fifty-five-mile-per-hour speed limit law to make this suggested speed limit compulsory. The administration believed that, to save as much gasoline, the only politically attainable measure would have been a national speed limit.<sup>281</sup> What instead happened, was that public panic (at the pump) set in and developed a momentum of its own: after the lines began, they did not end until the embargo was over. Uncertainty, as much as the actual shortage, triggered panic buying, which “fed itself and even extended to other commodities”.<sup>282</sup> Because of the absence of clear rules and of a systematic rationing government program, public panic accelerated, moving away the rally idea of the Nixon’s Administration. When in December 1973, OPEC countries led by Tehran raised prices again (from \$5,12 per barrel to \$11,65 per barrel)<sup>283</sup>, the public had little faith in Big Oil. Americans continued to blame the oil companies, not Arab producers. Actually, Exxon, Gulf, Shell, Texaco, Amoco, Mobil, and Standard Oil of California represented half of all sales of the American petroleum industry, and “collectively their profits were up to 45 percent from the previous year”.<sup>284</sup> It is then comprehensible why the public feared that oil executives were manipulating prices and supply according to their own interests. The most popular opinion was that the crisis was manufactured and that oil companies had postponed their inventory to make shortage worse and thereby raise prices even more.

The lawyer and U.S. senator from the state of Washington, “Scoop” Jackson was secretly working with the Administration to pass an energy bill, while he was leading a public attack on Big Oil. He was a supporter of social welfare programs, civil rights and labor unions and spoke on the behalf of American citizens.

The American people want to know why the prices of home heating oil and gasoline have doubled when the companies report record high inventories and stocks. (...) The American people want to know if this so-called energy crisis is only a pretext, a cover to eliminate the major source of price competition to raise prices, to repeal environmental laws and to force adoption of new taxes subsidies.<sup>285</sup>

Following oil market’s dynamics, it was foregone that higher prices benefited the interests of the major oil companies; however, in defending their record profits, these businessmen explained that,

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<sup>281</sup>On 2 January 1974, President Nixon signed the Emergency Highway Energy Conservation Act, setting the new national maximum speed limit. Prior to that moment, individual states could set speed limits within their boundaries, and highway speed limits across the country ranged from 40 mph to 80 mph.

<sup>282</sup>M. Jacobs, *Panic at the Pump*, p. 79.

<sup>283</sup>Ibid., p. 80.

<sup>284</sup>Ibid., p. 81.

<sup>285</sup>M. Jacobs, *Panic at the Pump*, p. 82.

in order to explore new sources of fuel and expand refining capacity, a lot of capital was needed. Oil executives explained that they were trying to manage the critical circumstances – not of their making – to offset the impact of the embargo. In their opinion, the U.S. Government was just amplifying the shortage through its policies and the only fair thing to do was to push back oil prices to 1 November 1973 - the date that preceded OPEC's drastic price hike to \$11.65 per barrel in December.<sup>286</sup>

Nevertheless, while Nixon's Project Independence emerged in a context of a national crisis and aimed to address energy security concerns, its classification as a "rally 'round the flag effect" is less straightforward. The crisis certainly heightened awareness of energy issues and may have contributed to a degree of national unity in addressing them. However, the multifaceted nature of the crisis and the complexities of energy policy, make it challenging to categorize Project Independence solely within the framework of the rally 'round the flag effect.

Despite the fact that the Arab embargo began to wind down in January 1974, and was officially ended in March, people continued to upset themselves due to the soaring prices, the gas lines and the shortages owed to the use of the "oil weapon". In January 1974, Nixon unveiled legislative steps to continue his path towards Project Independence. But in the fall of 1974, John C. Sawhill, who became the head of the new Federal Energy Administration (FEA), admitted that such self-sufficiency was unattainable, despite the fact that the Ford administration was asking Congress to pass something called the Energy Independence Act of 1975.

Sawhill's "unreachable self-sufficiency" was based on a study conducted by his subordinate, the FEA's chief data analyst Eric Zausner. Supported by the idea of some geologists who confirmed that a lot of oil was available on the Eastern continental shelf, he told Congress that actual oil self-sufficiency might be possible if there was drilling on that area.<sup>287</sup> However, the U.S. Geological Survey cut its estimate for oil on the continental shelf quite immediately.

After Nixon, also Ford decided to continue the American quest for energy independence. He, in fact, announced a legislative initiative that was to operationalize Project Independence and postponed the deadline to 1985. Nevertheless, as Ford had not been elected President, this circumstance was quite spontaneous: "when Ford took office on the resignation of President Nixon, the idea of "energy independence" had more popularity and credibility than Ford did himself".<sup>288</sup> Assuming that Ford's goal was either of actually achieving self-sufficiency, or of guaranteeing energy security, the possibilities to reduce energy dependence were still very little.

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<sup>286</sup>M. Jacobs, *Panic at the Pump*, p. 84.

<sup>287</sup>P. Grossman, "The Four-Decade Quest", p. 99.

<sup>288</sup>*Ibid.*, p.101.

He proposed to use more U.S. coal, but he soon realised that his plan would mean that by 1985 the United States would still be importing several million barrels per day of foreign oil. If we imagine Ford's intentions as the quest for a version of energy independence that would make the United States somehow "invulnerable" to supply disruptions, presumably, that meant that the United States could temporarily be self-sufficient in the event of an emergency. This would have implied another version of energy independence that saw the United States "invulnerable" to supply disruptions. Presumably, that meant that the United States could temporarily be self-sufficient in the event of an emergency.<sup>289</sup>

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<sup>289</sup> These measures were embodied in the Project Independence Act, that never became law.

## Chapter Three

### Project Independence in Practice

The concept that Americans could solve their energy problems through voluntary restraint was ridiculous. In 1971, a twenty-volume report entitled “Energy Policy Project”<sup>290</sup> emphasized conservation, diversification, and sustainable development. Nevertheless, the origins had nothing to do with a Middle East war that in 1971 had not yet occurred, an embargo on the United States that had not been yet announced, or even oil prices that had not quadrupled yet.<sup>291</sup>

On the ashes of that report, on 17 October 1974, one year to the day of OAPEC’s supply restriction announcement, the Ford Foundation unfolded a five hundred-page study entitled *A Time To Choose: America’s Energy Future*.<sup>292</sup> As its predecessor, the study aimed at addressing the “pressing energy challenges” the United States had to face after the embargo, and at providing a roadmap for the country’s energy policy. The challenges of energy dependence and the vulnerabilities implied by it, the recognition of the urgent need for a strategic approach to energy policy, and the critical issues of energy security were once again the focus. However, the Ford Foundation had to face some obstacles as soon as *A Time to Choose* was published. The embargo had made the American public conscious of the widening gap between energy consumption and domestic production, and of American growing dependency on foreign supplies. But still, by late 1974, in the middle of the Ford Administration’s efforts to keep up with the Project Independence plan, the gasoline lines disappeared, luxury automobile sales went up again, and oil supplies were plentiful anew.<sup>293</sup>

In such a contradictory context, a national energy policy was still at the center of presidential agendas. As Garavini and Vitalis argued, the Nixon Administration had encouraged (rather than opposed and fought against) the earlier OPEC price rises and had quite rapidly accommodated itself to the new context.<sup>294</sup> This might let us believe that the government, and of course oil companies, were behind the price increases. Politicians, in fact, exaggerated the economic costs of the supply disruptions; probably led by the old fear that the country was running out of oil.

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<sup>290</sup> The study was a significant initiative launched by the Ford Foundation aimed at addressing the growing concerns over the United States' energy future. This project was part of a broader effort to understand and respond to the energy challenges that were becoming increasingly evident in the early 1970s, especially in the context of the rising awareness of the environmental impact of energy production and the geopolitical risks associated with dependence on foreign oil.

<sup>291</sup>R. Vitalis, *Oilcraft*, p. 58.

<sup>292</sup> The report is considered a seminal document in the history of U.S. energy policy, reflecting the broader concerns of the 1970s regarding energy security and sustainability. It emphasized the importance of energy conservation as a critical component of the nation's energy strategy, it recommended diversifying the energy mix to reduce dependence on imported oil, it advocated for increased research and development in alternative energy technologies, it called for improvements in energy efficiency across various sectors - including transportation, industry, and residential use -, and it underscored the necessity of strong government leadership in guiding the nation's energy policy.

<sup>293</sup>See R. Vitalis, *Oilcraft*, chapter three.

<sup>294</sup>See G. Garavini, *The Rise and Fall of OPEC*, 2019, and R. Vitalis, *Oilcraft*, 2022.

As soon as Ford entered the White House, the energy issue was not yet back in shape. Being Project Independence the domestic energy program of Nixon, it was Ford's choice and responsibility to continue the agenda and get (unsuccessfully) the American energy program in hand. Many times President Ford highlighted Project Independence as the domestic energy program that would "seek in many, many different ways to reduce American consumption and to increase production of energy"; and, to the extent that the United States succeeded in doing so, "the world will benefit, [because] there will be much more energy available for others".<sup>295</sup>

Ford's Project Independence was a plan "born from ideological conviction [and it] reflected the reality that the administration had few foreign policy levers it could pull".<sup>296</sup> With limited military options, Ford was banking everything on Project Independence. His version of the plan had been defined as a "foreign policy program" rather than a domestic economic agenda by one of the founders of neoconservatism.<sup>297</sup> However, he cautioned that "no single country can solve the energy problem by itself (...) and just as Americans are challenged by Project Independence, the world faces a related challenge that requires a 'Project Interdependence'".<sup>298</sup>

In 1975, the new conservative Institute for Contemporary Studies, based in San Francisco, published a report entitled *No Time To Confuse* addressing the Ford Foundation article. Some experts insisted that the Nixon administration and "big oil" had devised the crisis (something that back in 1973-1974 also American citizens – naively - believed);<sup>299</sup> while what OPEC countries actually did in October and December 1973 was "to raise the tax rate [- not the final prices -] that the companies had to pay on the oil then being sold by them on world markets at already record high prices".<sup>300</sup> Secretary of State Kissinger himself argued that high oil prices were not "the result of economic factors – of an actual shortage of capacity or of the free play of supply and demand".<sup>301</sup> Rather, he said, they were "caused by deliberate decisions to restrict production and maintain an artificial price level".<sup>302</sup> Therefore, regional shortages and gas lines in the United States were consequences of the American government's decisions. They, in fact, came back with the second

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<sup>295</sup>FRUS, Volume XXXVII, Energy Crisis, 1974-1980, Editorial Note, Number 8.

<sup>296</sup>M. Jacobs, *Panic at the Pump*, p. 136.

<sup>297</sup>Ibidem. Irving Kristol was one of the founders of neoconservatism. He defined Project Independence as a "(...) program that has as its purpose the preservation of America's status as a world power, with the capability of conducting a foreign policy free from blackmail".

<sup>298</sup>FRUS, Volume XXXVII, Energy Crisis, 1974-1980, Editorial Note, Number 8.. For text of the speech, see *Public Papers of the Presidents of the United States: Gerald R. Ford, 1974*, pp. 175-183.

<sup>299</sup>That commonly shared idea among the American audience was probably led by the fact that they could not explain themselves how in the United States the embargo caused gas lines, while in the Netherlands (the other country on which OAPEC members started the embargo) no gas lines was ever been reported. For more about this, see M. Jacobs, *Panic at the Pump*, 2016.

<sup>300</sup>R. Vitalis, *Oilcraft*, p. 65.

<sup>301</sup>FRUS, Volume XXXVII, Energy Crisis, 1974-1980, Editorial Note, Number 8.

<sup>302</sup>Ibidem.



crisis in 1979, and disappeared with the Reagan Administration's decision to dismantle price controls in 1981.<sup>303</sup>

In the United States, the oil embargo redefined the meaning of the energy crisis. When in January 1974, President Nixon sent a special message to Congress about the events, he claimed that the challenges faced by Americans had originated outside the U.S. and the energy crisis became a "foreign-made-crisis" underlining the problem of dependency. Certainly, the national government absolved itself from blame, and it was also careful to minimize criticism of the oil companies. In this way, Nixon even recognized that increasing American demand entailed practical problems of ensuring stockpiles; and, therefore, the main problem became how to ensure enough supplies of energy.

We must never again be caught in a foreign-made crisis where the United States is dependent on any other country, friendly or unfriendly, for the energy we need to produce our jobs, to heat our homes, to furnish our transportation for wherever we want to go.<sup>304</sup>

President Ford, who succeeded Nixon and continued his agenda to achieve independency, defined dependency in the same terms.

The principal energy problem now facing the United States is our excessive and growing dependence on imported oil from a relatively few foreign nations that own the majority of the world oil reserves and have the ability to control world oil prices and production.<sup>305</sup>

Despite the fact that the U.S. was not "suffering the pressures"<sup>306</sup> that were facing other importing countries – mainly Europe and Japan -, the promise of energy independence to set the nation once again free from the dangers of foreign oil, should have been demonstrated through particular actions forecasted in Project Independence. Nevertheless, as Walter Levy, the oil analyst and consultant to

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<sup>303</sup>Ibid., p. 68. Vitalis traces these effects back to 1971 when price and allocation controls were imposed. See also S. Herbstreuth, *Oil and American Identity*", Chapter Two.

<sup>304</sup>Address to The Nation About Policies to Deal With the Energy Shortages November 7, 1973, Public Papers of the Presidents, United States Government Printing Office.

<sup>305</sup>State of the Union Address, 15 January 1975, Gerald R. Ford Presidential Library. Available at [https://www.fordlibrarymuseum.gov/sites/default/files/pdf\\_documents/library/document/0122/6783109.pdf](https://www.fordlibrarymuseum.gov/sites/default/files/pdf_documents/library/document/0122/6783109.pdf)

<sup>306</sup>In a Memorandum of conversation between Kissinger and the French President Pompidou, Kissinger admitted that "we possess reasonable resources from Texas and elsewhere, and we are not suffering the pressures to which you refer". FRUS, Volume XXXVI, Energy Crisis, 1969-1974, Memorandum of Conversation, 20 December 1973, Number 269.

the Department of State, said during a meeting held on 26 November, “(...) the President [Nixon] did not go far enough in his program”.<sup>307</sup>

Generally speaking, in the 1970s, federal executives tried in several ways to find an achievable and concrete energy policy, but every point they wanted to work on presented restrictions. The attempt to increase domestic energy supply partially failed due to the incapability to redefine the federal government’s role and relationship with the energy industry. Petroleum imports kept growing despite the independency program. Important Research and Development (R&D) programs had been developed, but never reached the immediate outcomes expected and necessary to influence the production-consumption equilibrium.

In this chapter, I will address how Project Independence took shape, analysing five main categories – namely, domestic consumption, domestic production, imports, the trade policy, and Research and Development (R&D). Therefore, I will study Project Independence from a practical perspective by answering to the following questions: were the 1969-1976 Administration’ actions coherent with the purposes of Project Independence? To what extent were Nixon’s, and then Ford’s, actions relevant to achieve the goals of Project Independence?

## **1. Domestic Consumption**

As already said, starting from the 1960s, energy consumes in the United States rapidly increased, and in 1967 it had already lost its auto-sufficiency for what concerned the domestic petroleum producing capacity. The same happened to natural gas: demand was growing but supply could not keep the pace. Moreover, new gas discoveries decreased due to the artificially low ceilings on well-headed prices imposed by federal regulations; while domestic oil companies were not able to increase financial investments to expand domestic oil producing and refining capacity.<sup>308</sup>

In the opening of the 7 November speech, Nixon said

As America has grown and prospered in recent years, our energy demands have begun to exceed available supplies. In recent months, we have taken many actions to increase supplies and to reduce consumption. But even with our best efforts, we knew that a period of temporary shortages was inevitable.<sup>309</sup>

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<sup>307</sup> FRUS, Volume XXXVI, Energy Crisis, 1969-1974, Memorandum of Conversation, 26 November 1973, Number 247.

<sup>308</sup>R. Morton, “The Nixon Administration Energy Policy”, *The Annals of the American Academy of Political and Social Science*, Vol. 410, 1973, pp. 65-74 (p.66).

<sup>309</sup>Address to The Nation About Policies to Deal With the Energy Shortages November 7, 1973, Public Papers of the Presidents, United States Government Printing Office.

