
**THE RIGHT HAND DOES NOT KNOW WHAT THE
LEFT HAND DOES.**

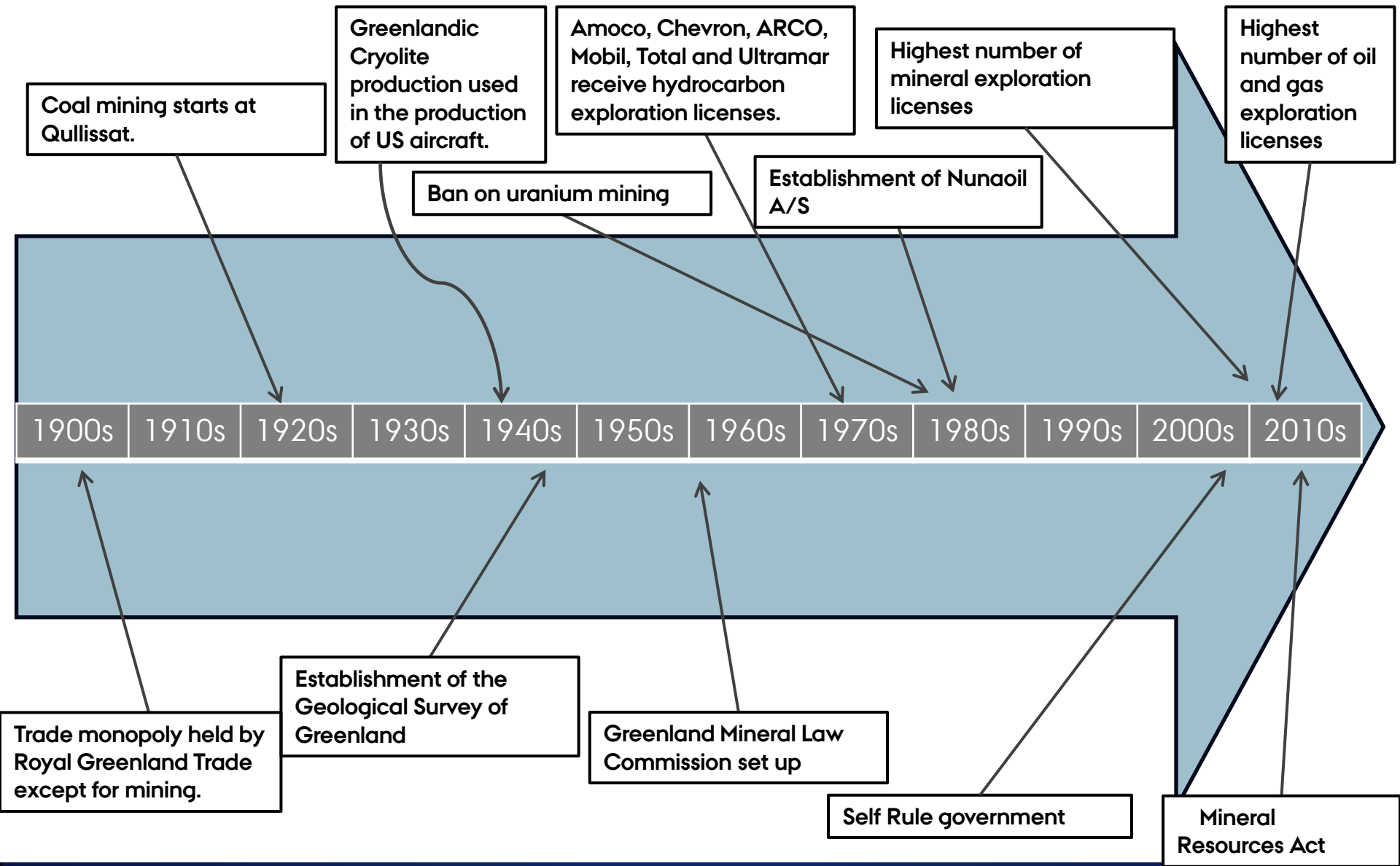
**MISSING LINKS IN THE RESEARCH LITERATURE
ON ENERGY SECURITY AND SOCIO-ECONOMIC
IMPACTS OF NON-RENEWABLE RESOURCE
EXTRACTION IN GREENLAND**

