

2 The relationship of domestic energy decisions in Iran's international context

The assumption of the elimination of power from politics could only result from a wholly uncritical attitude towards political problems.
~ E.H. Carr, *The Twenty Years' Crisis*, 1939.⁶⁴

The historical evolution of the Iranian energy sector clearly illustrates how important its role has been in economic and political developments within domestic and foreign policy. Countries such as Great Britain, the United States and Russia have been aware of the geopolitically crucial role Iran plays and have shaped their foreign policies accordingly in the 20th Century.

Historically, Great Britain's interest in Iran was driven by its concern about potential uprisings in India. Based on a concession acquired from Iran in 1857, Great Britain was able to build a telegraph line to their command posts in India to ensure better communication for their strategic decisions.⁶⁵ Even earlier in the 15th and 16th Centuries, concessions were also sold to Great Britain. However, none of these specifically included petroleum or natural gas, since these were not yet relevant to world trade. In 1901, Muzzaffar al-Din Shah sold his first petroleum concessions to a businessman, Knox d'Arcy.^{66, 67} The discovery of oil reserves in Masdjed-e Soleyman in 1908 initiated the long road of resource exploration and control in Iran – Muzzaffar al-Din Shah “shaped all of subsequent

64 Edward Hallet Carr, *The Twenty Years' Crisis* (New York: Perennial, 1939), p.105.

65 Stephen Kinzer, *All the Shah's Men* (Hoboken: John Wiley & Sons, Inc., 2008), p.31.

66 Bernard Hourcade, *Géopolitique de l'Iran* (Paris: Arnaud Colin, 2010), p.88.

67 The concession granted the “special and exclusive privilege to obtain, exploit, develop, render suitable for trade, carry away and sell natural gas [and] petroleum...for a term of sixty years” (Kinzer, *All the Shah's Men*, 2008, p.33).

Iranian history".⁶⁸ The oil reserves fostered a new geopolitical⁶⁹ importance for the country throughout the 20th and also the 21st Century.

Naturally, the discovery of petroleum increased Great Britain's interest in Iran. In return, Iran was eager to increase its cooperation in order to facilitate greater revenues. The result of the desire for increased cooperation was the creation of the Anglo-Persian Oil Company (APOC) in April 1909.⁷⁰ But only in 1932-1933 did Iran truly integrate crude oil into its development policies by ending the existing concession to APOC.⁷¹ In 1933, the two governments signed a revised 60-year agreement with the following conditions:

Great Britain was obliged to make a flat payment of four shillings per barrel produced with a guaranteed minimum annual payment of £750,000;

- APOC was to pay 4% tax to Iran with a guaranteed annual minimum of £230,000;
- APOC moved Iranian employees into managerial and technical positions;
- APOC paid the Iranian government £1 million as a settlement for all past claims.⁷²

This denied Iran almost any control over its oil exports. With this in mind, Mohammad Mossadegh's pursuit of the nationalization of Iranian resources in 1951 can better be historically understood. The efforts in the 1950s to regain control over national resources resulted in the government's demand that foreign companies leave the Iranian energy sector and all of its activities to the Iranian government. However, after the government coup in 1953, nationalization plans were quickly revised and a shared control between the National Iranian Oil Company (NIOC) and an international consortium emerged (British Petroleum, Gulf, Mobil, Standard California, Standard New Jersey, Texaco, Iricon, Shell).⁷³ Along with the agreement on the international consortium, the government also signed a 20-year concession agreement with the consortium.

68 Kinzer, *All the Shah's Men*, p.33.

69 For the purpose of this paper, Grygiel's definition of geopolitics will be applied: "Geopolitics is the human factor within geography, the geographic distribution of centers of resources, lines of communication and assigning value to locations according to their strategic importance." (Jakub J. Grygiel, *Great Powers and Geopolitical Change* (Baltimore: Johns Hopkins University Press, 2006), p.21))

70 Mohammad-Reza Djalili, *Géopolitique de l'Iran* (Paris: Editions Complexes, 2005), p.23.

71 Bernard Hourcade, *Géopolitique de l'Iran*, p.88.

72 John W. Limbert, *Negotiating with Iran: Wrestling the Ghosts of History* (Washington D.C.: United States Institute of Peace Press, 2009), p.61.

