



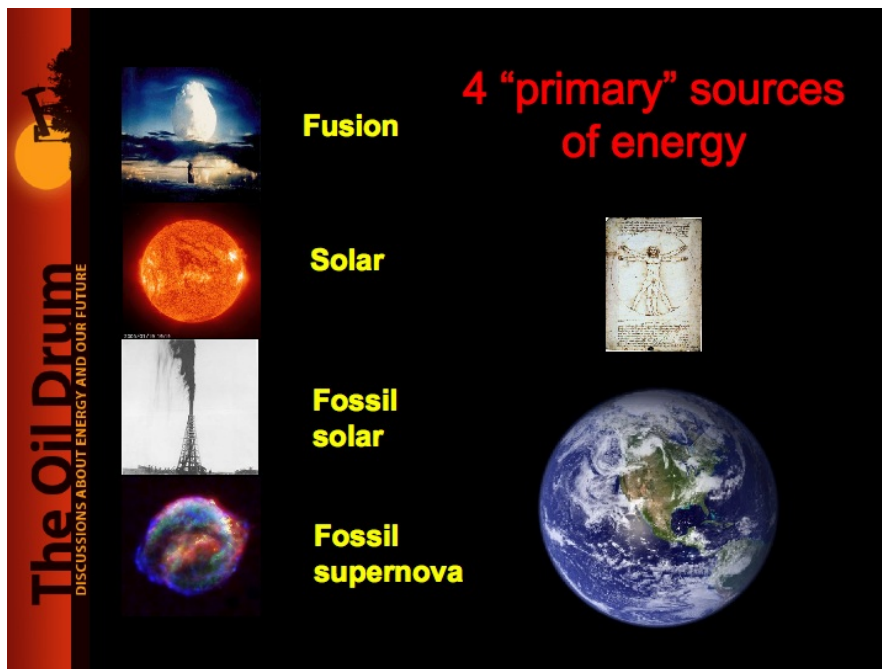
Crisis, what energy crisis?

Posted by [Euan Mearns](#) on July 3, 2007 - 10:19am in [The Oil Drum: Europe](#)

Topic: [Supply/Production](#)

Tags: [energy](#), [fossil fuels](#), [fossil solar](#), [fossil supernova](#), [fusion](#), [natural gas](#), [nuclear energy](#), [oil](#), [peak oil](#), [solar power](#), [wave power](#), [wind power](#) [[list all tags](#)]

