



## *Compagnie Française des Pétroles* and Its Contribution to the Re-establishment of France's Position among the Oil Countries after the Second World War

Mohamed Sassi

In the race to control oil sources, France found itself in a defensive position in the Middle East at the end of the Second World War. Faced with a new American domination of the area, particularly with the creation of the Arabian American Company (ARAMCO), the *Compagnie Française des Pétroles* (CFP) and the French state chose a compromise solution, which imposed a double strategy on the CFP. The first tactic, jointly with the state, consisted of a strong diplomatic mobilization; the second consisted of diversification in the Middle East and the development of Algerian Sahara and West African oil resources. This strategy bore additional fruit in that it allowed an acceleration of technological development as well as the valorization of purchases in francs. The postwar period thus provided a perfect example of a complementary state-private company activity in the oil economy.

---

“Oil diplomacy” was born during the interwar period, but changed geopolitics at the end of the Second World War created new stakes and imposed new rules of diplomacy. Governments needed to safeguard the oil interests of their respective national companies in the Middle East to the extent possible. The renewal of economic activity at the end of the war put France in the lead of new opportunities requiring a quick political and economic reaction.<sup>1</sup> The challenges of postwar rebuilding extended to all

---

<sup>1</sup>François Bloch-Lainé and Jean Bouvier, *La France restaurée, 1944-1954: dialogue sur les choix d'une modernisation* (Paris, 1986); Herman van der Wee,

---

**Mohamed Sassi** <mohamed\_sassi@yahoo.com> received his Ph.D. from the Université de Paris-IV (Sorbonne), and he is a research associate there and at the Université de Genève. In addition to the oil industry, he is working on issues linked to economic integration and investment climate in the Mediterranean region.

spheres of activity. With acceptance of the Marshall Plan in June 1947, France engaged in a long process of economic infrastructure development.<sup>2</sup> The basic sectors and the large-scale industries were the most involved.<sup>3</sup> The oil sector benefited from the pressure of urgent and growing needs. The United States and, to a lesser extent, the United Kingdom dominated economic and world politics, with the domination particularly obvious in financial matters because of the dollar gap. However, France benefited from some assets that allowed its integration into the world oil system: a) its presence in the heart of the Mesopotamian oil fields through its national company, Company Française des Pétroles (CFP); b) a rather high prewar level of industrialization, in the oil sector (large refineries) in particular; c) the experience of the oil companies, which had learned how to face competition and which had a technocratic tradition inherited from previous managers of the French oil industry; and d) the will of the state relayed by personalities like Pierre Guillaumat, head of the Direction des Carburants (DICA) beginning in 1944.<sup>4</sup>

Benefiting from these assets, how could France develop an oil industry able to compete internationally with the oil majors? To answer this question, we need to focus on two main issues. The first is the context that supported French efforts in this direction; the second concerns the factors that prepared the breakthrough of the French national company, CFP.

---

*Histoire économique mondiale: 1945-1990* (Bruxelles, 1990), chap. 1, "De la guerre à la reconstruction," 12-34.

<sup>2</sup> Maurice Lévy-Leboyer, *Le Plan Marshall et le relèvement économique de l'Europe* (Paris, 1991). Initially, the intent of massive American assistance was to accelerate the growth of European economies and to stop the electoral success of the Communist parties. See Hubert Bonin, *Histoire économique de la France depuis 1880* (Paris, 1988), 138-39.

<sup>3</sup> "Productivity Missions" were sent to the United States to import American methods and technologies, in particular in the construction industry and in some large-scale industries, one of which was oil; see Dominique Barjot, "Catching up with America: The Story of Productivity Missions in the French Publics-Works Industry after the Second World War," in *Catching up with America: Productivity Missions and the Diffusion of American Economic and Technological Influence after the Second World War*, ed. Dominique Barjot, (Paris, 2002), 359-85; Henri Morsel, "Les missions de productivité aux Etats-Unis de l'industrie française de l'aluminium," in "La reconstruction économique de l'Europe 1945-1953," *Histoire, économie et société*, ed. Dominique Barjot 2, (1999), 297-301.

<sup>4</sup> Mohamed Sassi, "Le rôle du technocrate: Ernest Mercier et la mise en place d'une industrie française entre les deux guerres," *Bulletin de l'IHTP 184* (Paris, 2004): 6-19; also available on the web: [www.ihtp.cnrs.fr/dossier\\_petrole/petrole\\_sassi.html](http://www.ihtp.cnrs.fr/dossier_petrole/petrole_sassi.html).

## A Context for the Oil Race: Toward the Diversification of Sources

### *The Strong Penetration of American Oil Companies within the World Oil Economy*

The “oil race” proved more competitive at the end of the war than it had been earlier. Jean Chardonnet devoted a chapter (entitled “The Race for Oil in the Allied Camp (1938-1944): The American Offensive”) to this question in his book *La course du pétrole* (“The Race for Oil”).<sup>5</sup> He particularly emphasized the impact of American policy on the world oil economy and, consequently, on the geopolitics of the Middle East.

By early 1944, the Allies knew they had won as far as energy was concerned. In fact, the process began in January 1942 when President Franklin Roosevelt launched the Victory Program.<sup>6</sup> The Anglo-American alliance gave new energy to oil activities in the Middle East.<sup>7</sup> As during the Second World War, the military events of the postwar period made obvious the important role of fuel in determining the economy and life of a country.<sup>8</sup> Moreover, to a greater degree than in the past, the Allies coveted large unexploited oil deposits, seeking to secure the most substantial share possible. Even during the war, they had been thinking about the postwar supply.

