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## No “Silver Bullet”

### The 2007 National Petroleum Council Report in the US Energy Debate

*Warner ten Kate, August 2007*

#### **Introduction**

On 18 July 2007 the United States National Petroleum Council (NPC) presented its study ‘Facing the Hard Truths about Energy’.<sup>1</sup> The hard truth is that there is no silver bullet that can quickly resolve the increasing import dependency and the climate change challenges. Another hard truth is that the five main strategies presented in the study no longer offer the comfort of being a policy-maker’s shopping list, but rather that it is a list of intertwined measures that should be integrally pursued. The importance of this report does not lie in the novelty of its insights in future oil and gas flows or in its ground-breaking recommendations. Rather, the importance is in the broad spectrum of stakeholders that was involved in preparing this study. Representatives of industry, NGO’s and academia have brought their insights together and have presented, in this pre-election year, an integrated view on the energy and environmental challenges for the United States (US) in the upcoming decades to come. The consensus about the consequences of fossil fuel consumption that is beginning to evolve from studies in the US and Europe will increasingly have an impact on the development of international oil and gas markets, provided that policy-makers can translate hard truths into robust policies.

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<sup>1</sup> Available at: [www.npc.org](http://www.npc.org). Please note that the recently published report is a draft report, a final report will be published in September 2007.

## **The study**

The National Petroleum Council, that conducted this study, is a privately funded advisory committee to the United States government since its formation in 1946. The council brings together virtually all major energy companies active in the United States and has therefore a powerful voice in the American energy debate. The study aimed to answer the following question: What does the future hold for supplies of oil and natural gas?<sup>2</sup> At the end of the nearly two year long process, the answers to this seemingly short and simple question resulted in a comprehensive study, that tries to establish "hard truths" concerning the American and global energy future. These "hard truths" are followed-up by five proposed "core strategies" that aim to balance future economic, security and environmental goals. These core strategies are backed up with various policy recommendations. The study was welcomed by Secretary of Energy Bodman as a "landmark effort" in its aim and thoroughness.<sup>3</sup>

The NPC-report was conducted under the supervision of retired ExxonMobil Chairman and CEO Lee Raymond. Over 350 experts from the energy industry were consulted. The number and background of these stakeholders reflects the broad scope of the study. About one hundred of them had an oil and gas industry background, while the remaining 250 participants had a governmental, academic, non-governmental, financial or other background.<sup>4</sup> The additional 500 people that were interviewed gave the study an even broader scope. All in all more than 1000 persons and groups with an affiliation to energy and energy policy have contributed to the draft of the report.

Apart from the number of participants, the open methodology and the participatory role for the US government in drafting the report have created a broad societal base to support its core strategies for a long term American energy policy. This *CIEP Briefing Paper* will consider the most remarkable recommendations of the NPC-report and how these relate to the current American debate concerning the national energy policy. Finally, we will discuss whether the NPC "landmark effort" signals a new start for international energy policy cooperation.

## **Hard truths and strategies?**

The NPC global oil and gas study states six "hard truths" about the next 25 years in the global energy future. By establishing these "hard truths" the report identifies risks and challenges for the future that will have to be addressed to ensure economic, security and environmental goals.<sup>5</sup> At the same time the NPC establishes a level playing field for future debate by eliminating the

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<sup>2</sup> *'Facing the hard truths about energy: a comprehensive view to 2030 of global oil and natural gas by the National Petroleum Council'* National Petroleum Council (Washington D.C. 2007) Appendix A. *'Facing the hard truths about energy: a comprehensive view to 2030 of global oil and natural gas by the National Petroleum Council; chapter seven'* National Petroleum Council (Washington D.C. 2007) 5.

<sup>3</sup> *'National Petroleum Council: Remarks as prepared for secretary Bodman'* United States Energy Department, July 18 2007 available at: <http://www.doe.gov/print/5249.htm>.

<sup>4</sup> *'Facing the hard truths about energy: a comprehensive view to 2030 of global oil and natural gas by the National Petroleum Council; chapter seven'* National Petroleum Council (Washington D.C. 2007) 5.