The key goals related to domestic consumption included energy conservation, development of energy-efficient technologies, and the promotion of both public awareness on energy conservation and behavioural change. Despite the fact that the United States possessed a large energy resource base, policies and programs did not respond properly; and on 10 June 1975, Secretary of State Kissinger still pressured for a “[needed] domestic energy program” adding that “we must have a domestic conservation program” while cracking the oil cartel and bringing oil prices down.<sup>310</sup>

In 1973, President Nixon called on every American to voluntarily (but on a mass basis and for a sustained period of time) do his part and to meet the energy challenge by reducing individual consumption by 5 per cent. Furthermore, Nixon wrote to every nation’s governor asking them “to work with their state legislatures to reduce highway speed limits in the interest of both increased safety and energy conservation”.<sup>311</sup> In other words, official policy consisted of calling for private sacrifice on behalf of the public good.

Contrary to the government's position, American citizens tended to blame the Nixon Administration and oil companies rather than holding responsible energy-wasters or the Mideast adversaries for the energy shortage. In fact, to the public, the energy crisis “stemmed not from a shortage of gas but from a shortage of effective economic leadership”.<sup>312</sup> At the individual level, there was little agreement that the crisis was "real" – Jacobs (2017) reports “less than 20 per cent of the public believed the crisis was real”<sup>313</sup> – and even less of the American population perceived it as "very serious". Nevertheless, the impact of the energy shortage on citizens' personal lives partially influenced their tendency to comply with government requests for reduced consumption.<sup>314</sup>

The expected conservation program included: the support for a 55 mph speed limit (which was expected to reduce fuel consumption by as much as 2.2 per cent), a required 10 per cent cut in electricity, reserved freeway lanes for buses and car pools, increased local taxes to build mass transit, and rationing of gas to 10 gallons per week.<sup>315</sup>

The national speed limit of 55mph was enacted in 1974 under the Emergency Highway Energy Conservation Act, and signed into law by Nixon as part of a broader effort to reduce consumption.

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<sup>310</sup>FRUS, Volume XXXVII, Energy Crisis, 1974-1980, Memorandum of Conversation, 10 June 1975, Number 65.

<sup>311</sup>R. Morton, “The Nixon Administration Energy Policy”, p. 71.

<sup>312</sup>M. Jacobs, *Panic at the Pump*, p. 97.

<sup>313</sup> *Ibidem*.

<sup>314</sup>D. Sears *et al.*, “Political System Support and Public Response to the Energy Crisis”, *American Journal of Political Science*, Vol. 22, No. 1, 1978, pp. 56-82 (p. 77). Available at [https://www.jstor.org/stable/pdf/2110669.pdf?refreqid=fastly-default%3A2a1221ba5aca7bb366bea032a19daeff&ab\\_segments=&origin=&initiator=&acceptTC=1](https://www.jstor.org/stable/pdf/2110669.pdf?refreqid=fastly-default%3A2a1221ba5aca7bb366bea032a19daeff&ab_segments=&origin=&initiator=&acceptTC=1)

The study shows that during a truly serious crisis that has a pervasive impact on the personal situations of everyone, allegiant and disaffected persons will behave similarly, though perhaps for different reasons. Paradoxically, in severe circumstances, self-interest may induce voluntary behavioral cooperation with the dictates of a highly unpopular regime.

<sup>315</sup>*Ibid.*, p. 65. See also P. Sabin, “Crisis and Continuity in U.S. Oil Politics, 1965-1980”, *The Journal of American History*, Vol. 99, No. 1, pp. 177-186.

The limit was widely implemented across the country and, despite having contributed to fuel consumption reduction, it did not achieved the numbers expected. Finally, it was repealed in 1995. A 10 per cent cut in electricity use was also part of the Nixon Administration efforts to reduce consumption and implement conservation. Despite the efforts at both state and local levels to promote energy conservation, this ambitious goal was largely unmet and significant reductions in electricity consumption were not fully realized.

The reserved freeway lanes for buses and car pools measure was implemented in some areas, but widespread adoption was limited and, as a result, the impact on overall fuel conservation was minimal compared to expectations. While, efforts to raise local taxes to fund mass transit improvements faced political and public resistance, and, therefore, the anticipated expansion and use of mass transit systems were less robust than projected.

Finally, gas rationing was never fully implemented. Generally speaking, the idea of rationing was very little shared and politically sensitive. In fact, while contingency plans existed, the rationing itself did not materialise – largely due to concerns about its enforceability and potential public backlash.<sup>316</sup>

With energy conservation and protection of the environment as the two main concerns in Nixon's mind, the President signed the Amtrak Improvement Act in 1973. The bill provided increased Federal financial aid to Amtrak (the national passenger railroad company of the United States) in order to assure the corporation “of continuity and flexibility in its operations at this important time in rail passenger development and in our national energy squeeze”.<sup>317</sup> In general, railroads could carry more passengers over greater distances per gallon of fuel than automobiles or airlines were able to do, while adding fewer pollutants in the air. Therefore, considering the preciousness and scarcity of national oil resources, the energy efficiency of rail travels was essential.

Among the main concerns of the Nixon administration with regards to the domestic situation after the embargo there were the residual fuel oil, and the weakness of the then domestic program.

If people use electric heaters, and we have a harsh winter, we will run out of residual fuel. Power plants will have to shut down or cut back voltage, burning up our electrical equipment.<sup>318</sup>

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<sup>316</sup>For more on these policies and their outcomes see R. Vietor, *Energy Policy in America Since 1945*, Cambridge University Press, 1984.

<sup>317</sup>R. Nixon, Statement on Signing the Amtrak Improvement Act of 1973. Online by G. Peters and J. Woolley, The American Presidency Project <https://www.presidency.ucsb.edu/node/255492>

<sup>318</sup>FRUS, Volume XXXVI, Energy Crisis, 1969-1974, Memorandum of Conversation, 26 November 1973, Number 247.

Even though no proposal for a strategic petroleum reserve had been advanced, what emerged was the American necessity to set up a residual allocation program that could transmit to the rest of the world that the American oil companies were able to work properly and secure some extra supplies also for its allies, and developing countries.<sup>319</sup>

As for the reallocation of resources, in the speech Nixon forecasted a reduction in fuel for aircrafts, that would have led to a cutback of “more than 10 per cent of the number of flights and some rescheduling of arrival and departure times”.<sup>320</sup> Moreover, to secure enough oil for the entire winter, it was essential that every American citizen lowered the thermostat “by at least 6 degrees”, keeping a temperature between 66 and 68 degrees – which, coincidentally, was the best temperature to stay healthy. Extra reductions in the consumption of energy were ordered to the Federal Government.<sup>321</sup> The aim was to install a culture of conservation to help reduce overall energy demand.

As soon as the year 1974 started, a study on the economic impact of increased oil prices forecasted also an increase in consumption limits. “If the United States were to cut 1974 consumption by 5% of the 1973 level, the added import bill would be about \$12 billion; a 10% cut would limit the increase to about \$9 billion.”<sup>322</sup> That publication was an initial assessment of the possible impacts of increased oil prices on the main consuming areas in 1974; and according to it, “oil demand will be essentially unchanged from the 1973 level. Higher prices, conservation efforts, and the general economic slowdown will offset the 5% increase in demand that was expected before the crisis began”.<sup>323</sup>

Nevertheless, according to some data reported by Lifset (2014), “on a daily annual average, consumption fell from 17.31 million bpd in 1973, to 16.7 million bpd in 1974” showing a 3.5 percent decline.

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<sup>319</sup>Even though, in National Intelligence Estimate of 5 December 1973, we can read that “US-owned companies, however, will continue to be pressed not to divert available oil supplies from intended destinations”.

FRUS, Volume XXXVI, Energy Crisis, 1969-1974, National Intelligence Estimate, 5 December 1973, Number 262.

<sup>320</sup>Address to The Nation About Policies to Deal With the Energy Shortages November 7, 1973, Public Papers of the Presidents, United States Government Printing Office.

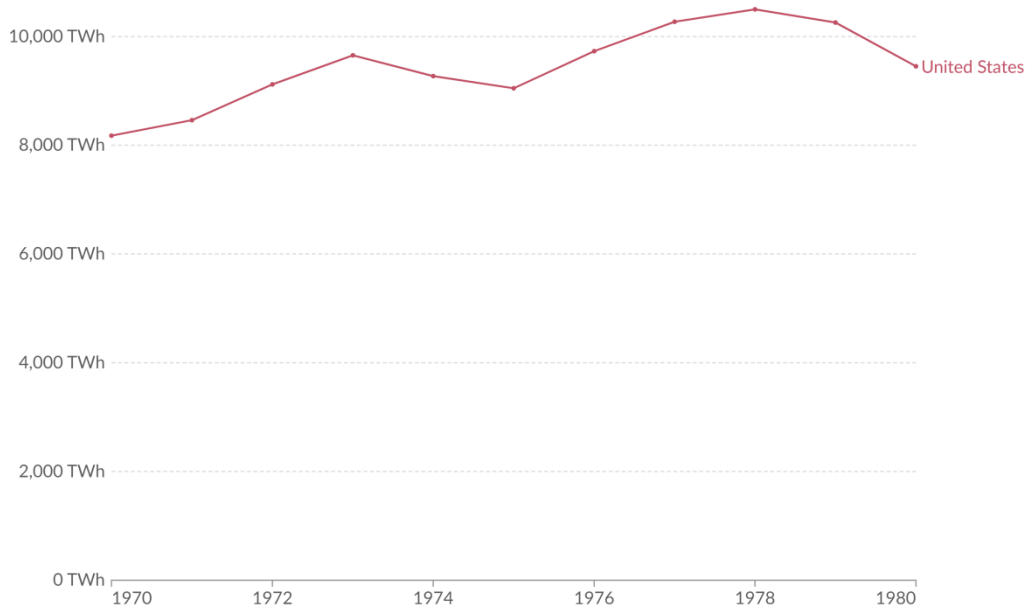
<sup>321</sup>Ibid.

<sup>322</sup>FRUS, Volume XXXVI, Energy Crisis, 1969-1974, Paper Prepared in the Office of Economic Research, Central Intelligence Agency, January 1974, Number 277.

<sup>323</sup>Ibid., note number 277.

## Oil consumption

Oil consumption is measured in terawatt-hours (TWh).



Data source: Energy Institute - Statistical Review of World Energy (2024)

OurWorldInData.org/fossil-fuels | CC BY

Available at <https://ourworldindata.org/grapher/oil-consumption-by-country?tab=chart&time=1970..1980&country=~USA>

Obviously, the little reduction in consumption was quite limited with respect to the expectations of policymakers. What is more, according to other scholars, instead, the U.S. had actually significantly increased consumption in the aftermath of the embargo, leading critics to dub the reaction to the energy crisis a “failure”.<sup>324</sup>

Like Nixon, also Ford promoted conservation measures while included some concrete proposals like natural gas deregulation. These energy measures were part of his voluntary anti-inflation campaign designed to spur citizen participation, “Whip Inflation Now” (WIN). He asked Americans to drive less, heat less, take carpools, and strive toward a national goal of reducing oil consumption by one million barrels a day.<sup>325</sup> The Administration was forced to work under time constraints, they resorted to the one safe and sure policy goal of conservation. And as Glenn Schleede – the associate director for energy and science in Ford’s Domestic Council – observed, “In the short term, conservation is about the only thing you can do”.

Nevertheless, by late 1974, Ford and his advisors took actions to stimulate rather than slow down the economy. They formulated a comprehensive energy program that proposed something more

<sup>324</sup>B. Black, “Energy Hinge? Oil Shock and Greening American Consumer Culture since the 1970s”, in E. Bini *et. al* (ed.), *Oil Shock. The 1973 Crisis and its Economic Legacy*, Tauris Academic Studies, 2016, pp. 198-221 (p.198).

<sup>325</sup>G. Ford, *Public Papers of the President, 1975*. Government Printing, 1976.

than just conservation. Since the “public cooperation effort [to save energy] had not achieved all we felt was necessary (...) there will be stronger measures”.<sup>326</sup>

Following a 14-15 December 1974 meeting of Ford’s economic and energy advisers at Camp David, Enders reported to Kissinger:

“Group agreed to recommend to President three phased policy:  
(A) By the end of 1977 achievement of two million barrel a day savings, through demand restraint and demand management measures (...); (B) By the end 1985 achievement of capacity for full national self-sufficiency; (C) Before the end of the century, reestablishment of the U.S. position as a net energy exporter both through new technology and through hydrocarbons.”<sup>327</sup>

During a nationally televised State of the Union address, Ford proposed decontrolling oil by removing price controls in less than ninety days. Higher prices would have encouraged conservation and, in the long run, they would have stabilised. Moreover, the incentive of higher prices would have stimulated oil companies to explore for and produce more oil. As Ford himself explained, the purpose of his new and more restricted program was to “allow the prices of oil and gas to move higher – high enough to discourage wasteful consumption and encourage development of new energy sources”.<sup>328</sup> Even though it was clear that it was a dramatic move – deeply in contrast with his Administration’s efforts to reach an agreement on lower prices with producing countries -, the estimates predicted a 850,000 barrels of oil saved per day by 1977.<sup>329</sup>

Another step Ford took towards energy conservation, was the adoption of the Energy Policy and Conservation Act (EPCA).<sup>330</sup> It succeeded the 1973 Energy Petroleum Allocation Act (EPAA) that had been written to stabilise the market and protect energy consumers.<sup>331</sup> This energy policy was signed into law by President Gerald Ford on 22 December 1975. Its primary goals were to reduce the nation’s dependence on foreign oil, promote energy conservation, and ensure the availability of energy supplies in the event of future crises. Among the key provisions of EPCA there were the

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<sup>326</sup>Y. Mieczkowski, *Gerald Ford and the Challenges of the 1970s*, University Press of Kentucky, 2005, p. 219.

<sup>327</sup>FRUS, Volume XXXVII, Energy Crisis, 1974-1980, Telegram From the Department of State to the Embassy in Iran, 24 December 1974, Number 27, Footnote 4.

<sup>328</sup>G. Ford, *Time to Heal*, p. 242.

<sup>329</sup>R. Lifset, *American Energy Policy in the 1970s*, p. 4.

<sup>330</sup>According to a study conducted by Cox and Wright, while the EPAA policy succeeded in equalizing refiners' average crude oil costs, the EPCA policy does not accomplished that objective. J. Cox and A. Wright, “The Effects of Crude Oil Price Controls, Entitlements and Taxes on Refined Product Prices and Energy Independence” ,*Land Economics*, Vol. 54, No. 1, 1978, pp. 1-15.

<sup>331</sup>R. Lifset, *American Energy Policy in the 1970s*, chapter 6. For more on EPAA see <https://www.congress.gov/bill/93rd-congress/house-bill/8863>

establishment of the Strategic Petroleum Reserve (SPR) and the formation of fuel economy standards for cars and trucks, known as Corporate Average Fuel Economy (CAFE) standards. It further formalized U.S. participation in the International Energy Agency (IEA), which was created to coordinate a collective response among oil-consuming nations to prevent future energy crises; and led to the creation of the Federal Energy Administration (FEA) – that was later merged into the Department of Energy in 1977 - which was responsible for implementing and enforcing the Act's provisions.

Generally speaking, Ford's policy did contribute to a greater awareness of the need for energy conservation and laid the groundwork for future energy policies that focused on efficiency and alternative energy. However, the immediate impact was less successful in achieving energy independence or significantly reducing the country's reliance on foreign oil.

## 2. Domestic Production

“Let us set as our national goal (...), that by the end of this decade we will have developed the potential to meet our own energy needs without depending on any foreign energy sources”.<sup>332</sup>

With these words, Nixon communicated to the whole nation that, through Project Independence, the new purpose was then to increase domestic energy production. The key measures were the expansion of oil and gas exploration, and the exploitation of known reserves including offshore drilling; the development of coal resources – recognised as a plentiful domestic resource; the construction of nuclear power plants – as nuclear energy was the key alternative to fossil fuels; and, finally, with a secondary role, the development of renewable energy sources – especially solar and geothermal energy.

In 1950 the United States imported 5.5 percent of the oil it consumed, while in 1970 it became 21.5 percent.<sup>333</sup> However, a meteoric rise in oil consumption coupled with a peaking in domestic production. Also Ford recognised that

There was no question that in 1974-75, we faced a serious energy policy. Nuclear energy was just beginning to be a factor. Hydro-electric power was at its peak. (...) Oil and gas were having troubles. Domestically, we were so much more dependent on foreign oil. We had a real crisis, so it was important that we make some headway, not only in conservation but in more production.<sup>334</sup>

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<sup>332</sup>Address to The Nation About Policies to Deal With the Energy Shortages November 7, 1973, Public Papers of the Presidents, United States Government Printing Office.

<sup>333</sup>R.Lifset, *American Energy Policy in the 1970s*, p. 4.