The United States was the first to enter this race.<sup>9</sup> In 1945, the United States produced two-thirds of world’s oil in its Texas, Oklahoma, Kansas, and California fields. They gradually monopolized the oil production of Central America, Curaçao, Aruba, and of Trinidad, where they paid for the deposits with some old abandoned destroyers.<sup>10</sup> And in April 1942 they militarily occupied Venezuela, the second or third largest oil producer in the world at the time.<sup>11</sup> Clearly, U.S. “oil imperialism” would not overlook the richest deposits in the world: those of the Middle East.<sup>12</sup> Benefiting

<sup>5</sup> Jean Chardonnet, *La course du pétrole* (Paris, 1945).

<sup>6</sup> For details of the procedures of this program, see in particular: “The Victory Program,” chap. 11, in *United States Army in World War II, The War Department, Chief of Staff: Prewar Plans and Preparations*, ed. Mark S. Watson (Washington, D.C., 1991), 331-67, also available on the web: <http://www.army.mil/cmh-pg/books/wwii/csppp/ch11.htm>, site created 12 Dec. 2002, visited 1 Jan. 2005.

<sup>7</sup> Jean-Baptiste Duroselle, *Histoire des relations internationales de 1919 à 1945* (Paris, 1974), 370.

<sup>8</sup> Maurice Lévêque, *Le pétrole et la guerre* (Paris, 1958).

<sup>9</sup> Robert Goralski and Russell W. Freeburg, *Oil and War: How the Deadly Struggle for Fuel in WWII Meant Victory or Defeat* (New-York, 1987).

<sup>10</sup> Chardonnet, *La course du pétrole*, 21.

<sup>11</sup> As an indication, 9% of world production in 1937 equalled 27,677,512 tons; Frédéric M. Bergounioux, *La France et le problème du pétrole* (Toulouse, 1941), 80.

<sup>12</sup> Chardonnet, *La course du pétrole*, 21.

from the support of federal authorities, the American oil companies concentrated their efforts in Saudi Arabia in 1947 within the Arabian American Oil Company (ARAMCO).<sup>13</sup>

By the end of 1943, the United States had created the Petroleum Reserves Corporation (PRC), whose goal, theoretically, was to acquire crude oil outside the United States to store and distribute.<sup>14</sup> In practice, the PRC represented American interests in all international negotiations relating to oil.<sup>15</sup> The United States used two means to secure its goals: sometimes they fought to acquire concessions; in other cases, they progressively took over significant parts of oil companies.<sup>16</sup> By such means, the United States thus obtained additional concessions in Egypt and the Persian Gulf.<sup>17</sup> The principal area of American expansion, however, was in Saudi Arabia, which contained the most extensive oil reserves.<sup>18</sup> A policy of “predatory finance”—a strategy of infiltrating the dollar into the host country’s administrative and economic activities—made access easier.<sup>19</sup>

The U.S. government announced on February 6, 1944, the construction of a 2000-meter pipeline linking the Persian Gulf (Ras-Tanura) coasts with the Mediterranean Sea. This disturbed Great Britain’s position in the area and, to use the more accurate recent terminology, profoundly

---

<sup>13</sup> See Henry Peyret, *La bataille des trusts* (Paris, 1954), 31; Standard Oil of California and Texaco (with a production facility in Saudi Arabia: Ghawar) decided in 1946 to reduce their participation from 50 to 30%. Standard Oil of New Jersey received an equal percentage; Socony was allowed the remaining 10% of the Group’s capital. ARAMCO was thus created. Archives of the Centre de Documentation et de Synthèse à Total [hereafter, Total Archives], “Le pétrole saoudien: Juin 1970,” ref. 89.16/42.

<sup>14</sup> *The Federal Register*, 2 July 1943, 9044.

<sup>15</sup> Anthony Sampson, *The Seven Sisters: The Great Oil Companies and the World They Made* (London, 1975), 96.

<sup>16</sup> Raymond F. Mikesell and Hollis B. Chenery, *Arabian Oil: America’s Stake in the Middle East* (Chapel Hill, N.C., 1949), chap. 7, “Middle East Oil and United States Foreign Policy,” 90-109.

<sup>17</sup> Total Archives, BIP no. 3806: Dossier no. 128, réf. 00AH001.

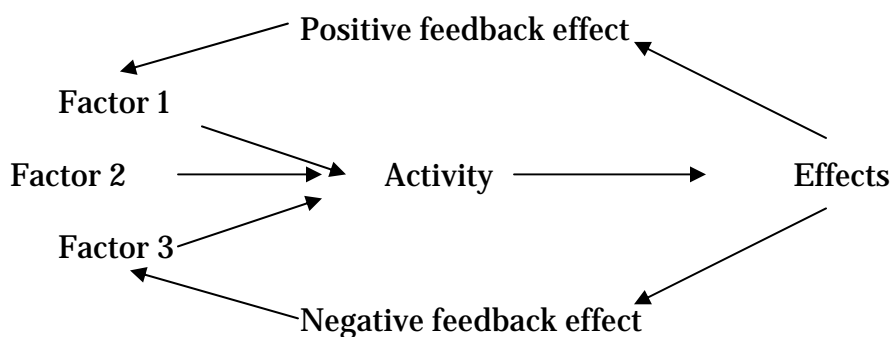
<sup>18</sup> Total Archives, “Le pétrole saoudien,” June 1970, ref. 89.16/42; “Monographie des pays du Moyen-Orient: La Péninsule arabique: L’Arabie Saoudite,” ref. 89.16/59.