<sup>5</sup> *'Facing the hard truths about energy: a comprehensive view to 2030 of global oil and natural gas by the National Petroleum Council; executive summary'* National Petroleum Council (Washington D.C. 2007) 1.

idea that there should be a preference for one of the three pillars in energy policy.<sup>6</sup> For example: “energy independence” is a popular notion in American political discourse and many politicians see increasing energy security by means of reducing dependence on foreign suppliers as the most important (if not only) goal of an energy policy. By ruling out that energy independence can ever be achieved the “six truths” help to steer the debate on energy policy away from this illusive goal and firmly establish balance between three pillars as the way forward.

To establish a balance among the three pillars of energy policy and to address the “hard truths” in the future, the NPC-report proposes five core strategies that will have to be implemented as soon as possible. However, the most important recommendation in the NPC-report is that: *“the council proposes five core strategies to assist markets in meeting the energy challenges to 2030 and beyond. All five strategies are essential – there is no single, easy solution to the multiple challenges we face.”*<sup>7</sup> Both the “hard truths” and “core strategies” have been summed up in the table below.

<b>Six “Hard Truths”</b>
<b>1:</b> Fossil fuels remain dominant in the energy mix
<b>2:</b> Accumulating risks threaten the energy supply
<b>3:</b> All available energy resources must be developed
<b>4:</b> Energy independence is a myth
<b>5:</b> The energy sector workforce must be replenished
<b>6:</b> Climate mitigation will alter the energy mix
<b>And the core strategies to face them</b>
<b>1:</b> Increase energy efficiency
<b>2:</b> Expand & diversify energy supply
<b>3:</b> Strengthen global energy security
<b>4:</b> Reinforce energy sector capabilities
<b>5:</b> Address carbon constraints

<sup>6</sup> Energy policy is a trade-off between price, security of supply and environment.

<sup>7</sup> ‘Facing the hard truths about energy: a comprehensive view to 2030 of global oil and natural gas by the National Petroleum Council executive summary’ National Petroleum Council (Washington D.C. 2007) 3.

The NPC-report continues with various recommendations that pragmatically and effectively pursue the five core strategies. The recommendations reflect the realistic and business like approach that the NPC has chosen to build its case for an all-encompassing energy policy. Most of these recommendations have been voiced in the numerous publications that have influenced the American energy debate so far.<sup>8</sup> These recommendations include for instance an increase in Corporate Average Fuel Economy (CAFE) standards by: “*the maximum rate possible by applying economic, available technology*”. Such an increase in energy efficiency is expected to reduce petroleum consumption by 3 to 5 million barrels in 2030.<sup>9</sup> The National Petroleum Council recommends as a core strategy to increase the availability of *all* energy resources, fossil, nuclear and renewable. The NPC-report does not favour a specific type of fuel, but since fossil fuels are to dominate the energy mix for the foreseeable future its recommendations focus on stimulating technical development that make fossil fuels available (enhanced oil recovery), mitigate their environmental consequences (clean coal technology), and create alternatives (second generation biofuels). When considering the reinforcement of the energy sector for future challenges, the NPC-report focuses on the ageing workforce in the energy industry and the need to replace these workers in the near future. These recommendations reflect the current concern in the energy industry that technology and highly skilled technicians constitute, to a considerable extent, their competitiveness and that this competitiveness must be maintained. Support for human resource management in energy policy can be regarded as the focal point of the NPC-report recommendations to strengthen the energy sector. It illustrates the scope of the NPC-report for it touches upon educational as well as immigration policies of the future.