73 Bernard Hourcade, *Géopolitique de l'Iran*, p.89.

Following the Iranian revolution in 1979, international oil agreements were discontinued and a period of nationalization began. Oil exports, specifically their potential revenue, were at the heart of Iran's reconstruction period. Only a decade later, in the 2000s, the government pursued domestic industrialization more seriously. In addition to industrial diversification, significant changes within the energy sector occurred. Most importantly, in 1990, natural gas was introduced in domestic consumption, decreasing domestic oil consumption. For a long period of time, these two fossil fuel resources have been the backbone of Iran's energy policy and only permit the introduction of renewable energy sources with difficulty.

Amongst these renewable energies, hydropower has seen the strongest growth. Fossil fuel consumption levels in 2011 were highest in the residential/public services/agriculture sector (referred to as "other" in the IEA report), a third more than the transport sector and almost twice as much as industry consumption levels.⁷⁴ Within the energy sector, electricity plays a strategic role, both domestically and regionally. Not only is 10% (2011) of the final energy consumption in the country electricity, but almost 70% of electricity is produced with natural gas and more than 20% with oil products. Changes in consumption behavior and the energy mix can therefore be a significant lever in shaping export values and potentially revenues.

The dominant role of the Iranian energy sector, both in its internal politics and foreign policies, requires a flexible theoretical approach that can underline domestic and international pressures and interests. In the following sections, I will identify this balancing act between domestic policy interests and international pressures in order to prepare the ground for a comprehensive analysis of how energy policies in Iran between 1990 and 2011 shaped the use of renewable energies in the electricity sector. Furthermore, I will look at how they have been used strategically to further foreign policy objectives. To this end, this chapter will first outline some theoretical assumptions on a conceptual level and will then explain how they are embedded in and applicable to the case of Iran.

74 International Energy Agency (IEA), *Energy Statistics of non-OECD Countries* (Paris: International Energy Agency, 2013), p.215.

2.1 The dominance of state interests in state interplay: An intertwined theoretical framework

Georg Wilhelm Friedrich Hegel described the Persian Empire as an agglomeration of independent states, where a level of interdependence is maintained between the states, but where individuality is guaranteed by their customs and own legal systems.⁷⁵ Each province was ruled by a governor who frequently exchanged reports with the central power.⁷⁶ Additionally, “the king’s eye” made annual inspections of each province to ensure that they were in line with the central power’s orders.⁷⁷ Although differences between the nations were fundamental to the organization of the empire “state building” obliged a sense of common duty. Each province was therefore required to provide the best of its products to the common army and with the declaration of war all the provinces were commanded to provide their best soldiers to the monarch.⁷⁸ Despotism was the backbone of this monarchy as only one man – the monarch – was truly free and was served by the people of the Empire.

During the Middle Ages the Safavid dynasty revived the former Persian Empire after numerous wars⁷⁹, creating what is often seen as the first stages of the modern Iranian nation-state under Shah Abbas I and II (16th Century). During this period commercial trade with East India (Dutch and British provinces) was expanded and the country sought to defend its territorial integrity following Machiavelli notion that a prince’s (or state leader’s) role is to seek power and expand his territory.⁸⁰ Meanwhile, the lack of strong governance and direction within the country by the later Safavid rulers led – among other reasons, including the invasion of Persian territory by Russia – to the end of the dynasty by 1666. Although the dynasty was reinstated, it had become domestically and nationally too weak, allowing Nader Shah to claim the throne after his success in negotiating Russian withdrawal. His reign was short-lived after his assassination in 1779. The resulting internal chaos and war with the following Qajar dynasty led once again to a change of rule. The Qajar dynasty relied heavily on leaders in their provinces to

75 Georg Friedrich Wilhelm Hegel, *Vorlesungen über die Philosophie der Geschichte* (Berlin: Dunder und Humblot, 1848), p.229.