<sup>19</sup> Edward N. Luttwak, *The Endangered American Dream: How to Stop the United States from becoming a Third World Country and How to Win the Geoeconomic Struggle for Industrial Supremacy* (New York, 1993). French version: *Le rêve américain en danger* (Paris, 1995), 399. The application of “Dollar Diplomacy” in Saudi Arabia continued until 1935: Total Archives, ref. 89.16/42. Dollar Diplomacy was applied for the first time in the United States from 1909 to 1913 by President William Howard Taft and his Secretary of State Philander C. Knox, See the U.S. Department of State website: <http://www.state.gov/r/pa/ho/time/gp/16324.htm>.

modified the “geo-economic” data for the whole region.<sup>20</sup> Militarily, the companies were committed to placing at the military’s disposal a permanent reserve of one billion barrels.<sup>21</sup> Economically, the pipelines of Arabia made it possible for Americans to utilize the economic position of the British-controlled Suez. However, that was not all.

Thanks to an unmistakable “positive feedback effect” (see Figure 1), the American companies pooled their efforts on a transport network and acquired a choice spot in the Middle East oil market.<sup>22</sup>

FIGURE 1  
The Feedback Effect System



The new American position triggered opposition between the British and American interests in the area. The British government realized the danger that an exclusive seizure of Saudi Arabia by the United States could have for the British oil trade and the country’s political predominance in the Middle East.<sup>23</sup> Thus, the US-UK competition opened the possibility of a new “world oil strategy,” a context that led France to accelerate its diplomatic efforts to take part in that race.

*The Reconquest of the Assets of the CFP in the Iraq Petroleum Company: Heads of Agreement of 1948*

The system of restrictions inside the Red Line imposed by the Group Agreement of 1928 seemed to have been exceeded by the end of the

<sup>20</sup> Edward N. Luttwak, “From Geopolitics to Geo-economics: Logics of Conflicts, Grammar of Commerce,” *The National Interest* (Summer 1990), cited in Pascal Lorot, “Géoéconomie, Nouvelle grammaire des réalités internationales,” <http://www.diplomatie.fr/cap/ressource/FD001147.pdf>.

<sup>21</sup> Chardonnet, *La course du pétrole*, 26.

<sup>22</sup> A comparative study showing the importance of feedback loops in the oil economy is presented in Mohamed Sassi, “Entre l’Etat et le marché, Desmarais Frères et la politique pétrolière de la France de 1861 à 1974: de l’entrée dans la CFP-Total” (Ph.D. diss., Paris, 2005), chap. 1.

<sup>23</sup> Irvine H. Anderson, *Aramco, the United States and Saudi Arabia: A Study of the Dynamics of Foreign Oil Policy, 1933-1950* (Princeton, N.J., 1981).

Second World War, as no concessions remained.<sup>24</sup> There was enough oil in the Middle East to meet the needs of each group, if they could find a formula for dividing up the area that meant all of their requirements.<sup>25</sup> Thus, other agreements, such as the Heads of Agreement signed in 1948, partly replaced the Group Agreement of 1928. From confrontation between the British and the French on the one hand and between the British and the Americans on the other, was born a “strategy of agreement.”<sup>26</sup>

That strategy saved the oil trusts from excessive competition, given the presence of sufficient deposits in the area. The new agreements made it possible to provide for the CFP’s needs at cost, rather than at the world price.<sup>27</sup> Saudi Arabia was removed from the territory delimited by the “Red Line.” All opposition to the American groups, who were part of the Iraqi Petroleum Company (IPC) and who joined ARAMCO, was abandoned.<sup>28</sup> Victor de Metz, the managing director of the CFP at that time, indicated his concern about the CFP’s ability to expand:

Beyond the litigious dispute, there was a continuation rather than a resolution of different objectives between the CFP and the other groups, those of the Americans in particular. They wanted freedom to take part to ARAMCO, and they had acted in consequence to benefit from its development, and undoubtedly also motivated by geopolitical concern. The French group wanted

---

<sup>24</sup> After long discussions, the creation of the Iraq Petroleum Company (or IPC) in 1928-29 marked the first official entrance of the American companies into the Middle East. The composition of the IPC was as follows: British Petroleum (23.75%), Royal Dutch-Shell (23.75%), Compagnie Française des Pétroles (23.75%), Near East Development Cy (23.75% shared by Standard Oil of New Jersey and Socony Mobil Oil), and Partex Gulbenkian (5%). See E. P. Fitzgerald, “Business Diplomacy: Walter Teagle, Jersey Standard, and Anglo-French Pipeline Conflict in the Middle East, 1930-1931,” *Business History Review* 67 (Summer 1993): 207-45; Mohamed Sassi, “The Emergence of a French Oil Industry between the Two Wars,” *Business and Economic History On-Line 2003*, URL: <http://www.thebhc.org/publications/BEHonline/2003/Sassi.pdf>. A year later, the same group of companies that created the IPC signed the Agreement. The perimeter circumscribed by the Red Line agreement corresponded roughly to the borders of the old Ottoman Empire. Saudi Arabia was included as well as Iraq, Syria, Lebanon, Palestine, Transjordan (later Jordan), the Emirates of the Persian Gulf (except Kuwait), and the isle of Bahrain where others had already exploited the oil.