Although the continental United States still “provided nearly 75 percent of American crude oil demand in 1973, 25 percent came from foreign sources. Of that 25 percent, more than 8 percent came from the Middle East”.<sup>335</sup>

Among the series of policies to reduce U.S. dependence on foreign oil, possibly, the most successful one was the expansion of federal offshore leasing. This measure, in fact, helped increase offshore crude oil output from “about 10 per cent of total U.S. production in 1975 (820,000 barrels per day out of 8.2 million b/d) to 24 per cent of the total (1.36 million b/d out of 5.8 million b/d) by the year 2000”.<sup>336</sup>

During the decade, domestic petroleum production in the lower 48 states dropped from 9.0 million b/d in 1973 to 7.5 million b/d in 1978; and only the development of oil structures in Alaska prevented an even higher dependency.

The Trans-Alaska Pipeline (TAPS) was fundamental for the U.S. domestic oil production.<sup>337</sup> In September 1973, President Nixon rehearsed his support for the pipeline, announcing that it was his administration’s priority for the rest of the congressional session. In early November, by great majority, Congress passed the Trans-Alaska Pipeline Authorization Act.<sup>338</sup> The legislation removed the project from further judicial review, authorized construction of the right-of-way and provided new financial incentives.

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<sup>334</sup>Y. Mieczkowski, “ ‘The Toughest Thing’ . General Ford’s Struggle with Congress over Energy Policy”, in R. Lifset, *American Energy Policy in the 1970s*, Chapter One.

<sup>335</sup>R.Lifset, *American Energy Policy in the 1970s*, chapter 6.

<sup>336</sup>T. Priest, “Shifting Sands: The 1973 Oil Shock and the Expansion of Non-OPEC Supply”, in E. Bini *et. al* (ed.), *Oil Shock. The 1973 Crisis and its Economic Legacy*, Tauris Academic Studies, 2016,pp. 117-141 (p. 128).

<sup>337</sup>By 1988 TAPS was delivering 20 per cent of U.S. domestic oil production (1.5 million barrels per day).

<sup>338</sup>For the text see 43 U.S. Code §1651 – Congressional findings and declaration. Available at Cornell Law School <https://www.law.cornell.edu/uscode/text/43/1651>



Map of Trans-Alaska Pipeline (TAPS). Source: Energy Information Administration (2006).

Available at: [https://www.researchgate.net/figure/Map-of-Trans-Alaska-Pipeline-TAPS-Source-Energy-Information-Administration-2006\\_fig2\\_263144085](https://www.researchgate.net/figure/Map-of-Trans-Alaska-Pipeline-TAPS-Source-Energy-Information-Administration-2006_fig2_263144085)

The 1973 “oil crisis” led to huge discoveries also in the North Sea. Massive fields were located in deeper water and the technical challenges and costs were too high that success in extracting oil was far from guaranteed. But the spike in oil price that followed the October War, arrived like a “divine wind”<sup>339</sup> allowing for a removal of too-high-costs preoccupations and political and technical constraints. The impact of this new production was huge and allowed the U.S. to restore supply flexibility, while easing pressures on global prices and calm runaway inflation.<sup>340</sup>

<sup>339</sup>T.Priest, “Shifting Sands”, p. 124.

<sup>340</sup>Ibidem.

But the North Sea was not the only solution of alternative sources that the 1973 “oil crisis” stimulated. If in the 1920s Mexico was the world’s largest producer of oil – and one of the first nations that nationalised production -, its reserves declined sharply in the 1960s. Moreover the 1973-74 price spike led the country into economic crisis. The government reacted with further explorations both onshore and offshore – with accelerated offshore leasing being a key component of President Nixon’s Project Independence<sup>341</sup> - and in 1975 the Chac giant oil field was discovered.

In addition to the North Sea and the Gulf of Mexico, the oil shock spurred oil and technological development offshore Brazil. Despite intensive onshore exploration, the national oil company Petrobras, established in 1954, never produced large quantities of domestic oil prior to the 1970s. But in November 1974, the company drilled a discovery well on a carbonate prospect called Garoupa in the Campos Basin, off the coast of Rio de Janeiro. This was a turning point for Petrobras because it opened up an entirely new geological play in Cretaceous limestone.<sup>342</sup> In 1975, inspired by a small U.S. independent, Hamilton Brothers Oil, a new method of floating production facility allowed for a sub-sea technology. Significant new sources of oil in deeper waters led Brazil to become completely self-sufficient and by the 1980s, Petrobras had become the world leader in floating and subsea production technology.<sup>343</sup>

After the 1973 oil shock, conceptual designs for compliant and floating production facilities for deepwater (beyond 1,500 –foot depths), such as tension-leg platform (TLPs), compliant towers and spars, became popular among engineers. The new supplies discovered and the new technologies adopted, gave oil firms and oil-consuming countries a measure of independence from OPEC. Back in 1971, before Congress approved and Nixon signed the Emergency Petroleum Allocation Act (EPAA) in November 1973 – a plan that established two tiers for domestically produced oil, to hold down prices -, Nixon had slapped price controls on oil, as a measure to slow down inflation. However, energy markets reacted adversely and by the winter 1972-73, media nationwide wrote of an “energy crisis”. That situation forced the Nixon administration to act, and it did it... though unwisely. In summer 1973, a voluntary program to allocate crude oil and refinery products started with the intention to share scarcity nationwide. However, as DiBona warned in opposing the program, it would have paved the way for mandatory allocation, that would have been a serious

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<sup>341</sup> T. Priest, “Shifting Sands”, p. 127. In 1971-72, as part of Nixon’s new energy strategy, offshore leasing became a key component to help Mexican discoveries. In April 1973, the American administration announced plans to triple lease offerings by 1979 and auctioned Gulf of Mexico tracts in 600- to 2,000 foot depths, beyond the edge of the continental shelf. Following the embargo, the Nixon administration redoubled its focus on offshore leasing as part of Project Independence.

<sup>342</sup> Ibid. p. 128.

<sup>343</sup> Ibidem.

problem. It became a real nightmare in October 1973, when the administration announced mandatory allocation of propane, heating oil, jet fuel, and other mid-distillate fuels.<sup>344</sup>

In December 1973, Kissinger wrote a letter to Minister Saqqaf saying that the OAPEC decisions taken on 25 December – the start of a series of measures leading to the lift of the embargo – singled out the United States (...), the only country [that was] seriously trying to bring about the just settlement desired by the Arab world, while increasing oil production for other countries who [were] unable to make any significant contribution to that effort”. And that context was putting President Nixon in an “impossible situation”.<sup>345</sup>

As soon as Ford became the new American president and decided to recommit the United States to Nixon’s Project Independence, he promised to increase domestic supply through decontrol and deregulation. However, the Democrats – led by Mike Mansfield – had already made the path forward very clear. World oil prices were not going to drop, resources remained limited, price controls would have to stay in place, and rationing might have been still necessary as a way of distributing oil equitably. In other words, even if the embargo was way behind them, the Democrats’ agenda remained the same: to protect the consumer’s pocketbook.<sup>346</sup>

On 16 November 1975, President Ford explained that “As the largest consumer of energy, the United States is determined to be in the forefront in conserving energy and developing new supplies”, he then added “We have defined our short and long term energy objectives and reorganized our government machinery to achieve them”.

The “new” goal was again to “dramatically increase all domestic energy sources, decrease demand, and cut oil imports sharply”.<sup>347</sup> While trying to keep imports of oil in 1985 to a level 10 million b/d below what they otherwise would have been, conservation and new domestic supplies would have accounted for the remainder import reduction. Accelerated energy production was therefore mandatory.

The new plan to get millions of barrels of additional domestic oil supplies involved the rapid building of the Alaskan pipeline, the authorization for a \$100 billion Energy Independence Agency to provide financial support for new energy projects, the making of commercial production of synthetic fuels a reality, among others.<sup>348</sup> As a matter of facts, through the Energy Bill – signed into law by Ford on 22 December 1975 – production of up to 160,000 barrels per day in 1975 was expected to grow 300,000 barrels per day by 1977. The legislation provided full development and

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<sup>344</sup>R.Lifset, *American Energy Policy in the 1970s*, chapter 6.

<sup>345</sup>FRUS, Volume XXXVI, Energy Crisis, 1969-1974, Telegram From the Department of State to the Embassy in Saudi Arabia, 28 December 1973, Number 273.

<sup>346</sup>M, Jacobs, *Panic at the Pump*, p. 128.

<sup>347</sup>FRUS, XXXVII, Energy Crisis, 1974-1980, Minutes of the Rambouillet Economic Summit Meeting, 16 November 1975, Number 88.

<sup>348</sup>Ibid.

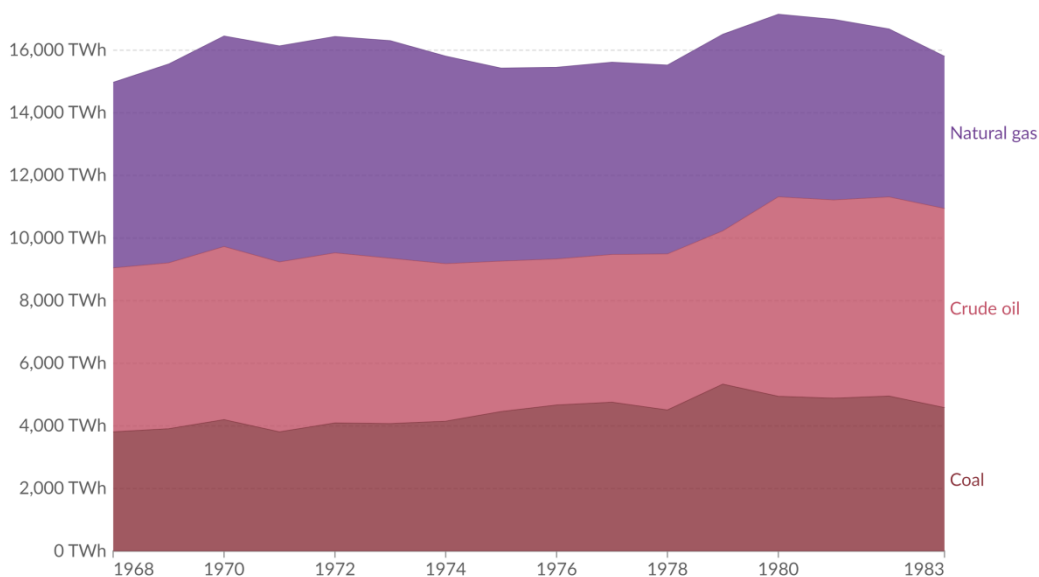
production of the Naval Petroleum Reserves (NPR's) to increase domestic oil supplies available in commercial markets.<sup>349</sup> It further promoted and authorized the President to explore, develop and produce in Alaska (NPR-4) where production of at least two million barrels per day was expected by 1985 or sooner. The Government share of NPR-4 production would have contributed to the National Strategic Petroleum Reserve and to military needs. The remainder would have been made available to the public economy.

Another key feature that emerged in the President's 15 January 1975 State of the Union Message to Congress was the deregulation of new natural gas. Deregulation was needed to increase domestic production and reduce demand for scarce natural gas supplies. Natural gas shortages were forcing curtailment of supplies in many industrial firms and denial of services to new residential customers (14 per cent in 1975 versus 7 per cent in 1974). This resulted in unemployment, reductions in the production of fertilizers needed to increase food supplies, and increased demand for alternative fuels. Through the Bill, competitive pricing of new natural gas was allowed.<sup>350</sup>

### Fossil fuel production over the long-term, United States, 1968 to 1983



Total fossil fuel production - differentiated by coal, oil and natural gas - by country over the long-run, measured in terawatt-hour (TWh) equivalents per year.



Data source: Gas production - Etemad & Luciana; Oil production - Etemad & Luciana; Coal production - The SHIFT Project  
OurWorldInData.org/fossil-fuels | CC BY

Available at <https://ourworldindata.org/grapher/fossil-fuel-production-over-the-long-term?time=1968..1983&country=~USA>

<sup>349</sup>The NPR further established a strategic petroleum storage program of one billion barrels for domestic needs and 300 million barrels for defense requirements. For more see “Energy Independence Act”, digitized version from Box 13 of the John Marsh Files at the Gerald R. Ford Presidential Library, 31 January 1975. Available at [https://www.fordlibrarymuseum.gov/sites/default/files/pdf\\_documents/library/document/0067/1562963.pdf](https://www.fordlibrarymuseum.gov/sites/default/files/pdf_documents/library/document/0067/1562963.pdf)

<sup>350</sup> “Energy Independence Act”, digitized version from Box 13 of the John Marsh Files at the Gerald R. Ford Presidential Library, 31 January 1975

However, also Ford's proposal encountered challenges that slowed down the reach of EPCA goals. The high cost of oil and gas exploration, regulatory obstacles, and market conditions limited the immediate impact on domestic energy production. Moreover, while the Act set the groundwork for future energy policy, the shift toward increased domestic production was gradual and did not fully materialize during Ford's presidency.

As for bringing prices down, Kissinger always recommended the “floor price” – a protective price for imported oil - with the aim of protecting American domestic production. And, despite the fact that the IEA agreement on a protective price was reached on 20 March 1975, Kissinger wanted to set America's own protective price mechanism to avoid losing billions in investments in alternative sources of energy. In general, the idea was not to protect all alternative energy sources, but only the additional investment in conventional energy sources, such as coal, outer Continental Shelf, and Alaska. Reducing oil prices was in net contrast with producing countries' plans: they were, in fact, trying to keep their prices set at levels competitive with each other. Nevertheless, the American position on prices was ambiguous and President Ford remarked it saying that “The question of price decontrol has been perhaps the most controversial issue in our domestic debate over the past year”.<sup>351</sup> Despite promoting a price decrease through the adoption of either a tariff or a floor price – or both -, the U.S. viewed a further increase as a way to help their independence.

### **3. Imports and Trade Policy**

After President Nixon delivered his 7 November speech, the widespread idea was that America deeply depended on oil imports from abroad – especially, from such an unstable region. In general, during the 1970s, Americans' unwillingness to pay more for their energy resulted in a fundamental obstacle to policymakers unable to construct long-term policies.

In a 28 August 1969 report, while the CIA directed to the White House expressing no alarm over the growing imports – both because “even the most radical states would continue to want to sell [oil]” and because “the dominance of the major oil companies provided an important buffet against any concerted threat to U.S. access to imported oil”<sup>352</sup> -, oil companies insisted on fixing import quotas. The purpose was to avoid unlimited imports that could have reduced incentives to invest in the United States and bring a halt to most exploratory drilling. Also, according to the then Standard Oil of New Jersey (later Exxon), with the retention of import quotas, North American production would have provided a high degree of security for petroleum supplies into the 1980s, thanks to

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<sup>351</sup>“Energy Independence Act”, digitized version.

<sup>352</sup>J. Hakes, *Energy Crises. Nixon, Ford, Carter, and Hard Choices in the 1970s*. University of Oklahoma Press, 2021, p. 7.

development of alternative fuels and new discoveries in Alaska.<sup>353</sup> In February 1970, after almost a year of efforts, the task force under George Shultz released a report declaring its position on phasing out mandatory quotas on oil imports. The reason behind such a decision was that “they forced Americans to pay an estimated \$5 billion per year more than necessary by blocking access to cheap foreign supplies”.<sup>354</sup> Without quotas, estimates showed that oil imports would have grown substantially creating more dependence on the Middle East but at a level that could be handled. Moreover, the Shultz task force argued that the United States could become more reliant on Middle Eastern oil because of the potential for military intervention, accepting the risk that armed forces might have become fundamental to ensure access to supplies from the Persian Gulf.<sup>355</sup>

Nixon’s decision to stick with existing controls left the impression that final decisions remained pending becoming the worst commitment on imports: given the uncertainty of national policy, neither American consumers nor producers got full access to cheaper imports, and no investment in domestic exploration and development had been encouraged.

Panic led to a bad legislation and, despite the auspices to achieve low import, in 1973-74 the United States still imported (and fought to secure such imports) from abroad; in particular from Canada and Saudi Arabia. Paradoxically to Project Independence’s expectancies, the most important thing for the U.S. Administration became that of guaranteeing imports of petroleum.<sup>356</sup>

During the October 1973 oil embargo, the United States relied on imports for just under 35 per cent of its petroleum supply. As oil prices surged, the nation's overall demand for petroleum fell from 15.8 million barrels per day (b/d) in 1973 to 14.9 million b/d by 1975. However, U.S. oil consumption rebounded, and by 1978, the average daily consumption reached 17.1 million b/d, marking an 8 per cent increase from 1973 levels. During this period, the proportion of imports in the petroleum supply steadily grew, rising from 35 per cent in 1973 to about 42 per cent in 1978, and even surpassing 50 per cent during certain months.<sup>357</sup>

The volatile situation within the United States remained as such since energy prices showed no sign of diminishing and the country was continuing to import more oil.