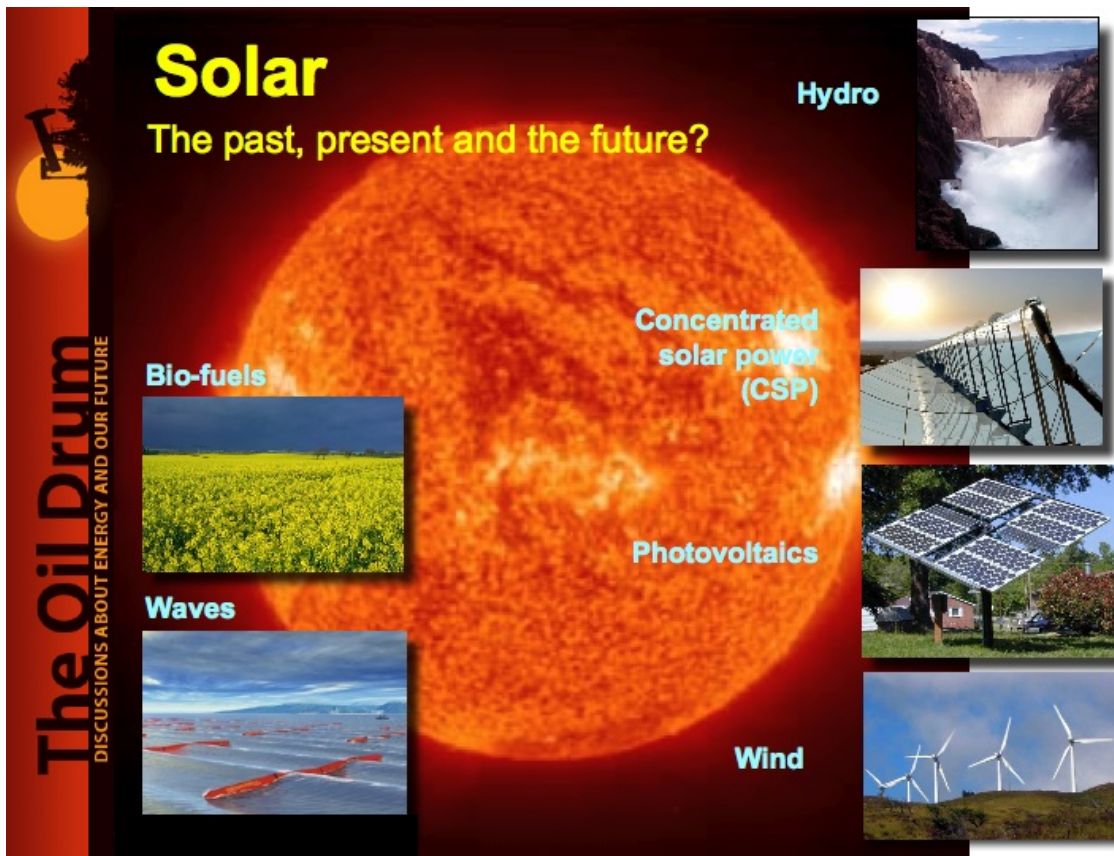
The energy gap left by declining fossil Solar fuels may be filled by alternative sources of energy. In short, the Earth has ample supplies of energy to sustain human population and economic growth. Discuss....



This post is intended to provide a structured background to energy matters for new readers and hopefully to provide a provocative debate with seasoned Oil Drum veterans. A listing of over 50 links to Oil Drum articles from the past year is provided which combined provide a comprehensive overview of the issues surrounding peak oil and energy decline. If you are new to the site or have been lurking and want to ask a question then all you have to do is sign up and post your query. The Oil Drum is here to educate--and we are here to help.



[Will Nuclear Fusion Fill the Gap Left by Peak Oil?](#) Guest post by Nick Rouse posted by Chris Vernon.



[Report: Brazilian Ethanol is Sustainable](#) Posted by Robert Rapier.

[Corn-Based Ethanol: Is This a Solution?](#) Posted by Gail the Actuary.

[Cellulosic Ethanol vs. Biomass Gasification](#) Posted by Robert Rapier.

[Has the Algae Cavalry Arrived?](#) Guest post by Fireangel, posted by Heading Out.

[How the Energy Crisis Will Help My Diet](#) Guest post by seismobob, posted by Prof Goose.