<sup>25</sup> Total Archives, ref. 92AA091/73.

<sup>26</sup> See “Strategy of Agreement” in *Dictionnaire des théories et mécanismes économiques*, ed. Janine Bremond and Alain Geledan (Paris, 1984), 130.

<sup>27</sup> *Pétrole Informations*, no. 1309 (29 mars-4 avril 1974), 13.

<sup>28</sup> Total Archives, ref. 92AA091/73.

to avoid a paralysis of the IPC and to support, on the contrary, the continuation of its research and the expansion of its production.<sup>29</sup>

Subsequently, CFP essentially obtained satisfaction through the lifting of any obstacles to the development of the IPC.<sup>30</sup> With the new agreements, the majority no longer determined production; rather, the sum of the oil groups' individual needs was established each year. Each contributed in relation to the proportion of its holdings to the expenditure of capital required for the implementation of the whole program. However, the "least permanent" groups—that is, those claiming an oil tonnage lower than their holdings proportion of the total—collected compensation from the groups receiving more than their oil proportion.<sup>31</sup> The 1952 adoption by each group of a formula of benefits division between the company and the state, including payment of an income tax to Iraq, altered this agreement.

### **Widening and Diversification of Oil Sources**

The strong diplomatic mobilization initiated by the CFP and assisted by the French government became apparent after 1947. At that time, the efforts of the CFP were concentrated in the Middle East, especially on managing its interests within the IPC.<sup>32</sup> The ambition of the French government, however, turned to the development of the Algerian Sahara and West African oil fields.

#### *Expansion of Prospecting Efforts*

In 1947, the CFP had already taken part in the successful exploration work carried out in Iraq. A company in the IPC group, Basrah Petroleum Company, holder of a concession covering the southernmost part of Iraq, discovered the important Zubeir deposits in 1948. In 1949, the Qatar Petroleum Company began production.<sup>33</sup> To increase its sources of access in the Middle East and other parts of the world, the CFP widened its geographical field of activity after the Second World War, while also making an effort to strengthen its position in the world oil products market by:

a) participating with the IPC in carrying out exploration in the south of the Arabian peninsula, on the Indian Ocean, and in the states of Hadramaut and of Oman;

---

<sup>29</sup> Emmanuel Catta, *Victor de Metz, de la CFP au Groupe Total* (Paris, 1990), 86-87.

<sup>30</sup> *Ibid.*, 88.

<sup>31</sup> Total Archives, ref. 92AA091/73.

<sup>32</sup> Hervé L'Huillier, "La stratégie de la Compagnie Française des Pétroles durant la Seconde Guerre mondiale: sauvegarder l'essentiel," *Histoire, économie et société* 3 (1992): 463-78.

<sup>33</sup> "L'âge du pétrole, le groupe Total dans le monde du pétrole," *Entreprise*, supplément au no. 547 (3 March 1966), 1.

b) partnering with the Anglo Iranian Oil Company (AIOC, 66 percent; CFP, 33 percent) on research in the territorial waters of the state of Abu Dhabi on the Persian Gulf;

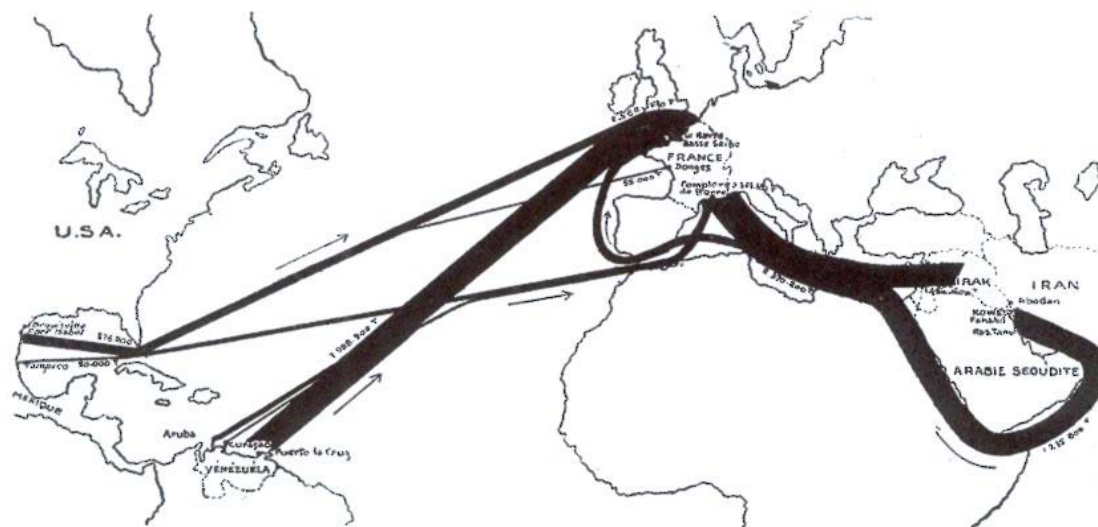


FIGURE 1  
Paths of Crude Oil Imports into France in 1947

Source: *L'étoile Bleue*, Oct. 1948, p. 5.

c) taking part in oil exploration in Canada, in particular in the provinces of Alberta and Saskatchewan, as well as in Venezuela;<sup>34</sup>

d) taking 6 percent of the capital of the “Iranian consortium” (in 1954).<sup>35</sup> That was the only foreign investment, apart from that of Iraq and Qatar, that ensured the French company new, immediate access to crude oil.