The NPC-report’s vast number of recommendations makes it difficult to see a clear energy policy emerge. However, the NPC-study is structured in such a way that it avoids giving any preference to a specific energy policy instrument. The report clearly leaves policy decision-making to the politicians. It merely states what *needs* to be done and how it *could* be done, recommending the most pragmatic and effective policies to address the five core strategies. The NPC-report should therefore be considered as the culmination of the current energy debate taking place within the United States of which it has selected the most pragmatic and relevant recommendations.<sup>10</sup>

### **Developments in the American Energy Debate: “missing links”**

The current American energy debate originated in several coinciding developments, namely rising gasoline prices, a perceived political dependence on foreign oil and hurricane Katrina. Rising gasoline prices and the perceived dependence of foreign oil have traditionally been

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<sup>8</sup> These publications include: ‘*National security consequences of U.S. oil dependency*’ by: The Council on Foreign Relations (CFR); ‘*Ending the energy stalemate: a bipartisan strategy to meet America’s energy challenges*’ and ‘*Energy Policy recommendations to the President and the 110<sup>th</sup> congress*’ by: The National Commission on Energy Policy (NCEP); ‘*Recommendations to the nation on reducing U.S. oil Dependence*’ by: The Energy Security Leadership Council (ESLC); ‘*A call for Action*’ by: the United States Climate Action Partnership (USCAP); ‘*National Security and the threat of climate change*’ by: the CNA corporation.

<sup>9</sup> ‘*Facing the hard truths about energy: a comprehensive view to 2030 of global oil and natural gas by the National Petroleum Council; executive summary*’ National Petroleum Council (Washington D.C. 2007) 14.

<sup>10</sup> The NPC states in its report that it has examined various other recent reports that informed the NPC’s Coordinating Subcommittee (CSC). ‘*Facing the hard truths about energy: a comprehensive view to 2030 of global oil and natural gas by the National Petroleum Council; chapter seven*’ National Petroleum Council (Washington D.C. 2007) 13.

dominating the energy debate leading to a domestic policy that focussed on increasing production and stimulating technological development to avoid any further increase in energy import dependence.

The end of the cold war caused a strong believe that a truly liberalised global energy market would emerge. External energy policy efforts were therefore aimed at the creation of a level playing field for International Oil Corporations (IOC's). In short: America's external energy policy during the nineties was relying on the market to secure energy supply. A very understandable strategy, because American Oil Companies are amongst the most prominent International Oil Companies in the world. However, these policies were not able to offset the increasingly limited access to oil reserves IOC's experienced in producing countries. During the Clinton era, access to reserves for American oil companies was further reduced due to the Iranian Libya Sanctions Act (ILSA) that forced American companies to sell their Iranian assets.<sup>11</sup> The longer-term impact of reduced access was ignored by government because of ample supply availability at that time.

However, the oil price increases since the turn of the century, refocused attention on the limited access to reserves of private international energy companies. In the past few years, the opportunities to invest in foreign upstream assets have been further restricted when countries such as Russia and Venezuela toughened control over their resources. The idea of a liberal world energy market has increasingly come under pressure by governments that try to strengthen control over their energy resources. In the current imperfect global energy market, large international oil companies alone can no longer guarantee American energy security. A lesson that is implicitly echoed in the NPC-report.

In the report the American oil industry concedes that the longstanding believe in "Big Oil's" ability to continue to ensure America's energy security was unfounded. The report clearly drifted from its original research question towards a global review of world energy, which includes more than oil and gas alone. The oil industry hereby admits that America needs more actors and other policies than those that have shaped American policy making up until now. Not only is "Big Oil" unable to guarantee energy security for the future, it also does no longer want to be (publicly perceived) as the sole provider of for American energy supply.

The oil price and availability concerns have been complemented with increased concerns over climate change that have come to the forefront in the wake of hurricane Katrina. The devastating effects of Katrina on the American oil infrastructure (upstream and downstream) demonstrated to the American public that energy security starts at home with policies made in Washington. Policies that had to ensure two things: First, a dependable national energy infrastructure that could withstand the challenges thrown at her. Second, an external energy policy that limited the challenges that would be thrown at her in the future.

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<sup>11</sup> This law prohibits any company to invest over 20 million USD in the Iranian energy industry. Especially IOC's experience the consequences, because they can be punished due to their presence on the American market. While National Oil Companies (namely Chinese and Indian) see the absence of these IOC's in Iran as an opportunity to invest.