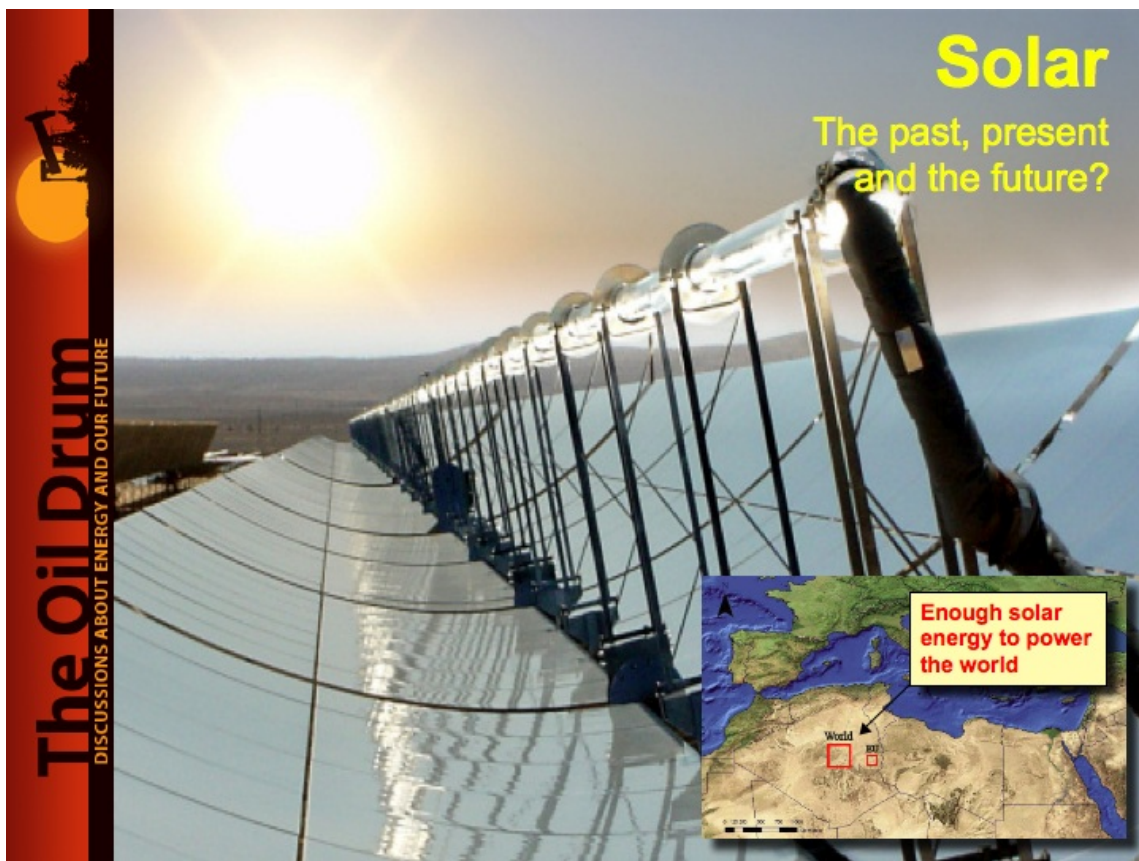
[Why wind power works in Denmark](#) Guest post by Cry Wolf, posted by SuperG.

[The First Ever Off-Shore Wind Farm Financed by Banks...](#) Guest post by Jerome a Paris, posted by Prof. K. Goose.