#### *Discoveries in the Colonies*

In its desire to diversify oil sources, CFP was not satisfied with the increasing share of crude oil coming from Iraq and Qatar. In particular,

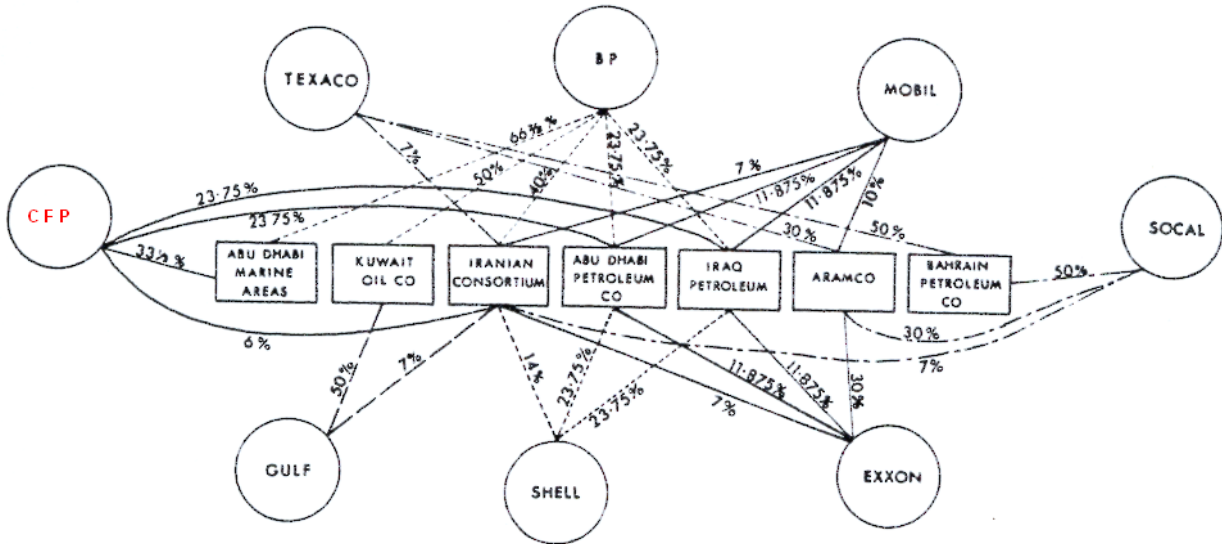
<sup>34</sup> Alain Perrodon, *Le pétrole à travers les ages* (Paris, 1989), 133.

<sup>35</sup> The “Iranian consortium” was formed at the end of the crisis of Iranian nationalization of 1951 to 1953 and the overthrow of the government of Mohammed Mossadegh in 1954. It gathered the principal American companies: Soconal, Exxon, Mobil, Gulf, Texaco, and Iricon (a group of seven American independent companies) with the British BP (British Petroleum) and Shell and the French CFP. Total Archives, *Les grandes dates pour l'OPEP et les appauvrissements pétroliers mondiaux au début de la décennie à la fin de 1978*, BIP no. 3806: dossier 128, réf. 00AH001; see also: Jacques De Launay and Jean Michel Charlier, *Histoire secrète du Pétrole* (Paris, 1985), 87-91.



CFP also joined an effort with the Bureau de Recherché des Pétroles (BRP), the office that dealt with oil research in North Africa.<sup>36</sup> Created and

FIGURE 2  
Financial Relations among the International Oil companies in the Middle East in 1954



Source: Multinational Hearing, Part 5, in Anthony Sampson, *The Seven Sisters: The Great Oil Companies and the World They Made* (London, 1975), 260.

controlled by the state, the BRP was instituted in 1945 to implement a national research program in the French colonies on the African continent.<sup>37</sup> Research began in 1946 following the creation of a five-year plan under the supervision of Pierre Guillaumat, director of the Fuels Administration and the board chair of the BRP from 1945 to 1951 and again from 1954 to 1959.<sup>38</sup> The geological and topographic maps of Gabon were already established by then, and the Société Nationale des Pétroles

<sup>36</sup> Alain Beltran and Sophie Chauveau, “Destins croisés: Aperçus de l’histoire du groupe Elf-Aquitaine et de la CFP-Total,” *Bulletin de l’IHTP*, 2d sem. (2004), 20-29.

<sup>37</sup> Rule of 12 Oct. 1945. The BRP had the role of coordinating research in France and overseas, of taking part in the financing, and working on acquisitions of holdings in the various companies formed for this purpose.

<sup>38</sup> Pierre Péan and Jean-Pierre Sérén, *Les émirs de la république: l’aventure du pétrole français* (Paris, 1982), 22.

d'Aquitaine (SNPA) had drilled 6,521 meters.<sup>39</sup> The prospecting zones covered 3.9 million hectares.