On 12 November 1973, the Canada’s Prime Minister Trudeau sent a message to President Nixon. The purpose of such communication was to ensure that no misunderstanding existed with respect to Canada’s policy governing export of Canadian crude oil and petroleum products to the United

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<sup>353</sup>J. Hakes, *Energy Crises*, p. 12.

<sup>354</sup>*Ibid.* p. 12.

<sup>355</sup>An opposite way of reasoning with respect to Eisenhower who had argued that the country should have not become dependent on oil from the Middle East in order to avoid the need for military intervention in the region.

<sup>356</sup>After the embargo, the U.S. sought to diversify and secure oil supplies from several countries outside the Middle East region, to reduce its dependence on OPEC cheap oil imports. Among the key regions the U.S. focused on, there was Venezuela (even though it was an OPEC member, it was not part of the Arab embargo), Canada (probably the most preferred partner due to its geographic proximity and political stability), Mexico, the North Sea, and Alaska.

<sup>357</sup>J. Williams and A. Alhaji, “The Coming Energy Crisis?”, *Oil & Gas Journal*, 2003, pp. 1-8.

States. Trudeau wanted, in fact, to be clear on the fact that Canadian relations with the U.S. were still very friendly and were not dictated by Arab blackmail.<sup>358</sup>

On 20 November, the other way mentioned to guarantee the U.S. with foreign supplies able to satisfy the increasing domestic demand, was the idea of receiving secret supplies from Saudi Arabia through a third party (not mentioned).<sup>359</sup> In a following meeting held on 29 November<sup>360</sup>, Kissinger and William Colby – the then Director of Central Intelligence -, among others, discussed on the Saudi's strategy to get the U.S. oil, because of their special ties with America. The problem was that it was difficult to keep such a deal secret, especially to other Arab radicals, who were pressuring the Saudis. Moreover, the amount of oil would have been so small as to be insignificant.<sup>361</sup>

The idea that emerged to secure supplies from the Gulf, was to “build a presence in the Middle East”.<sup>362</sup> A new line of communication was essential for oil flows to the United States “before Christmas, or the 17 per cent shortfall the President was concerned about would have turned to 23 per cent”.<sup>363</sup> Therefore, the only solution was to convince the Saudis to lift the embargo, even selectively – starting with Europe and then with Japan - to give them a face-saving way of backing down. The idea was to convince Sadat to urge Faisal to relax the embargo (the other possible mediator was Iran), and if this approach would have failed, the message that the U.S. was contemplating serious actions against Saudi Arabia, could have been conveyed to Faisal through a variety of channels. The idea could have also been spread that the U.S. intended to rely primarily on Iran as an alternative to Saudi Arabia in the Gulf area.<sup>364</sup>

Another pivotal aspect was that of Saudi cheaper oil. From the U.S. point of view, reliable Saudi supplies of oil would have made it possible to develop higher cost sources of energy more gradually. Clearly, Americans did not want to produce expensive energy if cheaper and reliable oil imports were available. “The pace and substance of Project Independence [was], in this sense,

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<sup>358</sup> FRUS, Volume XXXVI, Energy Crisis, 1969-1974, Memorandum From the President's Assistant for National Security Affairs (Kissinger) to President Nixon, 12 November 1973, Number 240. Trudeau's message seemed to be in contrast with the public statement made by the Canadian Energy Minister, who seemed to foreshadow ready capitulation to Arab pressure.

<sup>359</sup> FRUS, Volume XXXVI, Energy Crisis, 1969-1974, Memorandum of Conversation, 20 November 1973, Number 243.

<sup>360</sup> FRUS, Volume XXXVI, Energy Crisis, 1969-1974, Memorandum of Conversation, 29 November 1973, Number 251.

<sup>361</sup> In a later memorandum, we can see how back in December, the Saudis recognised that the oil boycott should have been lifted and limits on production removed. See FRUS, Volume XXXVI, Energy Crisis, 1969-1974, Memorandum From the President's Deputy Assistant for National Security Affairs (Scowcroft) to President Nixon, 20 December 1973, Number 268.

<sup>362</sup> FRUS, Volume XXXVI, Energy Crisis, 1969-1974, Memorandum of Conversation, 29 November 1973, Number 253. In another Memorandum of Conversation, dated 9 July 1974 (number 360), President Nixon said “(...) we are interested in the whole Arab world – we're not just tied to the Israelis”.

<sup>363</sup> FRUS, Volume XXXVI, Energy Crisis, 1969-1974, Minutes of Washington Special Action Group Meeting, 29 November 1973, Number 254.

<sup>364</sup> FRUS, Volume XXXVI, Energy Crisis, 1969-1974, Memorandum From Harold H. Saunders of the National Security Council Staff to Secretary of State Kissinger, 30 November 1973, Number 255.



negotiable”.<sup>365</sup> And from half 1974, “the new tune with the Arabs [became] Arab-American friendship (...) [and] Project Independence doesn’t mean we don’t care about them”.<sup>366</sup>

How serious the energy crisis turned out to be in 1974 depended on when and by how much Arab oil producers relaxed their political constraints on oil production. Clearly, economic growth was quite frozen because of the supply restrictions and their price consequences. Nevertheless, as Cooper – then President’s Deputy Assistant for International Economic Affairs – stated, “the U.S. had already made a decisive contribution to resolving the 1974 energy crisis”, first, through “diplomatic efforts in the Arab-Israeli negotiations”; second, through the

President’s apparently successful effort to commit the U.S. to Project Independence which, if it can be sustained, will reduce the U.S. claim on OPEC oil supplies as a result of both conservation measures and increased domestic oil production.<sup>367</sup>

Few weeks before the embargo was finally lifted, in a telegram directed to Kissinger who was in Damascus, Scowcroft and Cooper wrote on America’s special bilateral relationships with Saudi Arabia. “With our commitment to Project Independence we are taking steps so that we could import less and less Saudi oil beginning within two years, with perhaps no imports by 1980”.<sup>368</sup> They stressed the fact that, while European countries were seeking bilateral relations with producers – in particular with the Saudis – to tie up large amounts of oil for a long period in the future, the U.S.’s immediate economic interest was concentrated in getting the Saudi production up in 1974 – 75 in order to get prices down, while allowing more oil from the Saudis or elsewhere to reach the U.S. in those years. Therefore, due to American short-term economic self-interest in Saudi oil, the idea was to deepen the economic relationship between U.S. and the KSA on a basis of mutual self-interest, laying the foundation for future discussions that might have resulted in a secure role for Saudi oil in the future U.S. market despite Project Independence.

A period in which the Saudis re-establish the position of their crude in [the American] market over the next few months would be a prerequisite to any agreement to assure them possible moderation of Project Independence

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<sup>365</sup> FRUS, Volume XXXVI, Energy Crisis, 1969-1974, Memorandum From the President’s Deputy Assistant for International Economic Affairs (Cooper) and Harold H. Saunders of the National Security Council Staff to Secretary of State Kissinger, 5 June 1974, Number 353.

<sup>366</sup> FRUS, Volume XXXVI, Energy Crisis, 1969-1974, Memorandum of Conversation, 9 July 1974, Number 360.

<sup>367</sup> FRUS, Volume XXXVI, Energy Crisis, 1969-1974, Memorandum From Charles A. Cooper of the National Security Council Staff to Secretary of State Kissinger, 21 January 1974, Number 286.

<sup>368</sup> FRUS, Volume XXXVI, Energy Crisis, 1969-1974, Telegram From the President’s Deputy Assistant for National Security Affairs (Scowcroft) and Charles A. Cooper of the National Security Council Staff to Secretary of State Kissinger in Damascus, 1 March 1974, Number 330.

and share [U.S.] future market.<sup>369</sup>

When in January 1974, the Administration was discussing on a Presidential communication to publicly announce the end of the embargo in the State of the Union address, Kissinger himself wrote to Scowcroft (the Deputy Assistant to the President for National Security Affairs) that

We have gotten where we have in this exercise by dealing from (or appearing to deal from) a position of strength. Should the President now indicate to the Arabs the vital importance to the U.S. and to him of ending the oil embargo (...) we will give strength to the Arabs in their determination to deal with us harshly.<sup>370</sup>

As a matter of facts, in November 1974, the Federal Energy Administration (FEA) published a two-part *Project Independence Report* concluding that reducing American vulnerability to oil supply disruptions was a more realistic (and hence more desirable) national goal than achieving energy self-sufficiency. In other words, the United States could have cut back its oil imports, but only at a severe socioeconomic cost. Therefore, it would have been better to reduce the impact of future disruption.

In general, the idea of reducing imports and dependence on imported oil, was still deeply shared also by the Ford Administration. On 15 January 1975, the Department of State underlined that “major steps [were being taken] to reduce [American] dependence on imported oil (...) to end vulnerability to economic disruption by foreign suppliers by 1985”.<sup>371</sup> Again, immediate actions to cut energy imports while increasing both domestic supplies and the ability to use internal coal, gas, oil and nuclear power were needed to ensure adequate conservation and a new emergency storage program.

Despite the fact that, apparently, total imports seemed to have been slightly reduced from 1973 to 1975, according to the graphics below, imports from OPEC and Gulf countries increased (while those from Canada were reduced); and in 1976, during the last year of the Ford Administration, imports from Arab countries skyrocketed departing from the reach of a strong reduction of imported oil planned by 1985. The administration members themselves noticed that “we see the U.S. importing 9-11 million b/d in 1980 [while] Project Independence says 5 million b/d”<sup>372</sup> and

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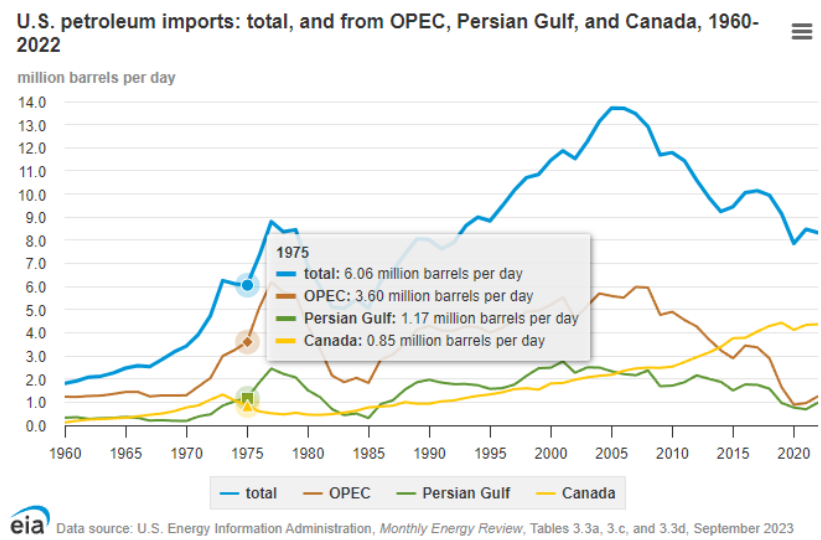
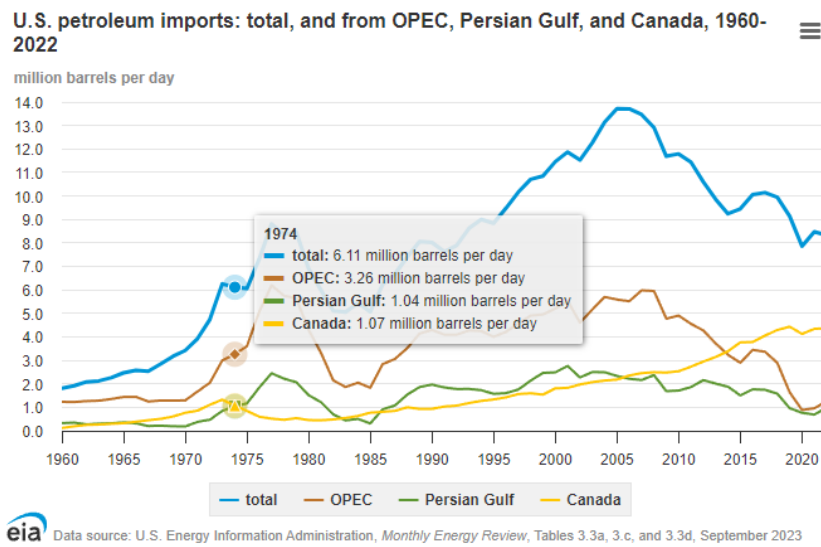
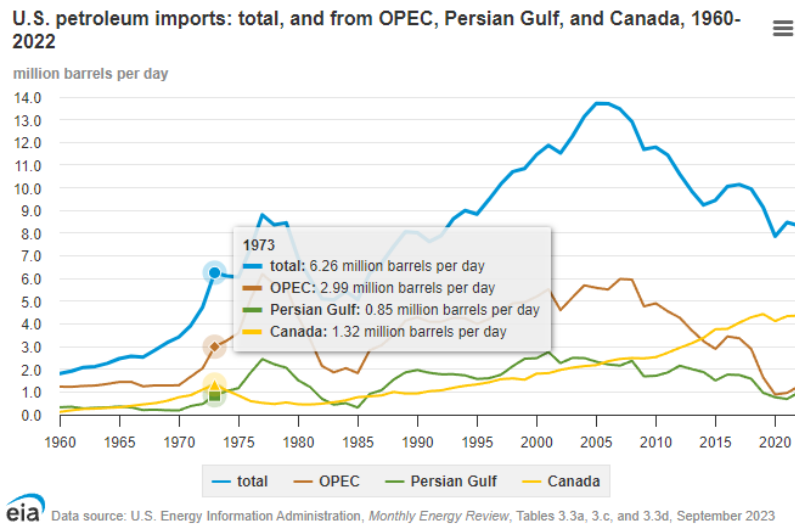
<sup>369</sup>FRUS, Volume XXXVI, Energy Crisis, 1969-1974, Number 330.

<sup>370</sup>FRUS, Volume XXXVI, Energy Crisis, 1969-1974, Editorial Note, Number 292.

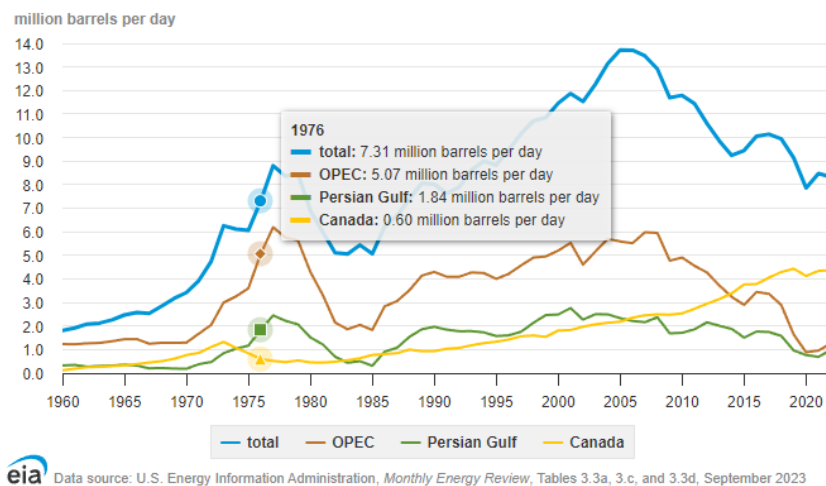
<sup>371</sup>FRUS, Volume XXXVII, Energy Crisis, 1974-1980, Telegram From the Department of State to the Embassy in France, 15 January 1975, Number 33.

<sup>372</sup>FRUS, Volume XXXVII, Energy Crisis, 1974-1980, Memorandum of Conversation, 7 August 1975, Number 75.

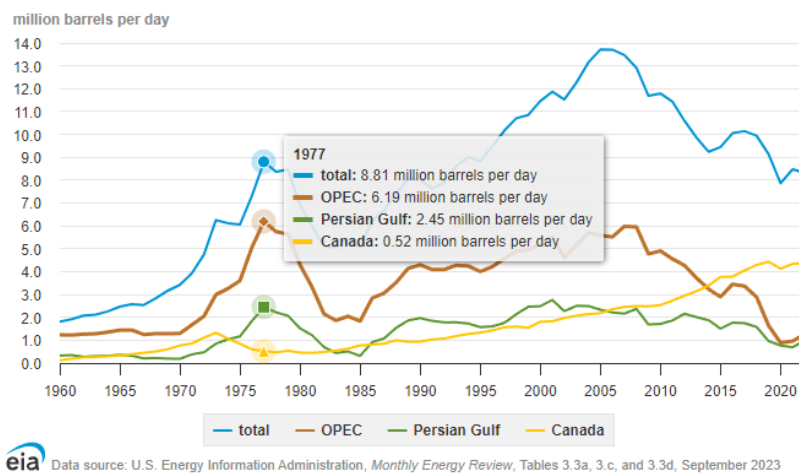
that “the President’s program says 30% would be covered by imports by 1985” so “a long dependence on OPEC” was still in American’s horizon.