Vladimir Pacheco,
Department of Culture and Society

**Security and Governance in the Global Arctic: Nordic and
International Perspectives**

INTRODUCTION

1. **Greenland: conceptualizing non-renewable resource (NRR) extraction**
2. **Socio-economic impacts**
3. **Energy Security**
4. **No dialogue**
5. **Closing the gap?**
6. **Why should we close the gap?**



GREENLAND: CONCEPTUALIZING NON-RENEWABLE RESOURCE EXTRACTION



Old mining shaft at Qullissat

Photo © Esther Kokmeijer

Source: <http://mvfram.blogspot.dk/2013/06/a-paradise-of-ice.html>



Coal mining at Qullissat, 1907

Source: <https://en.wikipedia.org/wiki/Qaarsut>

- 1st conceptual wave: NRRs help secure Greenland's status as part of the Danish realm.
- In Greenland more than 20 different mines have operated in the past 150 years and include graphite (Amitsoq, Ivittuut); cryolite (Ivittuut: 1854-1987); lead-zinc (Mestersvig: 1956-1963); zinc, lead and silver (Maarmorilik: 1973-90).
- The Josva mine and smelter at Innatsiaq produced 60 tons of copper between 1905-14.
- The Qullissat mine, on the east coast of Disko, produced 570,000 tons of coal between 1924-1972 (GEUS: 2014).

Iceland, Greenland and the United States

By Hans W. Weigert

THE consciousness that the far north is an area of great strategic importance to the United States is no longer limited to the small group of men who began to listen to Vilhjalmur Stefansson's gospel of the "northward course" more than twenty years ago. These men did not then pretend to be advancing thoughts which were entirely new. They aimed at a rebirth of the visions which led William Henry Seward to purchase Alaska in the middle of the nineteenth century and made him wish to secure America's position in the North Atlantic through the purchase of Iceland and Greenland from Denmark. For a long time the concept of the American Far North had little effect on our foreign policy. But air-mindedness has brought about a revival of Seward's ideas and has given them wide popularity and a new meaning. It is no longer necessary to deplore the lack of a national awareness of the north, but rather to warn against over-enthusiastic

Volume 23, Number 1, OCTOBER 1944

- Second conceptual wave:
- NRRs assist in achieving greater independence

PageFair hack - update for visitors to econo

Greenland and oil

Independence on ice

All latest updates

Falling crude prices are forcing Greenland to put off plans to split from Denmark

Jan 21st 2015 | COPENHAGEN | Europe

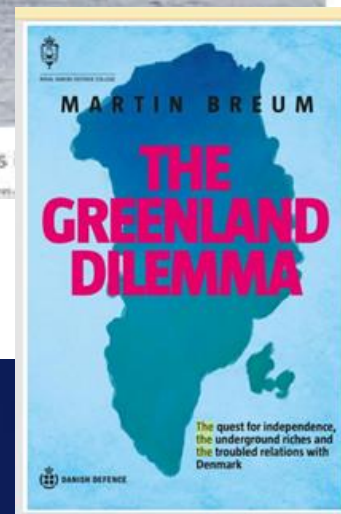
Timekeeper

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THE collapsing price of crude over the past six months has



TO THE BENEFIT OF GREENLAND

The Committee for Greenlandic Mineral Resources to the Benefit of Society



Energy and climate: articles and press releases

Conference: The Impacts of Uranium Mining in Greenland

Publiceret: Fredag, 7. marts 2014 13:23 |



International Conference in Copenhagen - The Impacts of Uranium Mining in Greenland and the Rest of the World.