Under the current administration the United States had put itself on the sideline of the international energy and climate debate, despite the fact that it is one of the greatest stakeholders. This implies that the United States government has to develop an external energy and environmental policy that address the political risks and the environmental risks to energy security. This is also voiced in the NPC's central message that stresses the need to pursue all five core strategies simultaneously. Two of these strategies are especially concerned with the development of an international American effort. By addressing these external policy issues, the NPC-reports tries to address the "missing links" that have so far prevented the establishment of a comprehensive American energy policy.

### **Strengthening global energy security**

The NPC-report calls for a strengthening of global and US energy security. It argues: "without global energy security there is no US energy security".<sup>12</sup> This notion was already mentioned in the "National Energy Policy" of 2001, which stated that the broad scope of energy policy required it to be integrated into various policy areas, including trade and foreign policy.<sup>13</sup> Although the NPC-report states that the United States must implement a foreign energy policy to increase global energy security it fails to expand further on the subject. The recommendations of the report stops short with the suggestion to create an equal voice for the Secretary of Energy on energy issues (which seems appropriate), and strengthening ties with consumer and producer nations. No further recommendations are made that are necessary to ensure global energy security.

Some more far reaching and substantive proposals were recently made in a study published by the Council on Foreign Relations.<sup>14</sup> These recommendations suggested a far more institutional approach by creating an energy security directorate within the National Security Staff. The CFR study also suggested far more concrete issues on which cooperation must be increased (e.g. help producing countries to manage their hydrocarbon revenues, encourage global market transparency, reducing infrastructure vulnerability).

Amongst legislators the subject of energy and foreign policy was already addressed in 2006 by Senator Lugar (I-R) who proposed the "Energy Diplomacy and Security Act of 2006".<sup>15</sup> Since then it has been redrafted and introduced as the "Energy Diplomacy and Security Act of 2007", which is currently scheduled for debate.<sup>16</sup> The proposed act stresses the need to establish bilateral energy partnerships with major energy consumers and producers, in particular the need

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<sup>12</sup> 'Facing the hard truths about energy: a comprehensive view to 2030 of global oil and natural gas by the National Petroleum Council; executive summary' National Petroleum Council (Washington D.C. 2007) 2.

<sup>13</sup> 'National Energy Policy' National Energy Policy Development Group (Washington D.C. 2001)

<sup>14</sup> 'National security consequences of U.S. oil dependency' The Council on Foreign Relations (Washington D.C. 2007).

<sup>15</sup> The bill never became law due to the change in leadership in Congress after the elections of November 2006.

<sup>16</sup> Although the bill is scheduled for debate this will not mean that it will actually reach that stage since it is the Majority leadership that decides whether it will actually be placed on the Senates agenda and move on in the legislative process.

for an active engagement of China and India.<sup>17</sup> It seems that the "*Energy Diplomacy and Security Act of 2007*" that is currently under consideration is actually more substantive than the National Petroleum Councils recommendations to increase U.S. external energy security.

### **Sense of urgency**

The NPC-report conveys a sense of urgency that also underpins the national debate concerning an external energy policy and brings the debate further than merely a debate on the role and function of IOC's. With the change in public awareness, other interest groups have seized the opportunity to push for an increasing international energy engagement of the United States government.

The recent debate has led to some interesting publications like a publication of the CNA corporation entitled: "*National Security and the Threat of Climate change*".<sup>18</sup> The publication draws on the experience of some of the most respected generals and admirals of the US military to assess the consequences of climate change for the national security. The study urges the US government to address the issue of climate change in an international context as a necessary step to American security. It shows that the "environmental green" suddenly has a common interest with "military green", which makes for a coalition that was until recently very unlikely. It also demonstrated that any global security policy would be useless without a policy addressing global climate change. This realization concurs with the second "core strategy" of the NPC-report that addressed a revolution in American external energy policy making.