### U.S. petroleum imports: total, and from OPEC, Persian Gulf, and Canada, 1960-2022



### U.S. petroleum imports: total, and from OPEC, Persian Gulf, and Canada, 1960-2022



<https://www.eia.gov/energyexplained/oil-and-petroleum-products/imports-and-exports.php#:~:text=U.S.%20petroleum%20imports%20rose%20sharply,of%20U.S.%20crude%20oil%20imports.>

As soon as Gerald Ford entered the White House, the situation on imports was critical. By 1975, the U.S. was importing around 35-40 per cent of its oil, up from about 28 per cent in 1973, before the oil embargo. In 1977, before Ford left office, OPEC nations became the source of 70 per cent of U.S. total petroleum imports and the source of 85 per cent of U.S. crude oil imports.<sup>373</sup> On 30 January 1975, President Ford submitted his Energy Independence Act before (the Democratic) Congress. In order for Congress to submit his will, Ford enacted an executive action to achieve domestic control expire. Under the Trade Expansion Act of 1962, the President could impose a fee on a foreign good if an import threatened national security. His Administration saw oil from OPEC as such a case, and so Ford would levy a \$3 tax on each barrel of foreign crude. The

<sup>373</sup>U.S. Department of Energy, Energy Information Administration, *Oil and Petroleum Products explained. Oil imports and exports*. Available at <https://www.eia.gov/energyexplained/oil-and-petroleum-products/imports-and-exports.php>

purpose of rising prices was to reduce dependency on foreign petroleum. Moreover, “allowing market prices for American oilmen would increase their production, and the result would have been the same: a reduced dependence on Middle Eastern oil”.<sup>374</sup>

Nevertheless, according to the graphics above, despite all the efforts and initiatives undertaken also by the Ford administration, the U.S. continued to rely heavily on oil imports. The global oil market was still largely controlled by OPEC, and U.S. domestic production, while incentivized, was insufficient to fully meet national demand.

Let aside the “Nixon Shock” (that focused mainly on new domestic policies, particularly the imposition of wage and price controls to reduce inflation), the end of the Bretton Woods system and the protectionist pressures in Congress – all factors that let the early 1970s became a period of trade-policy turmoil in the United States -, as Treasury Secretary John Connally once stated, the United States was “in bad shape” in world trade, and the trade policy needed “a radical change”.<sup>375</sup> Since 1962, the American trade policy system had been moving away from the liberal trade approach which had characterized it since 1934.<sup>376</sup> The most relevant evidence of the shift in Congressional and public opinion developed in 1970 with the so-called Mills bill. This measure would have levied quotas on all textile and shoe imports and tariff quotas on two minor products. As soon as the Nixon Administration started in 1969, a “fresh approach” to trade policy was better than “no change in policy.” “Unfortunately, a ‘fresh’ approach in trade policy [was] likely to suggest to the rest of the world an abandonment of, or at least substantial departure from, the policy of trade liberalization”.<sup>377</sup>

On 28 March 1973, the full description of the Trade Reform Act of 1973 was provided. The proposed Trade Bill provided authorities and tools for: a more open and equitable trade, an orderly adjustment to fair competition and a fair competition between imports and domestic production, a stronger capacity to manage trade policy and respond effectively to problems created by

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<sup>374</sup> M. Jacobs, *Panic at the Pump*, p. 138.

<sup>375</sup> D. Irwin, “Clashing over Commerce: A History of US Trade Policy”, *University of Chicago Press*, pp. 509 – 564 (p. 543). Available at <https://www.nber.org/system/files/chapters/c13861/c13861.pdf>

<sup>376</sup> C. Bergsten, “Crisis in U.S. Trade Policy”, *Foreign Affairs*, Vol. 49, No. 4, 1971, pp. 619-635. Already in 1964, Congress passed the Meat Import Act which became the first legislated import restrictions for a major industry in the postwar period. Subsequently, there had been attempts in 1964 – 65 to negotiate voluntary restraint agreements covering U.S. imports of woollen textiles. Also the Nixon administration sought to negotiate voluntary restraints on synthetic and woollen textiles throughout 1969-1970.

<sup>377</sup> FRUS, Volume IV, Foreign Assistance, International Development, Trade Policy 1969-1972, Report of the Task Force on Foreign Trade Policy, 31 January 1969, Number 181. For more on U.S. Trade Policy see also FRUS, Volume XXXI, Foreign Economic Policy, 1973-1976, Paper Prepared in the Office of the Special Representative for Trade Negotiations, undated, Number 154.

international or domestic imbalances, and, finally, the opportunity to take advantage of new trade possibilities.<sup>378</sup>

Despite the fact that American administrations following the energy crisis recognised the urgent need for a more coherent and strong trade policy, no singular and overarching strategy was ever adopted. Instead, the U.S. implemented a series of measures with significant trade policy implications, that aimed at both stabilizing domestic markets and ensuring long-term energy security. Nevertheless, these were part of a broader strategy to increase energy security which had significant trade implications, particularly in terms of how the U.S. engaged with global energy markets and coordinated with other nations. They, in fact, had a limited power to achieve true energy independence, and the United States continued to be integrated into the global energy trade network. The same Project Independence had very little and indirect influence on U.S. trade policy. Among the key measures at the national level there are some Domestic Energy Production Incentives, the Energy Policy and Conservation Act (EPCA) of 1975 and the Strategic Petroleum Reserve (SPR). At the international level, the International Energy Agency (IEA) and the International Energy Program (IEP) played an important role.<sup>379</sup>

Pushing back OPEC's power and preserving American independence required letting American businessmen produce oil; and, the way to stimulate domestic production was by lifting domestic price controls and removing regulations. Early in Nixon's presidency, trade policy was largely focused on reducing the trade deficit and on addressing inflationary pressures. During his administration, price controls on domestically produced oil had been imposed to prevent dramatic price increases and to mitigate the effects of the oil embargo. An example of such a measure was the ceiling imposed on the price of domestically produced crude oil to keep it lower than the international market price.

On 10 April 1973, President Nixon submitted to Congress the "Trade Reform Act of 1973", which ended nearly two years later with the signature by President Ford on 3 January 1975 of "The Trade Act of 1974". A trade legislation was needed because the American Constitution granted the power over foreign commerce, while it left to the President the administration of the laws and the conduct of foreign relations. "In entering into a trade agreement, the President can base his action on either his Constitutional authority or on some form of Congressional approval".<sup>380</sup>

The Trade Act of 1974, although primarily focused on trade liberalisation, allowed for the adjustment of trade barriers to protect domestic industries from foreign competition. In this way, it

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<sup>378</sup> FRUS, Volume XXXI, Foreign Economic Policy 1973-1976, Memorandum From the President's Assistant for International Economic Affairs (Flanigan) to President Nixon, 28 March, 1973, Number 168.

<sup>379</sup> See paragraph 5.

<sup>380</sup> A. Wolff, "Evolution of the Executive-Legislative Relationship in the Trade Act of 1974", *SAIS Review (1956-1989)*, Vol. 19, No. 4, 1975, pp. 16-23.

included provisions that could be used to address unfair trade practices and adjust import levels if deemed necessary for national security or economic stability.

In 1974, the new energy czar appointed by Ford was Frank Zarb and his purpose for the American national energy policy was to restore “American dominance in setting the goals and establishing the price of energy”.<sup>381</sup> Few months later, on 13 January 1975, in a television address from the White House, Ford communicated to American citizens that the moment had come to restore the price mechanism to energy. In addition, Ford asked Congress “to end wellhead price controls for natural gas, allow offshore exploration and coal conversion for factories and utilities, and ease compliance with clean air standards”.<sup>382</sup> These measures devised what Ford called his Energy Independence Act. The ultimate purpose was to cut oil imports by one million barrels per day by the end of 1975 and two million barrels per day within two years while boosting domestic production. As a result, the higher cost of oil was a necessary price to pay for the country’s independence.

Among the measures to limit imports, while no direct tariffs had been imposed, the U.S. negotiated voluntary export restraint (VERs)<sup>383</sup> agreements with some oil-exporting countries to limit the amount of oil they could export to the U.S. The main purpose was, again, to mitigate the impact of rising prices on the U.S. economy. The VERs mechanism was used also as a way to manage trade imbalances and protect domestic industries without resorting to formal trade barriers like tariffs or quotas.

Resource conservation can be attained in two possible paths: free market allocation, or allocation by direct government regulations (through the use of taxation or subsidies).<sup>384</sup> In the presence of externalities, and suboptimal resource allocation, government intervention had been used to correct for market failures, and the expected outcome of such regulation was that it turned to be economically efficient. The power of Government should have been used to enforce energy conservation as an instrument to resolve the “energy crisis”, but what was concretely done instead was the creation of a naive definition of conservation – mainly represented with “use less” or “save energy” concepts frequently mentioned in Nixon’s Project Independence and in the Energy Policy Project report of the Ford Foundation.

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<sup>381</sup>M. Jacobs, *Panic at the Pump*, p. 135.

<sup>382</sup> *Ibidem*.

<sup>383</sup> For more on VERs see W. McClenahan, “The Growth of voluntary export restraints and American foreign economic policy, 1956-1969”, *Business and Economic History*, 1991, pp. 180-190; K. Abbott, “Linking trade to political goals: Foreign policy export controls in the 1970s and 1980s”, *Minnesota Law Review*, Vol. 65, 1980, p. 739.

<sup>384</sup>W. Mead, “The Performance of Government in Energy Regulations”, *The American Economic Review*, Vol. 69, No. 2, 1979, pp. 352-356 (p.352).

Historically, “federal energy tax policy was focused on increasing domestic oil and gas reserves and production; there was no tax incentives for energy conservation or for alternative fuels”.<sup>385</sup> Among other measures, two oil/gas tax code preferences embodied this policy: first, the intangible drilling costs (IDCs)<sup>386</sup> and dry hole costs of 1916, and second, the percentage depletion allowance of 1926. The objectives of such initiatives were to reduce marginal effective tax rates in the oil and gas industries, to reduce production costs, and to increase investments in locating reserves (increasing exploration). Due to these measures, oil prices were relatively low and therefore, encouraged petroleum consumption, while interdicted the development of alternatives to fossil fuels, such as unconventional fuels and renewable forms of energy.

During the 1970s, three events caused a dramatic shift in the focus of federal energy tax policy. First, the large revenue losses provoked by oil and gas tax preferences became more and more hard to justify in the face of increasing federal budget deficits. Second, there was more awareness of environmental pollution and degradation. Third, the double energy crisis focused policymakers’ attention on the problems (alleged “failures”)<sup>387</sup> in the energy markets, and how these problems reflected on the economy, causing stagflation, shortages, productivity problems, rising import dependence, and other economic and social problems. These developments led federal energy policy to shift from oil and gas supply towards energy conservation (reducing energy demand) and alternative energy sources.

In a memorandum of 1 December 1973, Winston Lord – the Director of the Policy Planning Staff – wrote “The Saudi/Kuwaiti oil embargo is an inconvenience for the U.S. It does not threaten our vital interests if we manage our resources well”.<sup>388</sup> Lord continued saying that the U.S. was “the only major Western country which cannot be shut down by an embargo” and the embargo was just

an opportunity to revitalize our [American] alliances by moving toward cooperation across the energy front. It forces attention domestically on the longer term energy supply issue and its relationship to our security and ecology. It forces a serious review of our international oil logistics system and its implication for our security. (...) By clearly demonstrating who needs whom it gives us a powerful future bargaining weapon with the Saudis on future prices and quantities of oil for the US. (...) The Saudis know that there are ample energy resources in the world. (...)

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<sup>385</sup> S. Lazzari, “Energy Tax Policy: History and Current Issues”, *CRS Reports for Congress*, 10 June 2008, Congressional Research Service.

<sup>386</sup> Expensing IDCs were labor costs, material costs, supplies, and repairs associated with drilling a well.

<sup>387</sup> S. Lazzari, “Energy Tax Policy”, p. 3.

<sup>388</sup> FRUS, Volume XXXVI, Energy Crisis, 1969-1974, Memorandum From Director of the Policy Planning Staff (Lord) to Secretary of State Kissinger, 1 December 1973, Number 256.



They know that the introduction of other modes of energy and the development of new oil fields cuts into present and future Saudi markets.<sup>389</sup>

The resource management included the use of specific measures. However, direct tariffs specifically targeting energy imports were not a major feature of U.S. policy during the energy crisis. The early-to-mid 1970s Administration(s) preferred, instead, to adopt measures that aimed at reducing dependence on foreign oil and boosting domestic energy production, while reducing consumption. These included the establishment of strategic reserves, the introduction of fuel efficiency standards, and support for alternative energy sources.

In other words, in the context of economic disruptions caused by the oil crisis, there was a growing sentiment for protecting domestic industries. While not directly a result of Project Independence, the broader economic environment it created contributed to a climate where protectionist trade policies gained traction, particularly in industries impacted by higher energy costs.

#### **4. Domestic Research and Development**

Solutions to America's energy dependence would have been extremely costly and complex. As a matter of facts, the policies adopted did not respond to the economic and technological necessities to better utilize domestic energy resources. Actually, Research and Development (R&D) policies aimed at developing new energy sources or clean conventional resources, but they turned out to be inadequate, especially in view of the lead time (five to ten years) required to bring them to commercial fruition.

As soon as the oil embargo started, President Nixon urged Congress to give priority to the establishment of the Energy Research and Development Administration. However, months of tensions over the Watergate situation, along with several debates among congressional committees over the size and shape of the new agencies caused a delay and Congress did not act immediately.<sup>390</sup> Nixon decided to appeal again to Congress on 23 January 1974 to take action on his legislative proposals. He called for the establishment of a federal energy administration to carry on the work of the Federal Energy Office on a continuing basis, and for an energy research and development administration and a department of energy and natural resources to provide a balanced energy program for the future.<sup>391</sup>

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<sup>389</sup>Ibid.

<sup>390</sup>A. Buck, "A History of the Energy Research and Development Administration", *U.S. Department of Energy*, 1982, pp. 1-23. Available at <https://www.energy.gov/management/articles/history-energy-research-and-development-administration>

<sup>391</sup>Ibidem.

On 11 October 1974, President Ford signed the Energy Reorganization Act of 1974 that abolished the Atomic Energy Commission and created three new federal entities: the Energy Research and Development Administration (ERDA), the Nuclear Regulatory Commission (NRC), and an Energy Resources Council composed of the Secretaries of State and Interior, the administrators of ERDA and FEA and the director of the Office of Management and Budget. The Energy Research and Development Agency (ERDA) was, in fact, established by the U.S. government in 1974 as part of the broader reorganization of federal energy programs in response to the energy crisis and the growing concerns about energy security, and brought together for the first time the major programs of research and development for all forms of energy.

The first head of the Energy Research and Development Administration chosen by Ford was Robert C. Seamans, Jr., president of the National Academy of Engineering. While Robert A. Fri, a former deputy administrator of the Environmental Protection Agency, became the deputy administrator of ERDA and worked closely with Seamans to develop a closely integrated organization. In addition to Seamans and Fri, six assistant administrators headed the major programs for fossil, nuclear, solar, geothermal and advanced energy systems, conservation, environment and safety, and national security.<sup>392</sup> The system composed by eight presidential appointments matched the desire of Congress to establish an efficient balance among the different energy systems. The fuel programs, fossil, nuclear, solar, and geothermal and advanced energy systems, received the major portion of the research budget, with lesser amounts allocated to energy conservation. Conservation was not entirely a matter of research and development and had been added as a major program almost as an afterthought.<sup>393</sup>

Seamans submitted the first national energy plan, “Creating Energy Choices for the Future”,<sup>394</sup> to the President and the Congress on 28 June 1975. The proposal was a two-volume report that outlined short-term (to 1985), mid-term (1985-2000), and long-term (after 2000) programs for developing energy resources. Reporting the fact that oil and gas imports represented 20 per cent of the total U.S. domestic energy consumption in 1974, the plan called for a shift to new primary forms of energy, and outlined five changes that should be made rapidly and simultaneously in the nature and scope of energy research, development and demonstration programs.