Tuesday, March 25th 2014, 13.00-17.00

International Conference in Copenhagen - The Impacts of Uranium Mining in Greenland and the Rest of the World

The Common Hall (Fællessalen) in the Danish parliament building Christiansborg, 1240 Copenhagen K

(Access through the visitor entrance to the right of the main entrance)

Tuesday, March 25th 2014, 13.00-17.00

National Environmental Research Institute
Ministry of the Environment - Denmark

Potential environmental impacts of oil spills in Greenland

An assessment of information status and research needs

NERI Technical Report, No. 415



Guidelines for Social Impact Assessments

for mining projects in Greenland



SOUTH GREENLAND

A Strategic Environmental Impact Assessment of hydrocarbon activities in the Greenland sector of the Labrador Sea and the southeast Davis Strait

Scientific Report from DCE - Danish Centre for Environment and Energy No. 23 2012

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Mining in Greenland - a country divided

By James Fletcher
BBC World Service, Narsaq, South Greenland

© 1 January 2014 | Magazine

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© 10 minutes ago

Third conceptual wave.

NRRs: jobs, taxes, royalties, training, new businesses

AND


migration, resource dependence, pollution

SOCIO-ECONOMIC IMPACTS: POSITIVE AND NEGATIVE

ENERGY SECURITY IN GREENLAND

The screenshot shows a web browser window with several tabs open, including 'Mining in Greenland', 'Google Books', 'www.brookings.edu', 'Greenpeace Protest Sh...', and 'arcticjournal.com/sites'. The main content area features the Arctic Forum Foundation logo, which is a stylized globe with a green Arctic region. Below the logo is a navigation menu with links: Home, About Us, Partners, Participants and Friends, Experts & Advisory Council, Fora, Publications, Events calendar, and Contact.

Greenland: A key for future developments in the Arctic




Rapid developments in the Arctic region have highlighted the importance of Greenland, a self-ruled territory that is closely linked to the European Union and has all the strategic assets to attract any country, particularly a power like China. Greenland is about half of the size of the European Union, and is inhabited by less than 57 000 persons. The territory's state-building process is therefore of great importance for future developments in the Arctic and global energy security, particularly due to Greenland's enormous potential of Rare Earth Elements, that are needed to develop the technology base for a low carbon century. Greenland's Self Rule Act from 2009 has generated growing interest amongst the international community and coincides with a strengthened global attention on the Arctic region. Greenland has all that a power like China could be looking for: natural resources (Rare Earth Elements, Uranium, Iron Ore, etc.), enormous reserve of water, strategic coastal dimension in the Arctic Ocean, etc.

Greenland's Rare Earth Elements are seen to be crucial for securing low carbon economies. China controls more than 97% of the world's REE-production and that has caused concern in Western economies. As the REE-demand is rising fast, Greenland and its non-Chinese owned enormous REE-potential are becoming strategic. The Arctic island may be able to supply at least 25% of the world's REE-demand in the next 50 years. But it may actually be more: new data from 2011 showed that a mine in South Greenland – which was expected to be exploited during 25-30 years – may be exploited during 300 years, if not more.

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Partners, Participants and Friends



Our Arctic Twitter News

- Landmark decision by Sami people to say no to gold mine in Norway
<https://t.co/E51t1q1B>
- RT @StefanieSpear: In her response to Arctic drilling, Hilary broke with the Obama administration