76 A.T. Olmstead, *History of the Persian Empire* (Chicago: The University of Chicago Press, 1959), p.59.

77 *ibid.*

78 Georg Friedrich Wilhelm Hegel, *Vorlesungen über die Philosophie der Geschichte*, p.230-231.

79 This included wars with the Uzbeks and Azeris.

80 Niccolo Machiavelli, *The Prince* (New York; Signet Classic, 1999), p.33.

govern, as their power was often limited to the capital.^{81, 82} Loss of territory and greater European influences in the region, combined with daunting economic and demographic hardships (e.g. The Great Persian famine in 1870), ruined trust in the Qajar dynasty's ability to govern. In 1906, this discontent was manifested in the constitutional revolution that for the first time established a parliament to limit the powers of the Shah. This system essentially lasted until 1925 when the Qajar dynasty dissolved and Reza Shah Pahlavi claimed the throne.

While the history of the Persian Empire and the creation of the modern Iranian nation-state are not the subject of this dissertation, they do hold importance when considering the process of state-building, territorial integrity, state expansion and preservation. The ecstasy following the discovery of oil in 1908 was overshadowed by concerns with respect to investments in a transportation network necessary to reach the market, the construction of a refinery and a loading site for ships. The daunting costs were only one of the British concerns in Iran, as the political environment proved to be difficult.⁸³ Negotiating for the necessary infrastructure was complicated by a weakened central political authority and competing provincial leaders, each contending for supremacy, along with various Russian and British interventions in national affairs.⁸⁴ This internal difficulty coincided with the British-Russian *détente* in Central Asia over Iran, Afghanistan and Tibet. While Russia had advanced in Central Asia since the last decades of the 19th Century, it was directly competing with British interests in Asia. In order to avoid open conflict, the two parties signed the Anglo-Russian Convention (1907), dividing Iran into 'spheres of influence', with a Russian zone in the north, a British zone in the south-east and a neutral zone in between.⁸⁵ With respect to Britain's energy security, First Lord of the Admiralty, Winston Churchill, presented a memorandum on "Oil Fuel Supply for His Majesty's Navy" to the Cabinet, advising the government to "acquire a controlling interest in trustworthy sources of supply".^{86, 87} Iran was increasingly of strategic importance in security, political and economic issues.

81 Ervand Abrahamian, *A History of Modern Iran* (Cambridge: Cambridge University Press, 2008), pp.8-9.

82 This account of the history of the Persian Empire and of the modern Iranian nation-state is by no means exhaustive and only serves to highlight the process of nation-building in Iran.

83 Ronald W. Ferrier, *The History of the British Petroleum Company*, Vol. 1: *The Developing Years, 1901-1932* (Cambridge: Cambridge University Press, 1982), p.115.

84 *ibid.*

85 Stephen Kinzer, *Reset* (New York: Henry Holt and Company, LLC, 2010), p.20.

86 Ronald W. Ferrier, *The History of the British Petroleum Company*, Vol. 1: *The Developing Years, 1901-1932*, pp.181-182.

87 *Encyclopaedia Iranica*, 'Oil Agreements in Iran' <<http://www.iranicaonline.org/articles/oil-agreements-in-iran>> [accessed May 13 2013].