The BRP was also charged with creating a number of prospecting companies, in particular the Société Nationale de Recherches Pétrolières en Algérie (SN-Repal) in 1946, whose financial direction was given to Roger Goetze.<sup>40</sup> Exploration in the Algerian Sahara began at that time and the Société Nationale des Pétroles du Languedoc et de la Méditerranée (SNPLM), created in 1944, obtained a prospecting permit for 830,000 hectares in the Montpellier area.<sup>41</sup> In 1948, the CFP took part in a geological mission organized in the Sahara by SN-Repal, after which the two companies agreed to link their research efforts in the Algerian Sahara.<sup>42</sup> The same year, the BRP announced its first oil discoveries in Morocco (Mellah Wadi) and in Tunisia (Cap-Bon). In 1949, the SPAEF (Société pour la prospection en Afrique équatoriale française) was created to oversee operations in Gabon, Congo, and Cameroon. That year the estimate of the French recoverable reserves of the "Lacq Supérieur" was more than 2.5 million tons.<sup>43</sup>

In 1952, licenses covering 240,000 square kilometers were allotted to the CFP/BRP association. The CFP then founded a subsidiary company, the Compagnie Française des Pétroles-Algérie (CFP-A), to which it transmitted its mining licenses. By taking that Saharan risk, the CFP undoubtedly conformed to the directive of former president Raymond Poincaré to develop oil production under French control, but it also acted as a dynamic company, eager to be present everywhere that research indicated there was a chance of success.

Algerian oil became the major asset that made it possible for the CFP to become a large producer on a worldwide scale. Until 1952, the company extracted only 4.941 million tons. It was not until 1956, the year of the discovery of oil in Algeria (which also coincided with the Suez crisis), that CFP saw larger production. The Edjeleh and Hassi Messaoud layers, then Hassi R' Mel were all discovered during the same year.<sup>44</sup> The latter was brought in on a SN-Repal license (in common with CFP-Algérie). In fact, it produced "wet" gas (a gas containing hydrocarbons liquefiable by

---

<sup>39</sup> Total Archives: B. Serren "Chronologie du groupe Elf," Réseau d'information du groupe Elf Aquitaine, April 1981.

<sup>40</sup> Rabah Mahiout, *Le pétrole algérien* (Algiers, 1974), 110-14. See Nathalie Carré de Malberg, *Entretien avec Roger Goetze, haut fonctionnaire des Finances: Rivoli, Alger, Rivoli, 1937-1958* (Paris, 1997).

<sup>41</sup> Total Archives: Serren, "Chronologie du groupe Elf"; *Une grande industrie: le pétrole*, Brochure of the Union des Chambres Syndicales de l'Industrie du Pétrole, Dec. 1947.

<sup>42</sup> "L'Age du pétrole," *Entreprise*, 17-25.

<sup>43</sup> Jean Lartéguy, *La grande aventure de Lacq* (Paris, 1961), 89-90.

<sup>44</sup> Mahiout, *Le pétrole algérien*, 113; James Bamberg, *British Petroleum and Global Oil, 1950-1975: The Challenge of Nationalism* (Cambridge, U.K., 2000), chap. 3, "The Suez Crisis," 75-99; Beltran and Chauveau, "Destins croisés," 23.

condensation), not oil. Production, which reached 18.661 million tons in 1960, increased to 34 million tons by 1965. In fact, the CFP controlled 6 percent of the whole Middle East production, and 25 percent of that of “independent” Algeria.<sup>45</sup>

In the Middle East and North Africa, the oil business became increasingly political. Thus, the apparatus installed by Pierre Guillaumat obtained a double purpose: technical and political.<sup>46</sup> Benefiting from the support of the Corps de Mines, his main role was to launch a program to finally make the French oil industry independent.<sup>47</sup> The state intervention used tools to push the oil industry toward greater concentration.<sup>48</sup>

### French Oil Development Measures

France’s favorable diplomatic position offered it a great opportunity to strengthen its oil industry. It made it possible to take long-term strategic development measures. For the government, actions were mainly justified by the need to acquire as much “autonomy of decision” as far as external finance was concerned as possible.<sup>49</sup> The French government’s objectives were to install a system of payment in francs and to enhance development efforts to acquire the best oil technology of the time. By combining those two strategies, the French decision makers tried to accelerate the development of the oil industry. Those measures may be the major reasons for the takeoff of the French oil industry. One also should bear in mind that long-term investment policies are, by nature, generators of technological progress.

#### *The Francs-Pétrole Agreements*

One process used to reduce the exchange costs imposed on the French balance of payments by the procurement of oil products from the American companies installed in the Middle East was to negotiate agreements to pay in francs for part of the crude oil they delivered to

---

<sup>45</sup> “L’age du pétrole,” *Entreprise*, 17-25.

<sup>46</sup> Georges-Henri Soutou and Alain Beltran, eds., *Pierre Guillaumat, la passion des grands projets industriels* (Paris, 1995).

<sup>47</sup> Jérôme Lecanu, “Entre innovation et tradition, la conversion des Ingénieurs du Corps des Mines au pétrole,” 175-89, and Christian Stoffaës, “L’obsession historique de la dépendance énergétique: données économiques,” 51-67, both in *Pierre Guillaumat, la passion des grands projets industriels*, ed. Soutou and Beltran.

<sup>48</sup> Hervé l’Huillier, “L’Etat au service de l’industrie française de 1945 à 1972: Des fondamentaux de l’Etat aux fondamentaux de l’Industrie,” in *Pierre Guillaumat, la passion des grands projets industriels*, ed. Soutou and Beltran, 85-96.