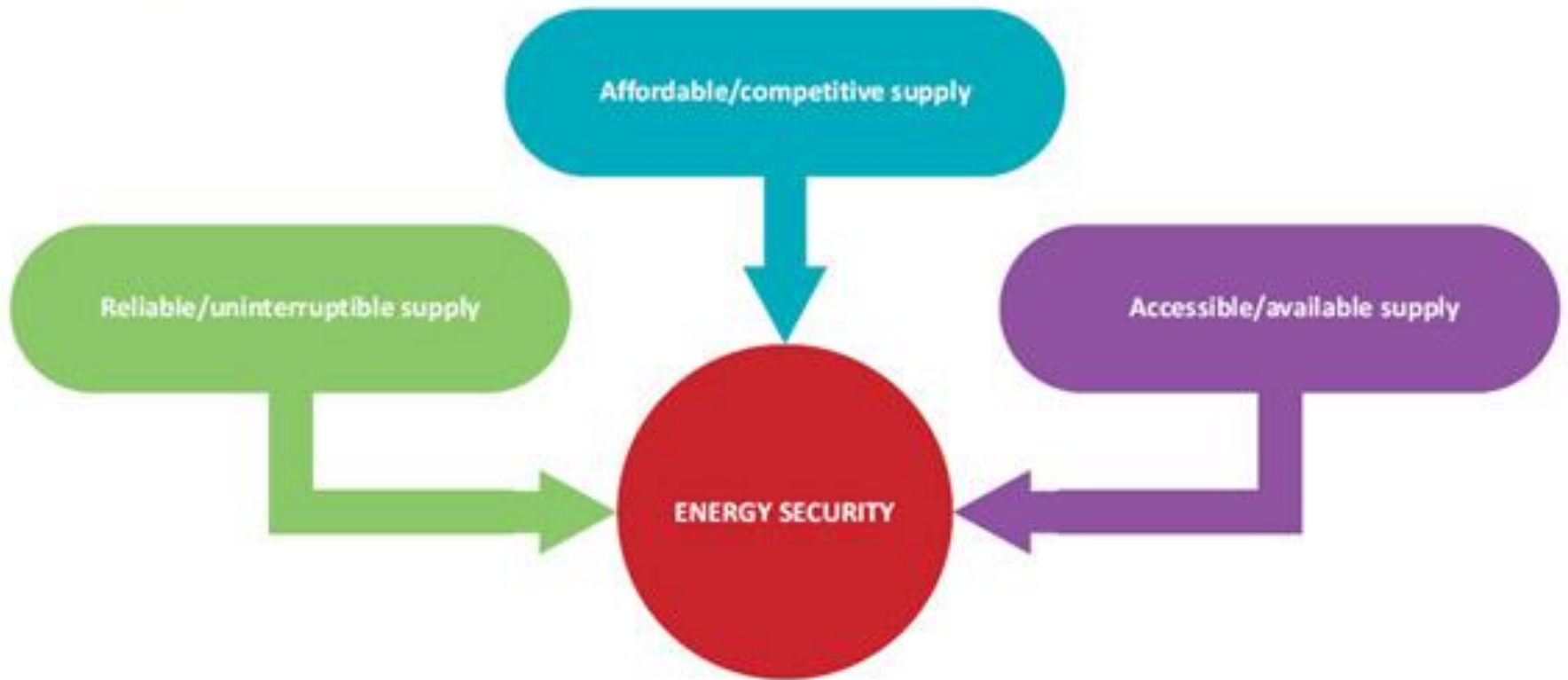
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Taskbar: Greenland SEIA.pdf, GREENLAND (1).ppt, The_Greenland_Dil...epub, Merrild Hansen Com...pdf

Taskbar icons: Oe, Chrome, S, Ps, W



Figure 1.1 Defining energy security



Note: unless otherwise indicated, all tables, figures and boxes in this chapter derive from IEA data and analysis.

NO OVERLAP OR LITTLE DIALOGUE BETWEEN ENERGY SECURITY AND SOCIAL IMPACT LITERATURES

Social impacts are conceived as failures to secure energy.



“Short-term energy security focuses on the ability of the energy system to react promptly to sudden changes within the supply-demand balance. **Lack of energy security is thus linked to the negative economic and social impacts of either physical unavailability of energy, or prices that are not competitive or are overly volatile.**” (IEA: 2015)

What about the social impacts incurred in the process of securing energy?

International New York Times if Greenland

Protest Shuts Down Oil Rig off Greenland

By JOHN COLLINS RUDOLF SEPTEMBER 1, 2010 6:06 PM

Greenpeace halted exploratory drilling by a Scottish oil firm off the coast of Greenland on Tuesday after four protesters [scaled an oil rig](#) and suspended tents from its underside.