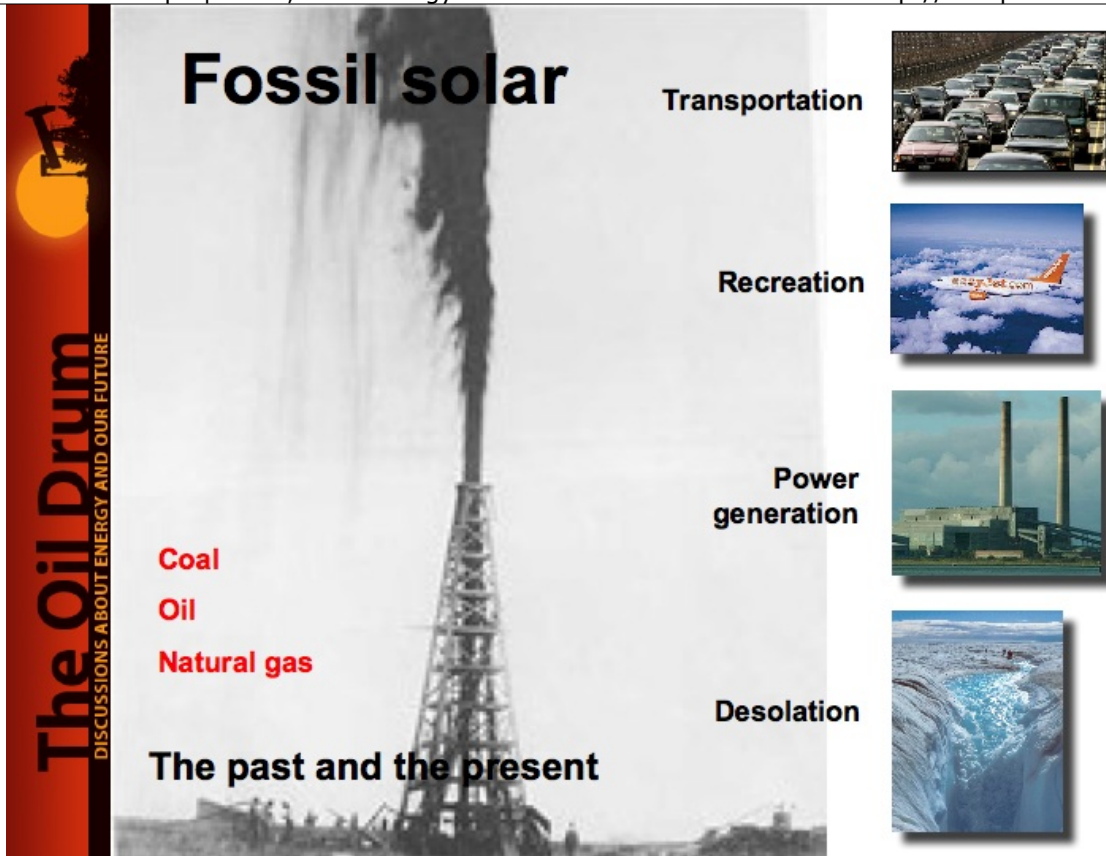
[Energy from Wind: A Discussion of the EROI Research](#) Guest post by Cutler Cleveland, posted by Nate Hagens.

[Pelamis: a Shot in the Dark?](#) Guest post by Luis de Sousa, posted by Prof Goose.

[Outsourcing Solar Roofs](#) Posted by Glenn



[Concentrating Solar Power](#) Guest post by Gerry Wolff posted by Chris Vernon.



[Peak Oil Overview - June 2007](#) Posted by Gail the Actuary.

[Oilwatch Monthly - May 2007](#) Posted by Rembrandt.

[Peak Oil Update - February 2007: Production Forecasts and EIA Oil Production Numbers](#) Posted by Khebab.

[Is There A Painless Way To Fill The Oil Supply Gap?](#) Guest post by Michael Smith, posted by Euan Mearns.

[World Oil Exports: A Comprehensive Projection](#) Guest post by Luis de Sousa, posted by Prof Goose.

[Natural gas: how big is the problem?](#) Posted by Luis de Sousa.

[What Does an Undulating Plateau Really Mean?](#) Posted by Glenn

[Simple mathematics - The Saudi reserves, GOSPs and water injection](#) Posted by Heading Out.

[The Status of North Ghawar](#) Posted by Stuart Staniford.

[Depletion Levels in Ghawar](#) Posted by Stuart Staniford.

[GHAWAR: an estimate of remaining oil reserves and production decline \(Part 2 - results\)](#) Posted by Euan Mearns.

[Ghawar reserves update and revisions \(1\)](#) Posted by Euan Mearns.

[An Update on Mexico's Oil Production--The Rapid Collapse of Cantarell by the Numbers](#) Posted by Khebab.

[Flesh on the bones of Mexican oil production](#) Posted by Euan Mearns.

[A primer on Caspian Oil](#) Posted by Jerome a Paris.

[Canadian Oil Sands Production Update](#) Posted by Khebab.

[Oh, Canada! -- Natural Gas and the Future of Tar Sands Production](#) Posted by Dave Cohen.

[Getting a Grasp on Oil Production Volumes](#) Posted by Khebab.

[The Loglet Analysis](#) Posted by Khebab.