After the First World War (1914-1918), renewed international debates were stirred in an effort to explain the occurrence of war between nation-states. What was termed 'international relations theory' – "the study of the relations of states, and that those relations are understood primarily in diplomatic, military and strategic terms" – gained in importance.⁸⁸ Although Iran was officially a neutral zone during World War I, the country was invaded by British, Russian and Turkish troops. Tribal uprising in the south and rebellions in the north suggested internal chaos in the country while the central government was growing weaker.⁸⁹ Against the backdrop of these developments, the Iranian government sought to re-negotiate its agreement with Great Britain to improve its earnings from the oil sector. Furthermore, the destruction of oil pipelines during the First World War placed additional costs of reconstruction on the Iranian government that it was unwilling to pay. The Armitage-Smith Agreement (1920) sought to settle previous disputes and renegotiated profit-sharing.⁹⁰ The British desire to expand its concessions and protect its influence in Iran – and Iran's desire to negotiate better, less-intrusive terms – was the subject of many agreements that will be discussed in the next section, most notably the 1933 agreement. Domestic interests and internationally contentious behavior were part of the larger international debate on state behavior.

The outbreak of the Second World War (1939-1945) whirled up two grand debates in international relations seeking to describe state behavior and states' objectives within the international system: idealism versus realism. Classical realism emerged as a critique to liberal internationalism (i.e. idealism) that had prevailed since the end of World War I. Like liberal internationalism, classical realism described a general approach to international politics but with fundamentally different assumptions about the state of nature. As one of the principal initiators of the grand debate, E.H. Carr described the critique as follows:

Utopian writers from the English-speaking countries seriously believed that the establishment of the League of Nations meant the elimination of power from international relations, and the substitution of discussion for armies and navies. 'Power politics' were regarded as a mark of the bad old times, and became a term of abuse. That this belief should have persisted for more than ten years was due to the circumstances that the Great Powers whose main interest was the

88 Chris Brown and Kirsten Ainley, *Understanding International Relations* (London: Palgrave Macmillan, 2009), p.3.

89 *Encyclopaedia Iranica*, 'Oil Agreements in Iran'.

90 Disagreements focused on the company's calculation of 16% of its net profits that formed the basis of the annual payment to the Iran government. The different calculations of profit, however, led to a difference of opinion. (*Encyclopaedia Iranica*, 2013).

preservation of the status quo enjoyed throughout that time a virtual monopoly of power....What was commonly called the 'return to power politics' in 1931 was, in fact, the termination of the monopoly of power enjoyed by the status quo Powers."⁹¹

Not only in Europe but also in the United States did leading academics in international politics question the very basis of the idealistically drawn world after the First World War. Hans Morgenthau proposed in his book *Politics among Nations* (1939) six principles that determined political realism. At the center of his definitions lies the relationship between national interest and power, or as he explained: "We assume that statesmen think and act in terms of interest defined as power, and the evidence of history bears that assumption out".⁹² Within his framework, the meaning of power, however, is not necessarily fixed to military power, but can be expanded depending on the particular period and the context.⁹³ Power in general, however, is the "man's control over the minds and actions of other men".⁹⁴ Political power is more specifically characterized "as mutual relations of control among the holders of public authority and between the latter and the people at large".⁹⁵ Important to this state-centered analysis is the struggle for power, which he claims is "always the immediate aim".⁹⁶ Particularly regarding the immediate aim of states and the role of moral values in politics, the realist school of thought has undergone different interpretations and modifications. Gilpin, for example, stated that not all realists reject moral values per se, instead they stress that these goals are secondary to the attainment of power in an international state of anarchy.⁹⁷ The different strands of the realist school of thought share, however, several distinct characteristics that have been outlined and summarized by Lynn-Jones and Miller:

- States are the most important actors in international politics;
- The absence of any common sovereign in the international community leads to anarchy. And because there is no central authority, states seek to maximize their power or their security;
- States adopt rational policies that aim to achieve power and/or security;

91 Edward Hallet Carr, *The Twenty Years' Crisis 1919-1939* (New York: Perennial, 1939), p.103.

92 Hans J. Morgenthau, *Politics among Nations: The Struggle for Power and Peace* (Boston: McGraw Hill, 1948), p.5.

93 *ibid.*, p.11.