Politics & Policy

[from the rig.](#)

“The drilling rig we’re hanging off could spark an Arctic oil rush, one that would pose a huge threat to the climate and put this fragile environment at risk,” said Sim McKenna, one of the protesters, in a [statement](#)

REE extraction: the process requires a cocktail of chemical compounds and produces a “tremendous amount” of solid waste, according to the U. S. Environmental Protection Agency. (Yale Environment 360: 2013)

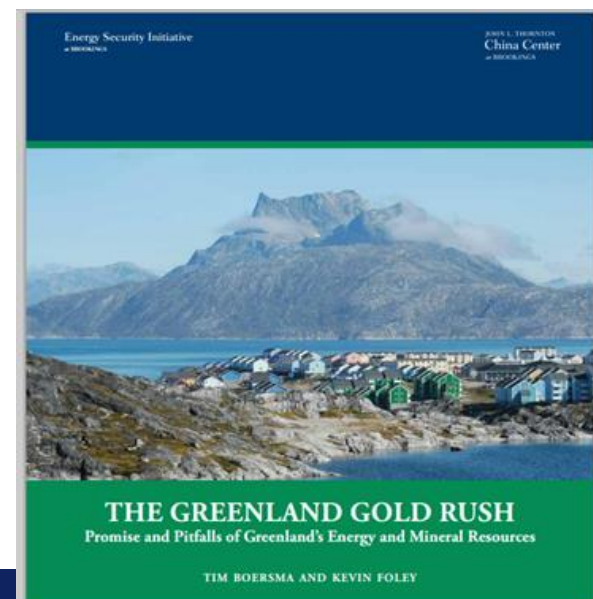
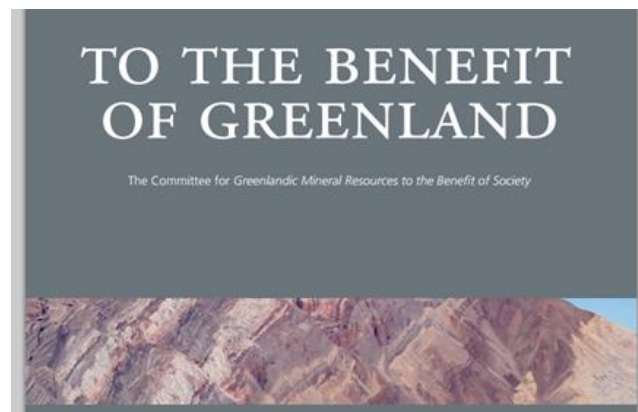


4. CLOSING THE GAPS?

Energy security should be primarily a question of ethics. Before we talk about the need for increased energy security we must ask:

- What is this energy for?
- Who benefits?
- What are the alternatives?
- What are the social, environmental and generational costs? (Sovacool, 2013: 3).

Social impacts lit should inform ES lit



WHY SHOULD WE CLOSE THE GAP?