[The Shock Model: A Review \(Part I\)](#) Posted by Khebab.

[Does the Hubbert Linearization Ever Work?](#) Posted by Robert Rapier.

[Norway and the Parabolic Fractal Law](#) Posted by Khebab.

[Peak Coal - Coming Soon?](#) Guest post by Shaun Chamberlin Posted by Chris Vernon.

[Implications of "Peak Oil" for Atmospheric CO₂ and Climate](#) Posted by Chris Vernon.

[Dr James Hansen: Can We Still Avoid Dangerous Human-Made Climate Change?](#) Posted by Chris Vernon.

[Greenland, or why you might care about ice physics](#) Posted by Stuart Staniford.



And a series of 26 technical posts by [Heading Out](#).

The Oil Drum
DISCUSSIONS ABOUT ENERGY AND OUR FUTURE

World Energy Consumption

BOE per annum (millions)

Year	Hydro (mm BOE)	Nuclear (mm BOE)	Coal (mm BOE)	Gas (mm BOE)	Oil (mm BOE)
1965	10000	0	10000	5000	5000
1970	10000	0	10000	5000	5000
1975	10000	0	10000	5000	5000
1980	10000	0	10000	5000	5000
1985	10000	0	10000	5000	5000
1990	10000	0	10000	5000	5000
1995	10000	0	10000	5000	5000
2000	10000	0	10000	5000	5000
2005	10000	0	10000	5000	5000

Oil = 39% of total Global energy consumed in 2005
Fossil fuels = 88% of total energy consumed in 2005

[The electric wheel - a breakthrough in car efficiency](#) Posted by Rembrandt.

[Why we Drive](#) Posted by Stuart Staniford.

[The Auto Efficiency Wedge](#) Posted by Stuart Staniford.

[Aviation and Oil Depletion](#) Guest post by Christopher Smith, posted by Euan Mearns.

The Oil Drum
DISCUSSIONS ABOUT ENERGY AND OUR FUTURE

Fossil supernova

Nuclear fission

Geothermal

Tidal

Past, present & future

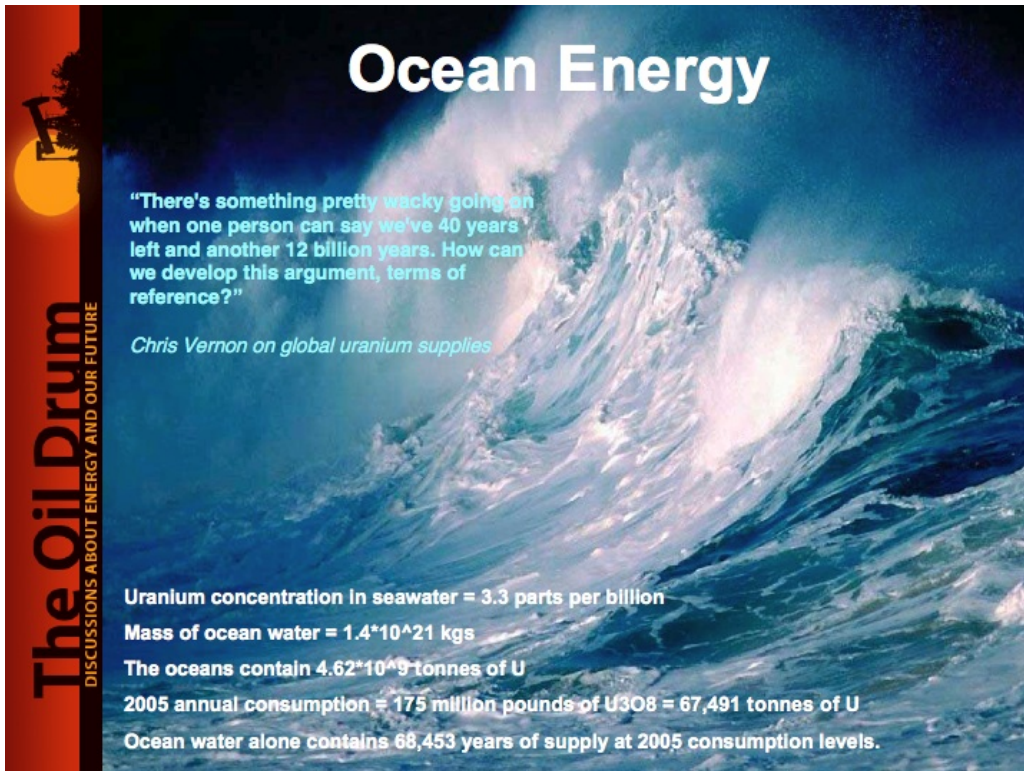
[Is Nuclear Power a Viable Option for Our Energy Needs?](#) Guest post by Martin Sevier posted by Prof Goose.