94 *ibid.*, p.30.

95 *ibid.*

96 *ibid.*, p.29.

97 Robert Gilpin, 'The Richness of the Tradition of Political Realism', in *International Organization*, 38:2 (1984), 287-304 (pp.290-291).

- The distribution of power among states is the most important cause of the basic patterns of international politics and foreign policy.⁹⁸

The Iranian government's decisions mirrored this return to national power. As the discussion of the history of Iran's energy sector will demonstrate, recognition within the country on the potential power to be held by the oil sector contributed to a brief return – both economic and political – to nationalization in the 1950s.

The Cold War system, reaching its height from the 1960s onwards, motivated changes to the basic assumptions of classical realism, leading to the development of a neo-realist perspective on international relations. In brief, neo-realism differs from classical realism in two essential points. Firstly, classical realism assumes that international conflict originates from the core of human nature, while neo-realists see the root of international conflict in the anarchic state of the international system. The unequal distribution of power in this system forces structural challenges upon each state.⁹⁹ For example, a state's lack of fossil fuels creates dependencies on fossil fuel-rich countries (and *vice versa*). Secondly, within this international system, classical realists believe that regardless of a state's domestic structure, it is able to shape its interests and motivations in the international environment, while neo-realists assume that the state is a 'passive bearer' of the international political structure and does not necessarily have much of a choice in this structure.^{100, 101} Neo-realism has most prominently been described by Kenneth Waltz in his book *Theory of International Politics* (1979). The perspective taken rejects essentialist concepts such as "human nature" introduced by classical realists, and focuses on a systemic approach to the analysis of state behavior in the international system's structure.¹⁰²

98 Sean M. Lynn-Jones and Steven E. Miller, 'Introduction', in *The Perils of Anarchy: Contemporary Realism and International Security*, ed. Michael E. Brown et al. (Cambridge: MIT Press, 1995), pp.ix-xxi (p.x).

99 Robert Gilpin, *Global Political Economy: Understanding the International Economic Order* (Princeton: Princeton University Press, 2001), pp.10-17.

100 John M. Hobson, *The State and International Relations* (Cambridge: Cambridge University Press, 2000), p.17.

101 Many more granular differences have been discussed by scholars and are important in any theoretical work on international relations theory. For the purposes of this paper, however, a broad discussion of the evolution of international relations theory within the realist school of thought will suffice.

102 This approach certainly also involves its own 'essentialist' assumptions about what the preferences/interests of states are, even if it doesn't attempt to justify them in an account of "human nature".

Born out of the experiences of the Cold War bipolar system and heavily influenced by neoclassical economic theories, Waltz suggested a system-level analysis in which states, just like firms on a market level, were pressed by the structure of the international system.¹⁰³ His goal was to develop an approach that predicted international state behavior based on patterns in the international system and as such is a testable and viable approach to international relations.¹⁰⁴ In the absence of a world sovereign, anarchy rules the international system and states strive to survive. Two threats are crystallized in this system: firstly, the state is concerned with the potential advantages of the system for some states over others, and secondly, the state is concerned with the increased dependence on other states as trade flows increase.¹⁰⁵ This describes the West's concern over its increased dependence on Iran's energy sector while it was less and less able to control the government's decisions.

These threats have been further developed by offensive realism, a sub-trend of the realist school of thought and most closely associated with structural realists. As explained by John Mearsheimer, the anarchic international system encourages aggressive behavior and opportunistic expansion by states in a system marked by little security.¹⁰⁶ Within this system each state seeks to maximize its power (relative to other states) to attain hegemony.¹⁰⁷ The increase of power is at the expense of other states and therefore promotes a competition in the international system for the status as a Great Power. Since no state in a multi-polar system is likely to become a hegemon, "the world is condemned to perpetual great-power competition".¹⁰⁸ According to Waltz, this will naturally lead to a balance of power in the international system and leaves two choices for state behavior: 1) states strengthen their internal capabilities (i.e. economic, military growth etc.); and/or 2) states seek an external strategy in which they enter into alliances or co-operations with other more powerful states to neutralize a

103 Kenneth N. Waltz, *Theory of International Politics* (New York: Random House, 1979), pp.73-74.

104 Steven Forde, 'International Realism and the Science of Politics: Thucydides, Machiavelli, and Neorealism', in *International Studies Quarterly*, 39:2 (1995), 141-160 (p.142).