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<sup>392</sup>A. Buck, “A History of the Energy Research and Development Administration”, p. 3.

<sup>393</sup>Ibid., p. 4.

See also R. Anders, “The Federal Energy Administration”, *U.S. Department of Energy*, 1980, pp. 1-16. Available at <https://www.energy.gov/management/articles/federal-energy-administration>

<sup>394</sup>The title of the 1975 energy plan, “Creating Energy Choices for the Future,” reflected Seaman's determination to commit the Energy Research and Development Administration to an experimental approach. Rather than follow a rigid plan that excluded options, he preferred a policy of exploring all energy options that offered potential in order to have choices for the future.

To provide new energy choices for the future, it would be necessary

- to overcome the technical problems (primarily operational reliability and environmental impact) preventing an expansion of current major energy sources such as coal plants and nuclear reactors;
- to emphasize energy conservation in automotive transportation, buildings and industrial processes;
- to accelerate the capability to extract gaseous and liquid fuels from coal and shale;
- to include electricity generated by solar power as a high priority development, along with fusion and the breeder reactor; and
- to concentrate on underused technologies capable of being rapidly developed for the midterm and beyond, such as solar heating and cooling and the use of geothermal power.<sup>395</sup>

In other words, ERDA's first national energy plan called for an early demonstration of the technical feasibility of new energy systems with built-in environmental and safety controls. The Federal Government should have provided overall leadership and undertaken only those efforts that industry could not initiate.

Not completely satisfied with domestic R&D solution, at the Rambouillet meeting in France in November 1975, Ford said that “strong domestic energy programs are absolutely essentials”.<sup>396</sup> As a consequence, on 15 April 1976, Seamans submitted a revised edition of the national energy plan. Despite the fact that the basic goals and strategy remained much the same, conservation and energy efficiency, became the highest national priorities. The increased emphasis on conservation aimed at developing new energy sources to replace dwindling supplies of oil and gas. The 1976 plan also gave additional emphasis to the role of industry in the development of new energy technologies, and added a short-term planning category which focused attention on opportunities for technology development having effect within five years.

Even if conservation was obviously one of the most immediate options to pursue, far more popular was the idea of using the sun to solve all energy problems. And American citizens showed a lot of enthusiasm for solar energy.<sup>397</sup>

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<sup>395</sup> A. Buck, “A History of the Energy Research and Development Administration”, p. 4-5.

<sup>396</sup> FRUS, Volume XXXI, Foreign Economic Policy, 1973-1976, Memorandum of Conversation, 16 November 1975, Number 124.

<sup>397</sup> According to Buck, solar energy was by no means a new technology in the United States. More than 100,000 solar hot water heaters had been installed in homes in California and Florida in the early part of the century. The market began to decline in the 1940s, however, because of the competition of low-cost systems using fossil fuels. Then the 1970s brought rising fuel prices and a renewed interest in solar energy. It soon emerged as one of the leading candidates for solving the energy crisis.

Under the Energy Reorganization Act and the Solar Energy Research Development and Demonstration Act of 1974, Congress authorized the construction of a Solar Energy Research Institute to support ERDA's solar program and to aid in establishing an industrial base for solar energy. ERDA's goal was "to develop and demonstrate commercially attractive and environmentally acceptable applications of solar energy at the earliest feasible time".<sup>398</sup> His office would propose four major program units to achieve this goal: (1) direct thermal applications, (2) solar electric applications, (3) fuels from biomass, and (4) technology support and utilization.

A part from solar energy, also geothermal energy was considered to be a viable solution for the future. An early project involved drilling for hot water in areas where ground waters had infiltrated formations of heated rock by a process called hydrothermal convection. Other geothermal projects involved research and development efforts on hot dry rock systems for the purpose of recovering useful heat.<sup>399</sup>

As the majority of ERDA staff came from the Energy Atomic Commission, nuclear energy was a program area that showed many problems, especially during the first year of the agency's existence. Nevertheless, ERDA inherited one of the major civilian reactor program from the Atomic Energy Commission – the liquid metal fast breeder reactor (LMFBR).



Dedication of the nation's largest solar heating and cooling system, currently in operation, took place November 26, 1975, at the George A. Towns Elementary School in Atlanta, Georgia. Solar collector panels mounted on the roof are pictured during construction.

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<sup>398</sup>A. Buck, "A History of the Energy Research and Development Administration", p. 6.

<sup>399</sup> Ibid., p. 8.

In January 1977, Robert Fri took Seamans' place after his resignation; and on 23 June, Fri presented the third and final energy research, development and demonstration plan (ERDA-77-1). The plan was in line with President Carter's National Energy Plan submitted to Congress on 20 April, and would have provided "the basis for the technological changes needed to weather the difficult period of transition from dependence on limited oil and natural gas to inexhaustible or renewable sources of energy".<sup>400</sup> The greatest immediate impact on the nation's energy system between 1977 and 2000 was again represented by conservation and increased efficiency in energy use. A successful conservation program would have required voluntary participation by the public, economic incentives, regulatory actions and the development of more efficient technologies to use and produce energy.

The expectancy of the Carter administration was that the larger arena of a cabinet-level department would have provided the need basis to weather the transition from limited supplies to renewable or inexhaustible sources of energy. Although the national goal of early commercialization of synthetic fuels was not realized, by the time ERDA was absorbed into the Department of Energy in fall 1977, programs were well underway to achieve near-term efficient ways to recover from the "crisis" and use coal, oil shale, and a number of pilot plants had already been constructed or were in progress.

In general, despite its efforts, ERDA's projects did not achieve their goals. Some of the alternative energy technologies such as solar, wind, and geothermal energies required scientific and technical challenges to meet the significant energy needs of the country. As such, even though ERDA was focused on R&D, the amount of time, funding, and expertise required to bring new technologies from the lab to commercial viability had been underestimated.

What is more, alternative energy technologies were generally more expensive than conventional fossil fuels, particularly oil and coal. This made them less attractive both to consumers and industry.

## **5. International R&D and Cooperation**

Also at the international level, some cooperation in energy R&D was expected. Among Western governments, the embargo created "enormous strain and antagonism as they struggled to respond, blamed one another, and sought to outmaneuver each other in securing supplies".<sup>401</sup> Clearly, all Western countries "entered the oil crisis of 1973 insufficiently prepared".<sup>402</sup> The situation was quite uncertain and it created the possibility for Arab countries to cleverly divide the Western consumer nations into preferential and non-preferential countries. In this chaotic context, Kissinger identified

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<sup>400</sup>A. Buck, "A History of the Energy Research and Development Administration", p. 14.

<sup>401</sup>D. Yergin, *The Quest. Energy, Security, and the Remaking of the Modern World.*, Penguin Books, 2012, p. 272.

<sup>402</sup>H. Türk, "The Oil Crisis of 1973 as a Challenge to Multilateral Energy Cooperation among Western Industrialised Countries", *Historical Social Research*, Vol. 39, No. 4, 2014, pp. 209-230 (p. 226).

that a strong and coordinated consumer group would be a useful means of opposing OPEC/OAPEC power and of absorbing “centrifugal tendencies” in the Western camp. As such, energy policy served as a vehicle for the U.S. to preserve its leading role among Western industrialised countries. Actually, the American government “showed its willingness to include the U.S. oil production in the sharing system”.<sup>403</sup>

On 12 December 1973, Kissinger delivered an address in London to try to promote the cooperation between the U.S. and Europe in all areas, including energy. The energy problem had, in fact, already shifted attention from international trade and monetary negotiations, becoming the focus of global debates. The American Secretary of State forecasted that the only long-term solution was “a massive effort to provide producers an incentive to increase their supply, to encourage consumers to use existing supplies more rationally, and to develop alternate energy sources”.<sup>404</sup> To achieve such a goal, Kissinger proposed the establishment of an international Energy Action Group (EAG) - a group formed by both consumers and producers -, which purpose was to assure energy supplies at reasonable costs through mechanisms such as conservation, discovery and development, incentives for producers to produce more oil, and coordination of research into new technologies. The diversification of energy supplies and the acceleration of energy research and development programs could have been achieved through international cooperative efforts.<sup>405</sup>

The proposal encountered an apparent support from delegates of the United Kingdom, Germany, Italy, Norway, Canada and the Netherlands. The French delegate was noncommittal,<sup>406</sup> and the Japanese delegate welcomed the proposal but underlined that Japan’s final view might have been determined by the reaction of the oil producing countries.

Kissinger’s idea was deeply supported by Nixon himself who, on 9 January 1974, decided to invite all major consumer nations to participate in an energy conference writing

Today, the energy situation threatens to unleash political and economic forces that could cause severe and irreparable damage the prosperity and stability of the world. Two roads lie before us. We can go our own separate ways, with the prospect of progressive division, the erosion of vital

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<sup>403</sup> H. Türk, “The Oil Crisis of 1973”, p. 227.

<sup>404</sup> FRUS, Volume XXXVI, Energy Crisis, 1969-1974, Editorial Note, 12 December 1973, Number 264.

<sup>405</sup> FRUS, Volume XXXVI, Energy Crisis, 1969-1974, Editorial Note, Number 27. For Kissinger’s speech in London see FRUS, Volume XXXVIII, Part 1, Foundations of Foreign Policy, 1973-1976, Address by Secretary of State Kissinger, 12 December 1973, Number 24.

<sup>406</sup> In a Memorandum of Conversation, the French President Pompidou remarked to Kissinger that “If we are talking about a dialogue between consumers and producers, we can discuss the modalities of such a dialogue without any problem. I would not concur, however, in establishing a consortium of consumers that would seek to impose a solution on the producers. You only rely on the Arabs for about a tenth of your consumption. We are entirely dependent upon them”. FRUS, Volume XXXVI, Energy Crisis, 1969-1974, Memorandum of Conversation, 20 December 1973, Number 269.

interdependence, and increasing political and economic conflict; or we can work in concert, developing enlightened unity and cooperation, for the benefit of mankind – producer and consumer countries alike.<sup>407</sup>

This was to demonstrate that Project Independence was not the American “form of unilateralism”<sup>408</sup> or the American “way of saying [the U.S.] will go it alone”.<sup>409</sup>

In February 1974, Kissinger explained that the idea was to create a kind of consumer organization and to reach a more cooperative conception and “avoid the sense of panicky impotence (...) in which everyone feels he must run for the nearest exit or assure his own supplies because he doesn’t know”.<sup>410</sup> Kissinger further noted that, to urgently resolve the energy problem and avoid the vicious cycle of competition, autarky, rivalry, and depression – that already led to the collapse of the world order in the thirties -, the U.S. views were that: first, “isolated solution are impossible”<sup>411</sup>; second, the situation required “concerted international action”<sup>412</sup>; third, “developing countries must quickly be drawn into consultation and collaboration”<sup>413</sup>; fourth, “cooperation *not* confrontation must mark our relationships with the producers”<sup>414</sup>; and fifth, “the United States recognised its responsibility to contribute to a collective solution as a matter of enlightened self-interest – and moral responsibility – to collaborate in the survival and restoration of the world economic system”.<sup>415</sup> Unfortunately, the European Community was already facing internal disagreements and the outcome was that both the Germans and British seemed unwilling to take on the French. Both countries would have been cooperative with the United States to a point, but would have not risked an open break with the French. Nevertheless, in the end, the European Community was somehow broken: while the French reserved their position on some of the substantive issues in the American communiqué, all other participants were with the U.S.; but still, no big common action was taken among consumers.

Despite the incapacity of the energy-consumer countries to produce effective cooperation in the period 1972-73, it is interesting that initiatives to improve cooperation in energy were renewed with far more success from 1974. In a memorandum from David Elliott to Jan Lodal- two members of

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<sup>407</sup> FRUS, Volume XXXVI, Energy Crisis, 1969-1974, Editorial Note, Number 280. Nixon wanted the conference to be held at the foreign minister level to facilitate agreement and establish a task force drawn from the consuming countries to deal with exploding energy demands. The American President further proposed that all the members of OPEC be invited to a meeting between consumers and producers, to take place within 90 days of the proposed energy conference.

<sup>408</sup> The expression was used by Kissinger during a conversation on the Washington Energy Conference. FRUD, Volume XXXVI, Energy Crisis, 1969-1974, Memorandum of Conversation, 9 February 1974.

<sup>409</sup> Ibid. During the same conversation, President Nixon replied to Kissinger with that expression on Project Independence.

<sup>410</sup> FRUS, Volume XXXVI, Energy Crisis, 1969-1974, Memorandum of Conversation, 6 February 1974, Number 305.

<sup>411</sup> FRUS, Volume XXXVI, Energy Crisis, 1969-1974, Editorial Note, Number 318.

<sup>412</sup> Ibidem.

<sup>413</sup> Ibidem.

<sup>414</sup> Ibidem.

<sup>415</sup> Ibidem.

the National Security Council Staff – we can read that increasing international cooperation in energy R&D, particularly in the application of technology to the development of alternate or new energy sources, was expected (in normal circumstances).<sup>416</sup> However, according to an American perspective, the main issue in obtaining significant cooperation was the inability of Europe and Japan to commit to a mutual, sizeable, expanded energy R&D program. Clearly, bilateral and multilateral R&D cooperation could have advanced the rate of new developments faster than wholly independent activity at the same level of effort. Moreover, a concerted agreement seeking alternative energy sources could have been a signal to OAPEC – though not a very threatening one in immediate terms, but a signal which could have contained significant longer term implications.

The same Washington Energy Conference held from 11 to 13 February 1974 at the Department of State, was an attempt to considering seven new areas for cooperative exploration: conservation, alternative energy sources, research and development, emergency sharing, international financial cooperation, the less developed countries, and consumer-producers relations.<sup>417</sup> Nevertheless, the conference was quite a failure as the French foreign minister, angry that the other European countries were cooperating with the United States, greeted his fellow European ministers with “*Bonjour, les traîtres...*” – “Hello, traitors”.

Despite the rancorous atmosphere that reigned at the Washington Conference, the Energy Coordinating Group (ECG) was created. The ECG worked “on a coordinated Western approach to economic reaction to the oil crisis”, meaning that “it was not simply a question of ensuring oil supplies in the case of a future oil embargo, but it was also important to ascertain the economic consequences of the oil crisis and to determine how the Western world would cope with it”.<sup>418</sup> The rationing of oil consumption, the creation of further oil reserve supplies, aligned research and development, and energy conservation were all matters of great importance.

Both the negotiations in the OECD and the ECG made clear that the United States was still the leading power in the initiative to generate cooperation among Western oil-consuming countries. This was probably just a consequence of Europe and Japan’s fear of direct consequences regarding oil supplies. But the ability of Kissinger to transmit the “Interdependence” feature that characterized the international world, smoothed uncertainties and “traditional stereotypes”<sup>419</sup> while incentivised the necessity of international collaboration.

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<sup>416</sup> FRUS, Volume XXXVI, Energy Crisis, 1969-1974, Memorandum From David Elliott of the National Security Council Staff to Jan Lodal of the National Security Council Staff, 29 November 1973, Number 252.

<sup>417</sup> FRUS, Volume XXXVI, Energy Crisis, 1969-1974, Editorial Note, Number 318.

<sup>418</sup> H. Türk, “The Oil Crisis of 1973”, p. 210-211.

<sup>419</sup> FRUS, Volume XXXVIII, Part 1, Foundations of Foreign Policy, 1973-1976, Address by Secretary of State Kissinger, 15 April 1974, Number 32.



No subject illustrates global interdependence more emphatically than the field of energy. (...) A comprehension by both producers and consumers of each other's needs is therefore essential. (...) All nations share an interest in agreeing on a level of prices which contributes to an expanding world economy and which can be sustained over the long term. [The Energy Conference in Washington, issued a program] that cannot be achieved by any one group of countries. It must draw on the strength and meet the needs of all nations in a new dialogue among producers and consumers. (...) A healthy global economy requires that both consumers and producers escape from the cycle of raw material surplus and shortage which threatens all our economies.<sup>420</sup>

The energy policy solutions developed into the International Energy Program, which was to be implemented by a new international organization, the International Energy Agency (IEA) created in 1974 and placed under the umbrella of the Organization for Economic Cooperation and Development (OECD) in Paris. The International Energy Treaty outlined a new energy security system to deal with disruptions, cope with crisis, and avert future bruising competitions. It also provided for cooperation and coordination among consumers in the event of supply interruptions, and encouraged parallelism and collaboration among their energy policies. As for the IEA, one of its core responsibilities was to coordinate the emergency sharing of supplies in the event of a loss of supplies.