[Uranium Depletion and Nuclear Power: Are We at Peak Uranium?](#) Guest post by Miquel Torres posted by Prof Goose.

[How Uranium Depletion Affects the Economics of Nuclear Power](#) Guest post by Miquel Torres posted by Prof Goose.

[A review of the underlying fundamentals of nuclear energy](#) Posted by Jerome a Paris.

[Nuclear Power for the Oilsands](#) Guest post by Brian Wang, posted by Stoneleigh.



There are no Oil Drum posts on extracting uranium from seawater as far as I know. However, I feel this is an important topic, so here's a couple of links giving contrasting views:

[Annex 8. Evaluation of Cost of Seawater Uranium Recovery and Technical Problems toward Implementation](#) Hat tip Khebab.

[Nuclear Power: the energy balance, Storm and Smith](#) (large pdf) Hat tip Nate Hagens.

And finally a few miscellaneous posts on vital energy matters:

[Ecological Footprint, Energy Consumption, and the Looming Collapse](#) Guest post by Francois Cellier, posted by Khebab.

[Ten Fundamental Principles of Net Energy](#) Guest post by Cutler Cleveland, posted by Nate Hagens.

[A Net Energy Parable: Why is EROEI Important?](#) Posted by Nate Hagens.

[Living for the Moment while Devaluing the Future](#) Posted by Nate Hagens.

[Burning Buried Sunshine](#) Posted by Dave Cohen.

[Sustainability, Energy Independence and Agricultural Policy](#) Posted by Engineer Poet.

[That cubic mile](#) Posted by Engineer Poet.

[More on the Units of Energy](#) Posted by Heading Out.

[Entropy and Empire](#) Posted by Stoneleigh.

[Peak Oil, Carrying Capacity and Overshoot: Population, the Elephant in the Room](#) Guest post by GliderGuider, posted by Stoneleigh.



DrumBeat posted daily by [Leanan](#) provides a menu of peak oil news and links that is second to none combined with an open discussion thread - that is often not recommended for the faint hearted.

My current position on the looming energy gap is this. The OECD faces unprecedented peril from energy decline (oil first, then gas, coal and uranium) and energy insecurity - increasing amounts of oil and natural gas are being imported into the OECD. However, there is ample fossil energy contained in and solar energy arriving at Earth to sustain current population and economic growth. The challenge lies in real energy conservation measures, rebuilding our energy gathering and distribution infrastructure, redesigning our transportation networks and stabilising global population below 7 billion. A momentous task, but can this be done?

Or is industrial civilisation doomed to decay in a maelstrom of civil unrest, resource wars, famine, terrorism and pestilence?

You can always count on Americans to do the right thing - after they've tried everything else. *Winston Churchill*

I joined The Oil Drum one year ago in June 2006. I was asked to join as a contributor to TOD UK in September 2006 which has since evolved into TOD Europe. This year has been an amazing voyage of discovery.



This work is licensed under a [Creative Commons Attribution-Share Alike 3.0 United States License](#).