105 Kenneth N. Waltz, *Theory of International Politics*, p.106.

106 Sean M. Lynn-Jones and Steven E. Miller, 'Introduction', p.xi.

107 Peter Toft, 'John J. Mearsheimer: An offensive realist between geopolitics and power', in *Journal of International Relations and Development*, 8:4 (2005), 381-408 (p.385).

108 John J. Mearsheimer, *The Tragedy of Great Power Politics* (New York: W W Norton & Co, 2003), p.2.

threat.¹⁰⁹ The relative gains, as well as concerns about underhand state action, challenge the durability and extent of cooperation internationally.¹¹⁰

Nonetheless, following the end of the Cold War and the new global challenges of the 1990s, the systemic analysis that neo-realists offered was no longer able to explain the behavior of states in a multi-polar world where states' internal political decisions could not be ignored. In the case of Iran, the decade of the 1980s, following the Iranian Revolution, crucially changed policy decisions at its root. Marked by the Iran–Iraq War, Iran's alliances and positions in the international system also substantially changed its foreign policy path. Traditionally, domestic decisions have been largely disregarded and have fallen short in capturing the sum of the policy processes on the domestic level that influences decision-making. As William Wohlforth argued in his article on contemporary realism, the basic dilemma of much of international relations theory is “the relative weight to internal versus international factors when they continually influence one another”.¹¹¹ The neglect of domestic systemic pressures on international state behavior, decision-making processes and actors led to an often curtailed perception of international relations theories. Some international relations theorists have argue in response that theories “must deal with the coherent logic of ‘autonomous realms’”. Because foreign policy is driven by both internal and external factors, it does not constitute such an autonomous realm, and therefore we should not strive for a truly theoretical explanation of it”.¹¹² International relations theories seek to distinguish between international and domestic spheres, treating the state as a black box. These approaches, however, overlook important aspects of the dynamics of the policy process.

In an empirical analysis of Iran's interest in diversifying its electricity sector in a country dominated by fossil fuels, domestic interests and international pressures have to be considered. Iran's fossil fuel interests and strengths have evolved since the beginning of the 20th Century. Within this time period, domestic structural changes on the leadership level and political and economic interests have advanced in the country. Simultaneously, new international pressures, the emer-

109 Robert Jervis, ‘Realism in the Study of World Politics’, in *International Organization*, 52:4 (1998), 971-991 (pp.986-987).

110 John J. Mearsheimer, ‘The False Promise of International Institutions’, in *The Perils of Anarchy: Contemporary Realism and International Security*, ed. Michael E. Brown et al. (Cambridge: MIT Press, 1995), pp.332-376 (p.339).

111 William C. Wohlforth, ‘Realism and the End of the Cold War’, in *The Perils of Anarchy: Contemporary Realism and International Security*, ed. Michael E. Brown et al. (Cambridge: MIT Press, 1995), pp.13-41 (p.19).

112 Gideon Rose, ‘Review: Neoclassical Realism and Theories of Foreign Policy’ in *World Politics*, 51:1 (1998), 144-171 (p.145).

Energy Sector Diversification in Iran
Evolving Strategies and Interests in the Electricity
Sector

Mirsaeedi-Farahani, S.

2015, XXII, 365 p. 85 illus., 33 illus. in color., Softcover

ISBN: 978-3-658-11283-7