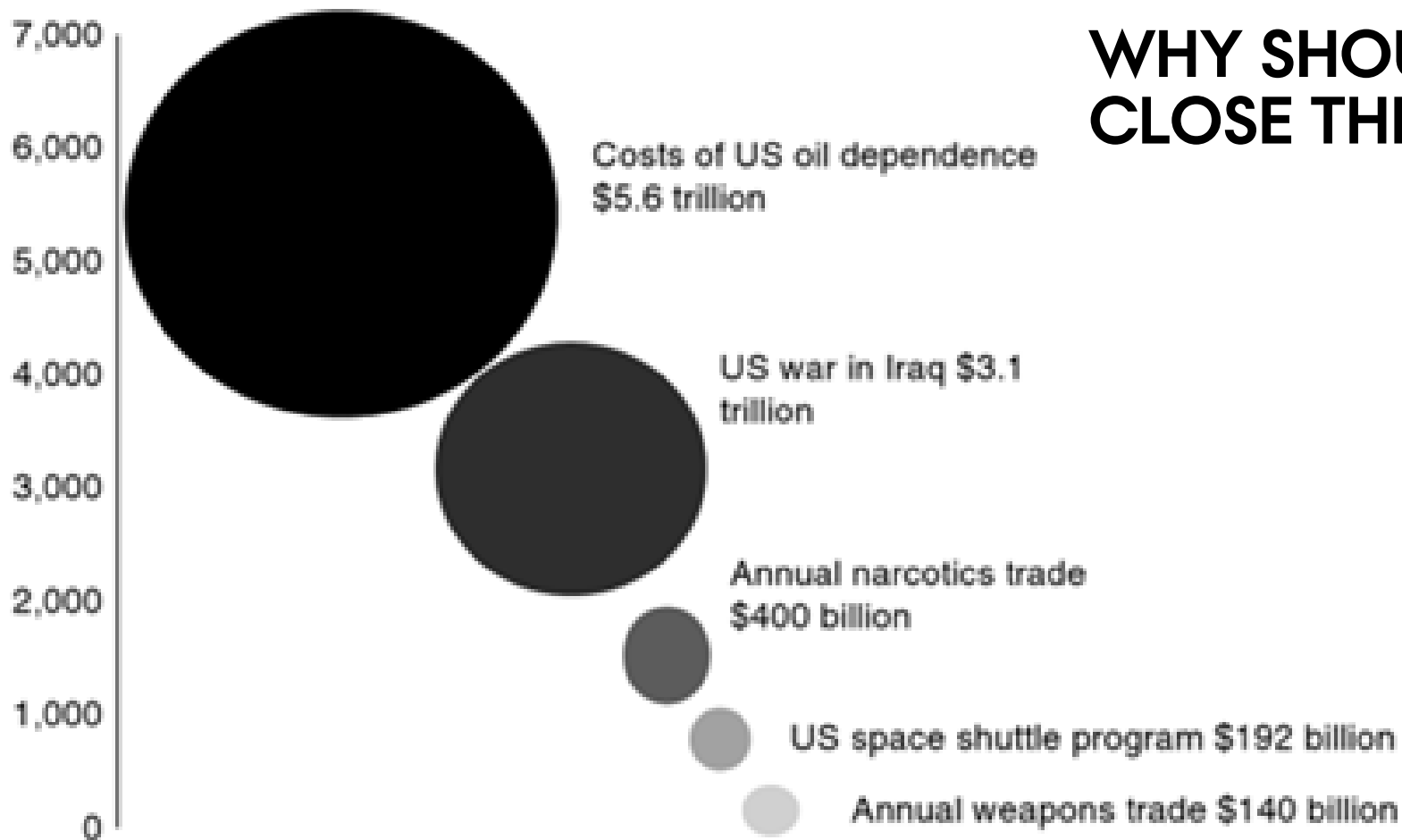


Figure 2.1 Macroeconomic costs of US dependence on foreign oil (billions of dollars), 1970–2004



[https://books.google.com/ngrams/graph?content=Energy+Security%2C\(Socio-economic+impacts\)%2CGreenland&year_start=1800&year_end=2008&corpus=15&smoothing=3&share=&direct_url=t1%3B%2CEnergy%20Security%3B%2Cc0%3B.t1%3B%2C%28Socio%20-economic%20impacts%29%3B%2Cc0%3B.t1%3B%2CGreenland%3B%2Cc0](https://books.google.com/ngrams/graph?content=Energy+Security%2C(Socio-economic+impacts)%2CGreenland&year_start=1800&year_end=2008&corpus=15&smoothing=3&share=&direct_url=t1%3B%2CEnergy%20Security%3B%2Cc0%3B.t1%3B%2C%28Socio%20-economic%20impacts%29%3B%2Cc0%3B.t1%3B%2CGreenland%3B%2Cc0)

EARLY DAYS FOR ENERGY SECURITY DISCOURSE