### **Climate for revolution?**

The press comments following the presentation of the NPC-report seemed to agree that the single most "revolutionary" recommendation that was put forward by the NPC was to: "*pursue an effective global framework for carbon management incorporating all major emitters of CO<sub>2</sub>*"<sup>19</sup>. The change of heart on this issue gained momentum in 2007. In April 2007 ConocoPhillips joined the United States Climate Action Partnership (USCAP), soon to be followed by a change of position on Climate Change by representatives of ExxonMobil (a corporation that has been recognized for its outspoken doubts with respect to global warming science), now pushing for climate mitigating policies.<sup>20</sup> It seemed that now that a major American integrated oil company was joining USCAP, an organisation that promotes a cap and trade system for climate change mitigation, a revolution in corporate America was on the verge.<sup>21</sup>

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<sup>17</sup> 'S193: *Energy Diplomacy and Security Act of 2007*' Library of Congress (Washington D.C. 2007) available at: <http://www.govtrack.us/congress/billtext.xpd?bill=s110-193>.

<sup>18</sup> Available at: [www.cna.org](http://www.cna.org).

<sup>19</sup> '*Facing the hard truths about energy: a comprehensive view to 2030 of global oil and natural gas by the National Petroleum Council; executive summary*' National Petroleum Council (Washington D.C. 2007) 35.

<sup>20</sup> 'ExxonMobil's top executives on climate-change policy' Euractiv.com June 19<sup>th</sup> 2007 available at: <http://www.euractiv.com/en/climate-change/exxonmobil-top-executives-climate-change-policy/article-161664>.

<sup>21</sup> Especially when Chrysler and Ford joined the partnership in June 2007, British Petroleum was already a member and Royal Dutch-Shell also joined the partnership.

The change in the climate mitigating discourse has also been noticed in Congress where the change in leadership since the November 2006 elections has spurred various legislative initiatives to combat climate change. Since January 2007, more than nine legal climate change initiatives have been launched in Congress. The most notable of these is the "*Low Carbon Economy Act of 2007*", which aims to establish a cap and trade system. This bipartisan bill proposes a mandatory system of caps on carbon emissions. The program is modelled after the 1990 US Acid Rain Program, which was one of the first cap and trade systems in the world, a system that effectively realized a reduction in emissions that caused acid rain. Although the bill faces criticism from environmental groups who claim that it does not go far enough, it succeeded in attracting labour union and corporate support.<sup>22</sup>

International initiatives were also launched by the House in Resolution 2420: "*International Climate Cooperation Reengagement Act of 2007*". This House resolution aims to bring the United States back in the lead of the global debate on climate change mitigation.<sup>23</sup> However, the bill currently remains in the first legislative stage, which creates great uncertainties about its future. Another initiative that is currently in progress is "*America's Climate Security Act*" from Senators Lieberman (C-ID) and Warner (Va-R). Although details of the proposal (among which is a declining emissions cap) have recently come forward, the final legislative proposal is expected in the fall of 2007.<sup>24</sup>

President George W. Bush has also joined American efforts to re-establish American standing in the international climate change debate by pushing for a global climate pact by the end of 2008. Most international observers greeted the Bush initiative with a certain level of scepticism.<sup>25</sup> The proposal that was issued in the run-up to the G8 meeting in Heiligendamm, Germany in June 2007 was generally considered to be a diversion of other initiatives put forward at the same meeting. However, the Bush proposal does signal that even amongst the staunchest climate sceptics, the issue will no longer be ignored.

## **Conclusion**

The National Petroleum Council report has not enlightened us with a lot that we did not already know. The report builds a well-balanced case for an all-encompassing energy policy that is pragmatic, achievable and has many supporters within the energy industry. It reflects the current energy debate in the United States and has been released with clockwork timing. The report may thus contribute to a push for an all-encompassing energy policy in this pre-election year.

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<sup>22</sup> John M. Broder 'Compromise measure aims to limit global warming', The New York Times, July 11<sup>th</sup> 2007.

<sup>23</sup> 'H.R. 2420: International Climate Cooperation Reengagement Act of 2007' available at: <http://www.govtrack.us/congress/bill.xpd?bill=h110-2420>.

<sup>24</sup> 'America's climate security act executive summary of progress to date senators Joseph Lieberman and John Warner' August 2<sup>nd</sup> 2007 available at: <http://warner.senate.gov/pressoffice/statements/text/20070802txt.htm>.

<sup>25</sup> Roger Harrabin, 'US climate plan meet mixed response' BBC, June 1<sup>st</sup> 2007.