<sup>49</sup> Bonin, *Histoire économique de la IV<sup>e</sup> République . . .*, 264.

France.<sup>50</sup> Such agreements had already been negotiated by certain foreign governments, in particular those of Britain and Holland.<sup>51</sup> Those operations were part of a monetary stabilization plan aimed at enhancing exports.<sup>52</sup>

Beginning in early 1950, External Finances undertook talks with the American companies. During the same year, the French Finance Minister exchanged letters with the president of each company.<sup>53</sup> That correspondence constituted the first agreements known as “franc-pétrole.” The agreements were renewed thereafter, either by new exchanges of letters or by a tacit agreement.

In fact, such agreements applied only to the American companies that delivered Middle Eastern crude oil to France: California-Texas Oil Company, Esso Export Corporation, Gulf, Socony Vacuum Oil Company, Arabian American Oil Company (ARAMCO), and, after 1954, the Atlantic Refining Company and the American Independent Oil Company.<sup>54</sup> There were almost no agreements of this type with companies that delivered crude oil to France payable in British pounds.

These agreements determined both the percentage of crude oil deliveries paid for in francs, and how the francs paid to the companies were used. Each agreement specified a fixed percentage of payment in francs, averaging 25 percent. Later, this percentage was gradually adjusted, either by modification of the terms of the initial agreement or by tacit agreement between the companies and the ministry; it reached 40 percent in 1954.

The definition of transactions in *francs-pétrole*, that is, “francs for oil,” constituted the most important and more delicate part of the agreements. Indeed, in any system in which payment in francs replaced payment in strong currencies, the essential difficulty was to ensure that the economy in currencies realized (thanks to these payments in francs) would not be compensated by a loss of earnings in those currencies. Precautions therefore had to be taken so that the amount in francs would be limited to an amount roughly corresponding to their potential use, and also that the investments and exports financed by those francs were exclusively

---

<sup>50</sup>André de Lattre, *Servir aux finances* (Paris, 1999), 94-95. See also: Solenne Lepage, “La direction des finances extérieures de 1946 à 1953: Les années fondatrices ou le magistère de Guillaume Guindeguy” (Ph.D. diss., Paris, 1996).

<sup>51</sup> See André de Lattre, *Politique économique de la France depuis 1945* (Paris, 1966).

<sup>52</sup> Michel Margairaz, *L'Etat, les finances et l'économie, histoire d'une conversion, 1932-1952* (Paris, 1991), 1054.

<sup>53</sup> CDS à Total, ref. 80.3/117.

<sup>54</sup> Pierre Desprairies and Lucien Coucoureux, “Le coût en devises de l'Approvisionnement pétrolier français,” Rapport au Conseil Supérieur du Pétrole, Dec. 1955.

operations giving an “additional” advantage, one that would not have existed if such a system had not been instituted.

### *Acceleration of Technical Development*

The role of technicians is to transform production conditions. During the postwar period, the development of technical expertise led to growth in exploration, refining, and transport for the French oil industry. As was true before 1940, it was necessary to reorganize the technicians' efforts. Doing so played a decisive role in the acceleration of discoveries, extension of production, and the development of refining and distribution activities. Yet, beginning in 1948 in the Middle East, the CFP was not satisfied with its former role as a financial and commercial partner: it placed its own engineers on the various technical committees.<sup>55</sup> The intervention of the state was certainly more obvious in that field, often accompanied by technical specifications that were sometimes very constraining.<sup>56</sup> Counting on the experience of its engineers in the Middle East (those of the CFP in particular), France constantly tried to consolidate its assets.

Efforts to put technical teaching in place, initiated during the interwar period, were accelerated after the end of the Second World War. France had a large training center (the first of its kind) beginning in 1950.<sup>57</sup> It trained oil industry specialists under the direction of the Institut Français du Pétrole (IFP), which contained an application school, the Ecole Nationale Supérieure du Pétrole et des Moteurs (a higher national school for oil and engines).<sup>58</sup> It trained engineers in four specialized fields: a) geological and geophysical prospecting; b) drilling and exploitation of oil layers; c) refining, chemical engineering, and scientific research; and d) engines and applications to oil derivatives.<sup>59</sup>

In addition, advances in knowledge were gained through the reports of the productivity missions organized in the United States under the framework of the Marshall Plan.<sup>60</sup> Techniques, both existing and those discovered by French engineers, were applied immediately. Thus, in the development of vast oil investment programs, engineers were involved in a variety of activities.

---

<sup>55</sup> Emmanuel Catta, *Victor de Metz, de la CFP au Groupe Total* (Paris, 1990), 145.

<sup>56</sup> L'Huillier, “L'Etat au service de l'industrie pétrolière,” 85-93.

<sup>57</sup> See Jacques Guillerme, *Pétrole, année 100* (Paris, 1959), 120.

<sup>58</sup> The French state founded the IFP in 1944. Its mission was research, training, and documentation; see Jacqueline Lecourtier, “Les actions de l'IFP depuis sa création et stratégie actuelle,” Séminaire organisé par le CHEFF dans le cadre de séminaires *Etat-Energie*, 14 Dec. 2004.

<sup>59</sup> Guillerme, *Pétrole, année 100*, 120.