Signature of the Agreement establishing the IEA, 18 November 1974.

Available at <https://www.iea.org/about/history>

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<sup>420</sup> FRUS, Volume XXXVIII, Part 1, Foundations of Foreign Policy, Number 32.

The members<sup>421</sup> expected the IEA to prevent the potential future use of the “oil weapon”, universally reduce dependency on Middle Eastern oil, and provide reliable data for political decision.

On 16 February 1976, the President’s Assistant for National Security Affairs (Scowcroft) wrote to President Ford on the adoption of a long-term program of cooperation from the International Energy Agency. The proposal, that Scowcroft classified as similar to the one proposed by Kissinger in his speech held in February 1975, forecasted: a minimum safeguard price (MSP) of \$7 per barrel, the establishment of conservation targets, and the creation of an overall R&D strategy for the group – including technical assistance in helping each country develop its own R&D program.<sup>422</sup> Those negotiations projected in the long-term program to reduce a joint dependence on imported oil, constituted one of the IEA’s major achievements. The program provided “for coordination of national efforts and cooperative measures in conservation, the accelerated production of new energy, and R&D”.<sup>423</sup>

In order to create a climate good for investment under mutually satisfactory conditions, international cooperation on a continuing basis should have been intensified. Investment in the development of energy resources, conventional and non-conventional, in their own territories and in the developing countries matched with the urgent need to maintain and improve access to capital markets by the developing countries.<sup>424</sup>

In general, it is fair to say that the negotiations leading to the establishment of the IEA and to a great and working system of international cooperation, can be seen as a struggle of the United States to maintain and renovate its hegemonic role in a period shaped by major challenges.<sup>425</sup>

## 6. The Administration’s Self-Evaluation

Despite the Administration’s faith in the American strategy (conservation, Project Independence, and cooperation with other consumers), when in a memorandum of conversation held on 3 August

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<sup>421</sup>The IEA’s founding members were Austria, Belgium, Canada, Denmark, Germany, Ireland, Italy, Japan, Luxembourg, The Netherlands, Norway, Spain, Sweden, Switzerland, Türkiye, United Kingdom, and the United States. They were followed by Greece (1976), New Zealand (1977), Australia (1979), Portugal (1981), Finland (1992), France (1992), Hungary (1997), Czech Republic (Czechia) (2001), Republic of Korea (2002), Slovak Republic (2007), Poland (2008), Estonia (2014), and Mexico (2018) and Lithuania (2022). Chile, Colombia, Israel, Latvia and Costa Rica are currently seeking full membership.

<sup>422</sup>FRUS, Volume XXXVII, Energy Crisis, 1974-1980, Memorandum From the President’s Assistant from National Security Affairs (Scowcroft) to President Ford, 16 February 1976, Number 94.

<sup>423</sup>FRUS, Volume XXXVII, Energy Crisis, 1974-1980, Briefing Memorandum From the Acting Assistant Secretary of State for Economic and Business Affairs (Katz) to Secretary of State Kissinger, 16 July 1976, Number 100.

<sup>424</sup>FRUS, Volume XXXVII, Energy Crisis, 1974-1980, Telegram From the Mission to the Organization for Economic Cooperation and Development to the Department of State, 29 October 1976, Number 107.

<sup>425</sup>The breakdown of the Bretton Woods system, the oil crisis, the EC’s pursuit of a more independent role in the international scenario, and the rising power of some Third World countries, challenged the dominant paradigm of international relations under the American leadership.

1974, Kissinger asked “How about Project Independence?”, the general answer had been “It is collapsing”;<sup>426</sup> and with the independence agenda, also cooperation with the other consuming countries was lacking in strong results.

Analysing the table below, it is clearly visible how, between 1970 and 1975, American domestic production went from 11,656 to 10,467 mb/d; net imports went from 3,161 to 5,846 thousand Barrels Per Day; and consumption increased from 14,697 to 16,322 thousand Barrels Per Day. These results were in obvious contrast with the goals of Project Independence.

**Table 5.1a Petroleum and Other Liquids Overview, Selected Years, 1949-2011**

Year	Production <sup>1</sup>	Production as Share of Estimated Consumption	Net Imports <sup>2</sup>	Net Imports as Share of Estimated Consumption	Balancing Item <sup>3</sup>	Estimated Consumption <sup>4</sup>
	Thousand Barrels per Day	Percent	Thousand Barrels per Day	Percent	Thousand Barrels per Day	
1949	5,475	95.0	318	5.5	-30	5,763
1950	5,908	91.5	545	8.4	5	6,458
1955	7,611	90.0	890	10.4	-37	8,455
1960	8,110	82.8	1,613	16.5	74	9,797
1965	9,234	80.2	2,281	19.8	-2	11,512
1970	11,656	79.3	3,161	21.5	-119	14,697
1975	10,467	64.1	5,846	35.9	8	16,322
1976	10,213	58.5	7,090	40.6	159	17,461
1977	10,387	56.4	8,565	46.5	-520	18,431
1978	10,771	57.2	8,002	42.5	74	18,847
1979	10,662	57.6	7,985	43.1	-135	18,513
1980	10,787	63.1	6,365	37.3	76	17,066
1981	10,693	66.6	5,401	33.6	-31	16,063
1982	10,744	70.2	4,298	28.1	288	15,310
1983	10,761	70.5	4,312	28.3	185	15,258
1984	11,095	70.4	4,715	29.9	-52	15,758
1985	11,177	70.9	4,286	27.2	302	15,766
1986	10,893	66.7	5,439	33.3	-5	16,326
1987	10,636	63.6	5,914	35.4	168	16,717
1988	10,473	60.4	6,587	38.0	277	17,336
1989	9,874	56.8	7,202	41.4	303	17,379
1990	9,645	56.6	7,161	42.0	230	17,036
1991	9,846	58.7	6,626	39.5	297	16,769
1992	9,703	56.8	6,938	40.6	455	17,096
1993	9,422	54.7	7,618	44.2	195	17,235
1994	9,239	52.1	8,054	45.5	424	17,716
1995	9,183	51.8	7,886	44.5	654	17,723
1996	9,194	50.2	8,498	46.4	616	18,308
1997	9,201	49.4	9,158	49.2	260	18,619
1998	8,987	47.5	9,764	51.6	165	18,915
1999	8,711	44.6	9,912	50.8	894	19,517
2000	8,784	44.6	10,419	52.9	496	19,699
2001	8,696	44.2	10,900	55.5	60	19,647
2002	8,720	44.1	10,547	53.4	493	19,760
2003	8,554	42.7	11,238	56.1	239	20,031
2004	8,498	41.0	12,097	58.4	133	20,728
2005	8,140	39.1	12,549	60.3	114	20,803
2006	8,163	39.4	12,391	59.9	143	20,697
2007	8,292	40.1	12,027	58.1	376	20,695
2008	8,364	42.9	11,090	56.9	51	19,506
2009	<sup>R</sup> 9,981	47.8	9,654	51.4	<sup>R</sup> 154	<sup>R</sup> 18,789
2010	<sup>R</sup> 9,490	<sup>R</sup> 49.4	<sup>R</sup> 9,435	<sup>R</sup> 49.2	<sup>R</sup> 267	<sup>R</sup> 19,192
2011	<sup>R</sup> 9,884	<sup>E</sup> 52.4	<sup>R</sup> 8,432	<sup>R</sup> 44.7	<sup>E</sup> 61	<sup>E</sup> 18,877

<sup>1</sup> Crude oil (including lease condensate) production; natural gas plant liquids production; and processing gain (refinery and blender net production minus refinery and blender net inputs). Beginning in 1981, also includes fuel ethanol (minus denaturant) production. Beginning in 2001, also includes biodiesel production.

<sup>2</sup> Net imports equal imports minus exports. Includes petroleum (excluding biofuels) net imports. Beginning in 1993, also includes fuel ethanol (minus denaturant) net imports. Beginning in 2001, also includes biodiesel net imports. Beginning in 2009, also includes a small amount of other biofuels (such as bio-jet fuel and bio-ETBE) imports.

<sup>3</sup> Includes petroleum and biofuels stock withdrawals (stock change multiplied by -1); petroleum adjustments; and biodiesel balancing item.

<sup>4</sup> Includes estimated consumption of petroleum. Beginning in 1981, also includes estimated consumption of fuel ethanol minus denaturant. Beginning in 2001, also includes estimated consumption of biodiesel. Techniques used to estimate consumption vary depending on the product. Petroleum product supplied is used as an approximation of petroleum consumption, which is adjusted to exclude biofuels in order to prevent double counting. See Note 1, "Petroleum Products Supplied and Petroleum

Consumption," at end of section. Estimated consumption of fuel ethanol minus denaturant in 2011 is calculated as fuel ethanol refinery and blender net inputs minus fuel ethanol adjustments minus the amount of denaturant in fuel ethanol consumed; for other years, see sources in Table 10.3. Estimated consumption of biodiesel in 2011 is calculated as biodiesel production plus biodiesel net imports minus biodiesel stock change; for other years, see sources in Table 10.4.

R=Revised, P=Preliminary, E=Estimate.

Web Pages: • See <http://www.eia.gov/totalenergy/data/monthly/#petroleum> for updated monthly and annual data. • See <http://www.eia.gov/totalenergy/data/annual/#petroleum> for all annual data beginning in 1949. • See <http://www.eia.gov/petroleum/> and <http://www.eia.gov/renewable/> for related information.

Sources: **Production:** Tables 5.1b, 10.3, and 10.4. **Net Imports:** Tables 5.1b, 10.3, and 10.4; and U.S. Energy Information Administration (EIA), *Petroleum Supply Monthly (PSM)*, and earlier publications—see sources for Table 5.1b. **Balancing Item:** Calculated as estimated consumption minus production and net imports. **Estimated Consumption:** Tables 5.1b, 10.3, and 10.4; and EIA, PSA, PSM, and earlier publications—see sources for Table 5.1b.

Source: U.S. Energy Information Administration. Annual Energy Review.

The administration running from 1973 to 1976 had recognised several times that Project Independence’s measures were too ambitious to be met. The oil price increase that followed the embargo, led to inflation and economic instability which strained efforts to promote energy self-sufficiency. The United States experienced stagflation through a combination of high inflation and stagnant economic growth, making it very difficult to implement aggressive energy policies also at

<sup>426</sup>FRUS, Volume XXXVI, Energy Crisis, 1969-1974, Memorandum of Conversation, 3 August 1974, Number 362.

the political level. Moreover, at the domestic level, there was significant opposition from various political factions, especially from those favouring deregulation and free market solutions, limiting the efforts to pass the highly-desired comprehensive energy program. In general, there was a shared recognition of the project's shortcomings, and internal responses differed from blaming external circumstances to calling for renewed focus on energy policy reform.

In a Memorandum of 1976 on U.S. Energy Policy, R. Hormats of the National Security Council Staff, wrote that “developing the response to NSSM 237 has been an unsettling process, primarily because it reveals the sorry state of U.S. domestic energy policy and its very dubious foundation in Project Independence”.<sup>427</sup> He continued stating that “while FEA’s ambition to achieve ‘energy independence’ may be useful as a rhetorical goal, it is neither an attainable objective nor a basket in which we should put many of our eggs”.<sup>428</sup> With these words, Hormats admitted that the self-sufficiency ambition was far away from being reached and that the FEA had too optimistic assumptions about the American ability to conserve energy and increase production from alternate sources. He added that,

(...) it becomes evident that over a 10-15 year period energy independence has almost no meaning for us in terms of decreasing our vulnerability to supply interruptions; we are going to remain very vulnerable for the foreseeable future. Perhaps more important in the short run, we will remain politically vulnerable though irreversible dependence of our industrialised allies no matter how independent the United States may become.<sup>429</sup>

From an international point of view, the geopolitical implications of energy dependence and the failure to achieve self-sufficiency were perceived as vulnerabilities in U.S. foreign policy. In particular, the United States had to decide whether

the thrust of U.S. policy should shift to a more calculated policy of encouraging the oil producers to exercise restraint, adopting a more accommodating view on commodity issues, diversifying our energy sources on a priority basis, building strategic reserve stocks more rapidly (...), or more actively seeking agreements to reduce the possibility

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<sup>427</sup> FRUS, Volume XXXVII, Energy Crisis, 1974-1980, Memorandum From Robert Hormats of the National Security Council Staff to the President’s Assistant for National Security Affairs (Scowcroft), 26 July 1976, Number 102. The mentioned NSSM 237 was a National Security Study Memorandum of 5 February 1976 on U.S. International Energy Policy to secure a reliable supply of required energy imports at reasonable prices over the next five years (by the early 1980s).

<sup>428</sup> Ibidem.

<sup>429</sup> Ibidem.

of arbitrary supply and price allocation.<sup>430</sup>

The speech's forecasted goals were too optimistic, and in the long run foreign oil continued to be a major part of the nation's energy supply. Apparently, the solution of the world's energy problem lied in the failed implementation of effective programs for the development of alternative source of energy and oil conservation.

As Katz (the Acting Assistant Secretary of State for Economic and Business Affairs) wrote in a memorandum of 16 July 1976, the United States had failed in the field of conservation by not applying national resources adequately.

We account for some 50% of the IEA's oil consumption and have the greatest potential among IEA countries for implementing meaningful measures. Our IEA partners expect us to take the initiative on conservation, and to date we have not met the challenge. We have failed to approach energy conservation in the IEA with the degree of commitment that has been directed toward energy supply expansion.<sup>431</sup>

The common factor that is present in each of these documents from the Administration's self-evaluation is the domestic energy program, classified as a mixture of achievements and shortcomings in the energy field. The same EPCA signed by President Ford in December 1975, despite constituting a step in the right direction to promote conservation, it resulted insufficient. In fact, it was a positive measure that helped providing for major conservation efforts and authorizing the creation of a strategic storage program to lessen the adverse economic consequences of new embargoes. But it fell short of what was required if the U.S. was to make meaningful headways in achieving the energy independence objectives.

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<sup>430</sup>FRUS, Volume XXXVII, Energy Crisis, 1974-1980, Memorandum From Robert Hormats of the National Security Council Staff to the President's Assistant for National Security Affairs (Scowcroft), 26 July 1976, Number 102.

<sup>431</sup> FRUS, Volume XXXVII, Energy Crisis, 1974-1980, Briefing Memorandum From the Acting Assistant Secretary of State for Economic and Business Affairs (katz) to Secretary of State Kissinger, 16 July 1976, Number 100.

## Conclusions

The start of the Arab oil embargo in 1973 made a full-blown energy crisis a real possibility. Along with the changes in the oil market, the 1970s American administrations tried to gradually improve the American energy situation. Contrary to aspects of energy production and consumption, that were among the targets, energy itself was not part of political agendas prior to early 1970s. As Yergin explained (2012), until the 1973 oil embargo, “the energy business was just that – a business – or, actually, several different businesses. From 1973 on, energy became everybody’s business”.<sup>432</sup>

Nixon and Ford called for U.S. “energy independence”, and Carter declared energy “the moral equivalent of war”.<sup>433</sup> The Presidents and Congresses of the period passed and adopted several policies to deal with the challenges of fuel shortages. Reduction of Middle Eastern oil imports and reduction of risks of escalation of severe conflicts between the oil producing countries and companies were at the centre of U.S. political agendas. Besides the “conservation ethic”, a restored commitment to finding new oil sources was a positive consequence of the “energy crisis”.

As outlined in Chapter Two, the American response to the oil embargo was quite ambitious and included several minor bureaucratic reorganisations to increase the federal government’s attention to energy, oil price controls, petroleum allocation and rationing, conservation measures and increase in energy security. However, the large involvement of government resulted being one of the main reasons behind the unsuccessful efforts to solve the energy crisis of the 1970s.<sup>434</sup>

At the domestic level, national dependency could have been reduced by energy-saving policies, the substitution of oil by alternative energy sources, or the search for new (and closer) petroleum suppliers, such as Canada. In his address on energy to the American nation delivered on 7 November 1973, president Nixon revealed Project Independence, a high-budget five-year program.

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<sup>432</sup> D. Yergin, *The Quest*, p. 531.

<sup>433</sup> J. Hakes, *Energy Crises. Nixon, Ford, Carter, and Hard Choices in the 1970s*. University of Oklahoma Press, 2021, p. XI. Available at

[https://books.google.it/books?hl=it&lr=&id=kTYGEAAAQBAJ&oi=fnd&pg=PR1&dq=Nixon+and+Ford+energy+policies&ots=FaF4WH7ejh&sig=ETRd5kT-6cwsrX9wcuVlC6n3Oes&redir\\_esc=y#v=onepage&q=Nixon%20and%20Ford%20energy%20policies&f=false](https://books.google.it/books?hl=it&lr=&id=kTYGEAAAQBAJ&oi=fnd&pg=PR1&dq=Nixon+and+Ford+energy+policies&ots=FaF4WH7ejh&sig=ETRd5kT-6cwsrX9wcuVlC6n3Oes&redir_esc=y#v=onepage&q=Nixon%20and%20Ford%20energy%20policies&f=false)

Two weeks after his arrival at the White House, in 1977, Jimmy Carter spoke from the Oval Office warning the American people that the energy problem will “get progressively worse through the rest of this century (...) We are running out of oil and gas, we must prepare for a change”. Stricter conservation and renewed use of coal, along with permanent renewable energy sources like solar power were the solutions to the same old energy problem.

<sup>434</sup> Ronald Reagan believed it too, and he told the country that the problem was not a shortage of energy sources, but rather a surplus of government. He criticized the Carter Plan as a massive Government intervention in the energy economy, that would have led to more shortages and higher prices, more inflation and a depressed economy. See M. Jacobs, *Panic at the Pump*, p. 312.

“For more than nine years”, Reagan declared, “restrictive price controls have held the U.S. oil production below its potential [and] have also made us more energy-dependent on the OPEC nations – a development that has jeopardized our economic security and undermined price stability at home”. Regan in fact ended price controls and the complex system of gasoline allocations while pushing domestic production of oil and natural gas.

Project Independence was a grand vision, but, as demonstrated in Chapter Three, there was little consensus on how to achieve energy self-sufficiency.

The Project was developed by the staffs of Nixon's Office Management and Budget and Federal Energy Administration together. Its goals were energy security, economic stability, and environmental conservation. Concerning the first purpose, reducing oil dependency particularly from politically volatile regions like the Middle East was the primary objective. This was seen as crucial for national security, as disruptions in oil supply could have significant economic and geopolitical repercussions. As for the economic stability, by reducing dependence on foreign oil, Project Independence sought to mitigate the economic impacts of volatile oil prices and supply disruptions. Increasing domestic energy production was also intended to stimulate economic growth and create jobs in the energy sector, reducing reliance on imports and boosting domestic industries. With respect to the last point, environmental conservation, the reduction of energy consumption was fundamental to manage the impact on nature. This included initiatives such as improving fuel efficiency standards for vehicles, implementing building codes to enhance energy efficiency, and encouraging public awareness of energy conservation practices.

The strategies implemented aimed at the diversification of energy sources. In fact, Project Independence advocated for diversifying the nation's energy portfolio beyond oil. This included investments, though R&D, in alternative energy sources like nuclear power, natural gas, coal, and renewable energy sources such as solar and wind power. While diversifying, the agenda required increasing domestic oil production, with efforts to expand drilling in existing fields and explore new reserves, such as Alaska's North Slope. The initiative also emphasized investments in research and development to spur technological innovations in energy production and efficiency. This included funding for scientific research on alternative energy technologies and development of cleaner and more efficient energy sources. Finally, Project Independence involved legislative efforts to support its objectives, including the creation of the Department of Energy in 1977 to coordinate federal energy policy and research initiatives.

Despite being somewhat "original", Project Independence did not achieve the proposed assumptions. As explained in Chapter Three, the tepid response of U.S. energy policy since the 1970s only "modestly altered American patterns of energy use".<sup>435</sup> Obviously, domestic challenges and limitations did exist and are the reasons why, in the end, the Project failed.

Neither greater production nor greater conservation gave Americans the immediate satisfaction they were looking for. As Jacobs (2017) wrote, "If the Vietnam War and the Watergate scandal taught Americans that their presidents lied, the energy crisis showed them that their government didn't

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<sup>435</sup> P. Sabin, "Crisis and continuity in U.S. oil politics, 1965-1980", *Journal of American History*, Vol. 99 No. 1, 2012, pp. 177-186 (p.185).

work”.<sup>436</sup> The bad political management of the situation involved also Nixon’s marginal absence on the issue – that can be clearly perceived when reading historical documents -, who was probably overwhelmed by “bigger issues” like Watergate and the suddenly-interrupted presidential mandate. Since Washington proved unable to design an effective national energy policy, the inability to develop resources and conserve made Americans more dependent on foreign oil.

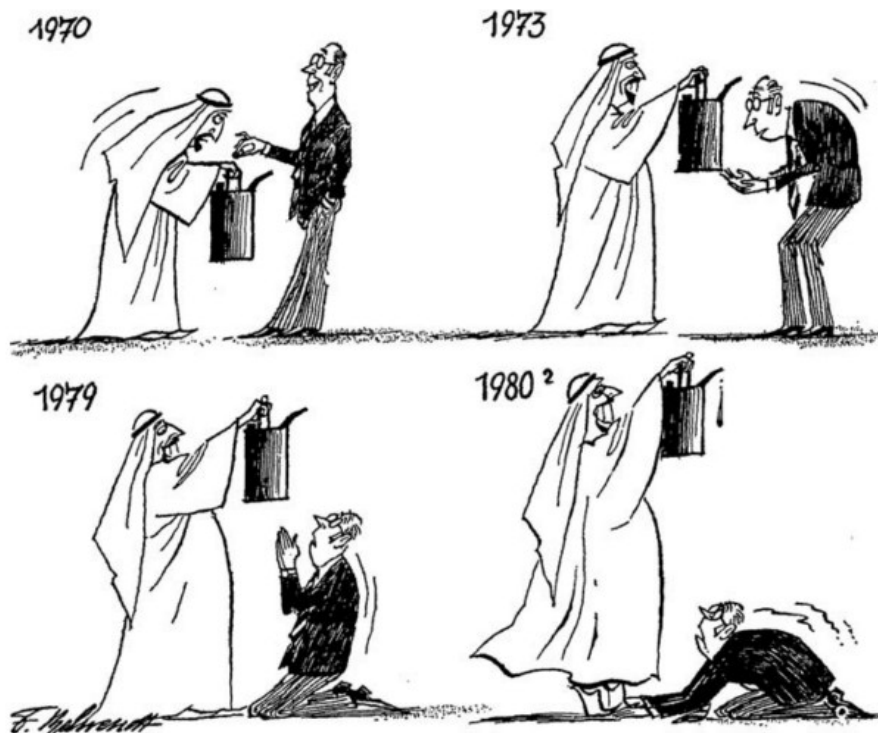


Fig. 6.4. Popular representation of the relationship between Western Europeans and Arab sheiks during the oil price increases of the 1970s (Frankfurter Allgemeine Zeitung, 1979).

Source: G. Garavini, *The Rise and Fall of OPEC*, p. 279

The primary issue that appeared to limit the government's authority and ability to enforce energy policies, thereby diminishing public confidence in its political leadership, was the perceived deficiency of government expertise in the energy sector.<sup>437</sup> The government's limited knowledge in oil and energy greatly contributed to its loss of credibility and the sense of insecurity during the oil crisis. Ignorance seemed to make the government dependent on external information and, in the end, cast doubt on its ability to conduct politics in a sovereign manner.<sup>438</sup> As I recalled in the thesis several times, the same gas lines were “self-inflicted by rigid government policies [such as] price

<sup>436</sup> M. Jacobs, *Panic at The Pump*, p. 9.

<sup>437</sup> R. Graf, “Claiming Sovereignty”, p. 48.

<sup>438</sup> *Ibid.*, p. 50.



controls and a heavy-handed federal allocation system that seriously misallocated gasoline”.<sup>439</sup> In other words, policy prevented markets from working, and the Government backfired and even prevented the moving around supplies to mitigate disruptions and speed adjustment

Despite efforts to reduce dependence on foreign oil, the United States remained heavily reliant on oil imports, particularly for transportation fuel. This dependency exposed the nation to geopolitical risks and price fluctuations in the global oil market. Moreover, the focus on domestic energy production, including fossil fuels, raised environmental concerns related to air and water pollution, greenhouse gas emissions, and climate change. Finally, the geopolitical landscape of the oil market and global energy dynamics has continued to evolve since the 1970s, with shifts in oil production and consumption patterns, changes in energy geopolitics, and geopolitical tensions in oil-producing regions.

As reported in the First Chapter, for the diversification of sources away from OPEC and the Middle East, efforts by oil firms and consuming nations began before the 1973 oil shock. Back in 1956, with the Suez Crisis, nations and firms cautioned about over-reliance on Persian Gulf oil. The necessity to take distances from the Arab producers came back in 1967 with the Arab-Israeli war. As a consequence, the Trans-Alaska Pipeline (TAPS) and North Sea oil were already under way before 1973.<sup>440</sup> Oil shock or not, great discoveries of oil in the North Sea and at Prudhoe Bay probably would have been developed as well. U.S. (and UK) governments “were firmly committed to assisting the diversification of oil supply away from the Middle East even before the price increases”.<sup>441</sup> However, the 1973 crisis removed political, economic and technical constraints that existed earlier and were slowing down research of non-OPEC sources. Moreover, the high oil prices provided the economic pretext to improve the technical reliability of subsea wellheads and flow lines.

Another key issue of the early 1970s “energy crisis” was the price problem. It was thought to be more critical than the supply problem and in the American Administration there was the hypothesis that bilateral agreements<sup>442</sup> (government-to-government) had a tendency towards keeping the prices up. High prices in the international oil market were a serious problem for the world economy – as well as for maintaining a good image for the oil companies – and therefore, prices needed to be reduced. To achieve such a purpose, a surplus in production was required; and to get a surplus,

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<sup>439</sup> D. Yergin, *The Quest*, p. 278.

<sup>440</sup> Despite works began prior to 1973, the British Petroleum (BP) which was promoting the pipeline project, faced a thicket of legal hurdles and political opposition from Alaskan native groups and environmental organizations, that delayed authorizations for three years.

<sup>441</sup> T. Priest, “Shifting Sands”, p. 124.

<sup>442</sup> For some examples of bilateral agreements see “*CIA Assessment of Recent Bilateral Oil Agreements*” FRUS, Volume XXXVI, Energy Crisis, 1969-1974, Memorandum From the President’s Deputy Assistant for International Economic Affairs (Cooper) to Secretary of State Kissinger, 11 April 1974, Number 348.

extensive exploration in all areas of the world and adequate incentives for production were essentials. Unluckily, for what concerns the United States, no particular incentives had been offered by Government in order to avoid an escalation of the price rise. Instead, it placed controls on the prices and allocation of oil causing long lines outside petrol stations, it limited highway speed to fifty-five miles per hour, and it required that vehicles attained high levels of fuel efficiency.

If we think about Project Independence as a plan to lead the United States exports surpassing its imports of petroleum – rather than an agenda to ban all foreign oil imports, as planned by Nixon -, we could argue that fifty years later, the U.S. is still importing a lot of energy to face the high demand.<sup>443</sup>

What, instead, Nixon and his advisers planned could be defined as “high-cost dirty path to energy independence”<sup>444</sup>, with an aggressive boost in offshore resource development, pursuit of extraordinarily expensive fast-breeder reactor, increased coal use, and expanded shale oil development. The plan – if achieved – could have turned the U.S. vulnerable to competition from countries with low-cost supplies. Moreover, if the agenda had been implemented as forecasted, the United States would have saddled with high-cost energy supplies and very high emissions of harmful global warming gases.

Instead, the path taken has been different from the one planned; even though, a sort of independence was somehow reached in the 21<sup>st</sup> century with horizontal drilling, fracking, future markets, and the auto industry’s deathbed conversion to fuel economy<sup>445</sup>; clearly, these measures partially satisfy only the “independence” aspect, but not the “clean” one.

As I reported in Chapter Two, Grossman proved that “Energy independence became an explicit goal of American energy policy [from Project Independence on], not just during Nixon’s remaining time in office but for all his successors into the 2010s”; he also added that “over the years since the end of the embargo, more than eight hundred pieces of new legislation, or amendments to old, containing the words ‘energy independence’ have been introduced in the US Congress” and “Since 1973, more than ten thousand references to “energy independence” appear in the Congressional Record”.<sup>446</sup> Therefore, the final outcome seems to be that not only have presidents and legislators

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<sup>443</sup> P. Verleger, “The Amazing Tale of U.S.”, *The Magazine of International Economic Policy*, 2012, pp. 8-11 and 54-62. In his study, the author was predicting a net exporter role for the United States by 2023. “In 2023, America will be exporting natural gas, petroleum products, coal, and possibly crude oil (...). The United States will also be importing some oil. On balance, though, America will be a net exporter.” p. 8.

<sup>444</sup> Ibidem.

<sup>445</sup> Ibid., p. 9.

<sup>446</sup> P. Grossman, 2021, p. 94.

touted energy independence, but even today an overwhelming percentage of Americans are also said to favour energy independence.<sup>447</sup>

Despite the amorphousness of “energy independence,” it became the explicit goal of American energy policy thereafter. Every president since Nixon has advocated for it even if with different approaches. Moreover, before Bush’s speech in 2006, no incumbent American President, either Republican or Democrat, had ever publicly referred to the national reliance on oil in terms of “an addiction” that would have required the search for independency from imported oil.<sup>448</sup>

In 2006, Senator Barack Obama called for energy independence. However, his approach was more a “moving away from an oil economy” goal, that he reiterated in a 2011 speech as president, than an approach similar to Nixon and Ford’s. Most recently, presidential candidate Mike Pence promised in a campaign ad to “put our country back on a path to energy independence”.<sup>449</sup>

The American discourse of dependency, today as it was in the past, is full of ambiguity, contradictions, and uncertainty that are then reflected into energy politics. The “addiction trope” contains strong American assumptions about the country’s relationship with its main source of energy. As opposed to “oil-as-lifeblood” – the counter-trope representing petroleum as the vital force of the United States – the metaphor of “oil-as-drug” depicts it as a poison that slowly consumes and finally destroys the body politic. The picture below, “Sam, you’re addicted to oil”, dates back to 2010, however, the notion of an American oil addiction (or dependency), dates back to the 1970s. Many historians agree on the fact that prior to the “energy crisis” of 1973, dependency was not widely associated with inherent problems; but, right after the oil shock, things changed dramatically<sup>450</sup> and dependency, primarily in the form of foreign oil dependency, became a major political problem.

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<sup>447</sup> Frank Luntz, “Our Divided Nation Is United on Energy Independence,” RealClearPolitics, [https://www.realclearpolitics.com/articles/2018/09/06/our\\_divided\\_nation\\_is\\_united\\_on\\_energy\\_independence\\_137992.html](https://www.realclearpolitics.com/articles/2018/09/06/our_divided_nation_is_united_on_energy_independence_137992.html), 8 September 2018.

<sup>448</sup>S. Herbstreuth, *Oil and American Identity: A Culture of Dependency and US Foreign Policy*, I.B. Tauris, 2016, chapter two “Defining Dependency”. Available at [https://www.google.it/books/edition/Oil\\_and\\_American\\_Identity/IqCLDwAAQBAJ?hl=it&gbpv=1&dq=Oil+and+American+Identity&printsec=frontcover](https://www.google.it/books/edition/Oil_and_American_Identity/IqCLDwAAQBAJ?hl=it&gbpv=1&dq=Oil+and+American+Identity&printsec=frontcover)

See also P. Verleger, “The Amazing Tale of U.S.”, *The Magazine of International Economic Policy*, 2012, p 59. In 2006, speaking to Congress in his State of the Union address, President George W. Bush announced the Advanced Energy Initiative, a program that intended to replace 75 per cent of U.S. oil imports from the Middle East with ethanol and other fuels. “By applying the talent and technology of America, this country can dramatically improve our environment, move beyond a petroleum-based economy, and make our dependence on Middle Eastern oil a thing of the past”.

<sup>449</sup> P. Grossman, “The Fantasy of Energy Independence”, *The New Atlantis*, Fall 2023. Available at <https://www.thenewatlantis.com/publications/the-fantasy-of-energy-independence>

<sup>450</sup> M. Jacobs, *Panic at the Pump*, p. 312. See also R. Vitalis, *Oilcraft*, 2022.



Source: KAL's Cartoon, "Obama v BP. The damage beyond the spill", *The Economist*, 19 June 2010.

In other words, the quest for energy independence has meant that America is continually seeking a “solution” to what we think of as the problem of participation in a global energy market. But, as I have tried to demonstrate, if participation in this market is a problem at all, the cause is not external, as we have been led to believe ever since the embargo. The problem is bad U.S. energy policies themselves.<sup>451</sup>

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<sup>451</sup> P. Grossman, “The Fantasy of Energy Independence”.

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