<sup>60</sup> Henri Morsel, “Les missions de productivité et le modèle américain,” *Entreprises et Histoire* 19 (1998): 165-67; see also, Barjot, “Catching up with America,” 359-85.

As for upstream activity, the improvement of transport, in particular the use of the Jeep and the development of specially adapted tires, made exploration and drilling possible even in the heart of desert.<sup>61</sup> Photogeology methods proved effective in locating structural anomalies on a vast scale. Seismic refraction made great progress, thanks in particular to the Compagnie Générale de Géophysique (CGG); for example, in 1960, the CGG developed a technique for tape recording seismic explosions.

Geological data, which totally differ between the north and south of the Algerian Sahara, imposed particular exploration methods.<sup>62</sup> The CGG became one of the world leaders in integrated supplies for geophysical services and equipment. It provided acquisition services in both terrestrial and offshore seismic data, and in seismic and layer-studies data processing.<sup>63</sup> Similarly, the oil Institute, IFP, brought to oil companies its invaluable laboratories collaboration for studying and synthesizing exploration data.

In the production field, we can also note the technicians' positive contributions: composition of drilling muds, deviation methods, electrical bore-hole prospecting, diagraphics by induction, diamond drilling—these represent many fields in which useful inventions improved possibilities of action. The gradual solution of difficult problems arising from offshore drilling opened up greater opportunities for exploration. Since 1948, the CFP and the Régie autonome des pétroles (RAP) had possessed great-depth drilling machines in Algeria, such as rotary drills that could drill to depths of more than 3,000 meters.<sup>64</sup> In addition, geophysicists began working in Algeria in 1949.<sup>65</sup>

Thanks to new methods and instruments, oil research began to produce very satisfactory results beginning in the early 1950s. The volume of the world's proven reserves quintupled from 1950 to 1963. The French share in those discoveries kept increasing in France and in Algeria, as described by the *Association Française des Techniciens du Pétrole* in 1959.<sup>66</sup> The assessment of BRP assets revealed sixty-seven discoveries (forty-six of oil) over ten years. The *Association* quantified the reserves at

---

<sup>61</sup> Edward Wald, *Le pétrole dans le monde, ses hommes et ses techniques* (Paris, 1960), 67-72.

<sup>62</sup> Alain Perrodon, *Le pétrole à travers les ages* (Paris, 1989), 167-69.

<sup>63</sup> See "Dossier sur la Compagnie Générale de Géophysique," *Les Echos*, 7 Oct. 2004, on the Web: [http://www.lesechos.fr/compagnie\\_generale\\_de\\_geophysique.htm](http://www.lesechos.fr/compagnie_generale_de_geophysique.htm).

<sup>64</sup> The rotary drill (or drilling) method consists in attacking the rocks by means of trepans which one makes turn on their axis. A mud current continuously evacuates the rock remains.

<sup>65</sup> Total Archives, Serren, "Chronologie du groupe Elf."

<sup>66</sup> Association Française des Techniciens du Pétrole, "Aperçu sur les principales découvertes de ces dix dernières années," *Bulletin de l'A.F.T.P.* 134 (31 March 1959).

the end of 1958 as containing 500 million tons of oil and more than 1,000 billion cubic meters of gas.<sup>67</sup>

### Conclusion

The years from 1945 to 1956 were a key period for understanding today's French energy industry. The period corresponds to an accelerated rebuilding of the French oil industry through the acquisition of additional oil interests in the Middle East, particularly in colonized Algeria. This was a period of massive investment. The "productive" investments were, for the most part, commercial ones, but in 1954, they included the 10 percent per barrel that went to British Petroleum (BP) for the acquisition of 6 percent of the Iranian Consortium. The investments categorized as "un-productive" were mostly exploration investments other than those within the IPC.<sup>68</sup> These included the first exploration expenditures in Algeria in 1954. Also, note that the rebuilding of the *Compagnie Française du Raffinage* (CFR) refineries after the Second World War, as well as the expansion of their capacity, was accomplished without the help of the CFR and its shareholders.<sup>69</sup>

Thanks to the "catch-up" role supported by the French state and its diversification efforts, the CFP became the top European oil group as far as speed of growth was concerned.<sup>70</sup> "Oil was produced in the French refineries and whoever put capital into building pumps could distribute gasoline . . .," testified Jean Blancard, one of the architects of French oil policy during that time.<sup>71</sup> That period also emphasized the very rapid pace of growth of that industry. Indeed, the development touched the upstream more strongly than the downstream. As the CFP gained ground on the production level, it began to orient its strategic objectives toward the international markets.

---

<sup>67</sup> Ibid., 3-10.

<sup>68</sup> Total Archives, ref. 82.5/16.

<sup>69</sup> Compagnie Française du Raffinage, a subsidiary of the CFP created in 1929. See Mohamed Sassi, "Evolution of the Structure of the French Oil Economy Between the Wars: Towards a French Holding Company," *Business and Economic History On-line*, 2004, <http://www.thebhc.org/publications/BEHonline/2004/Sassi.pdf>; Total Archives, ref. 86.12/5.

<sup>70</sup> See "Compagnie Française des Pétroles: Continent's Foremost and Fastest-Growing Oil Group," *Financial Times* (16 Jan. 1963).

<sup>71</sup> Interview of Jean Blancard by Patricia Bas, entretien no. 1, cassette 1, CHEFF, 27 Feb. 2003.