What is this?

July 15, 2015

The visualization below is part of an information mural I am making on the History of Climate Change. It covers a relatively short period from 2009 to now (2015). It addresses the recent emergence of a new concept of the limits to how much of the fossil fuels in the ground can be burned – if the world is to stabilize global average temperature of 2 degrees C above preindustrial levels. The Keep It In The Ground movement regards most fossil fuels as resources that must not be burned.

Our History of Climate Change Info-Mural project will be in full first draft form by the Paris meetings of the Conference of the Parties (COP 21). We welcome information we may have missed and corrections to this draft.

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A (Partial) History

Carbon Bubble? Stranded Assets? Divest Fossil Fuel Stocks? Beginning of a Moral Movement?

One trillion tons of carbon emissions proposed as limit

Why is this important?

2009

The calculation of a specific number - one trillion tons of CO2 gives a different boundary beyond which it is much more likely that global warming will cause serious to catastrophic consequences.

Before, policy makers used either 450 parts per million (ppm) of CO2 and/or two degrees Centigrate rise in average global temperature above pre-industrial levels (i.e. around 1850) to suggest a limit to carbon emissions from the global economy.

By using one trillion tons of carbon one can calculate an estimate of how many more tons of carbon can be emitted into the atmosphere by the global economy.

To Stay Below 2 Degrees C in 2050, Carbon Emission Limits Calculated to be **One Trillion Tons of CO2**

To Achieve Goal, Less Than Half Oil, Gas & Coal Reserves Can Be Burned – Ever !

2009

LETTERS

Greenhouse-gas emission targets for limiting global warming to 2 6C

Malte Meinshausen, Nicolai Meinshausen, William Hare, Sarah C. B. Raper, Katja Frieler. Reto Knutti, David J. Frame, & Myles R. Allen, (2009) Greenhouse-gas emission targets for limiting global warming to 2 6C, Nature, Vol 458|30 April 2009|



2013

The Daily Times

Announced Their Town

Will Divest From Fossil

First Municipality In Europe To

Make A Commitment To Divest

"Stigmatisation poses a

far-reaching threat to

any direct impacts of

parison,"

ment - 2013

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fossil fuel companies -

divestment pale in com-

Ben Caldecott, a research

fellow at the University of

Oxford's Smith School of **Enterprise and the Environ-**

Boxtel, Netherlands

Fuel Companies

From Fossil Fuels

Divestment movement launched...



Should the value of fossil fuel companies & countries be regarded as a six trillion dollar 'bubble"?

2013

Six Colleges, 16 Cities

And 11 Religious Insti-tutions Agree To Divest Stocks Of

Fossil Fuel Companies

2013

The logic of the "bubble"

BECAUSE... the fossil fuel reserves of companies are carried on their corporate balance sheets as assets at current market value

AND IF...fossil fuel reserves owned by companies and countries can never be burned

BECAUSE...burning risks pushing global warming into the catastrophic range **THEN...**the value of the fossil reserves are vastly overvalued, and... THUS...there is a what is regarded as a

"bubble" **AND...**at some point in time the market

will sharply reduce the stock price of those companies

2014

"The pensions, life insurances and nest eggs"



Why stigmatizing?

Similar campaigns targeted apartheid, tobacco and arms manufacturers. Associating fossil fuels with those industriest is what stigmatizing campaign is about.

Professor Lord Nicholas Stern - 2013

How big a bubble?

Esti. \$6 Trillion

Source: Grantham Research

Institute On Climate Change

Report And The Environment At

The second Carbon

pricking the bubble

"Smart investors can see that investing

in companies that rely solely or heavily

on constantly replenishing reserves of

questions as to the ability of the finan-

cial system to act on industry-wide long

measure of risk is performance against

fossil fuels is becoming a very risky

decision. The report raises serious

term risk, since currently the only

industry benchmarks."

Tracker report

London School for Economics.

Carbon Tracker

School for Economics

Prevent \$6 Trillion Carbon

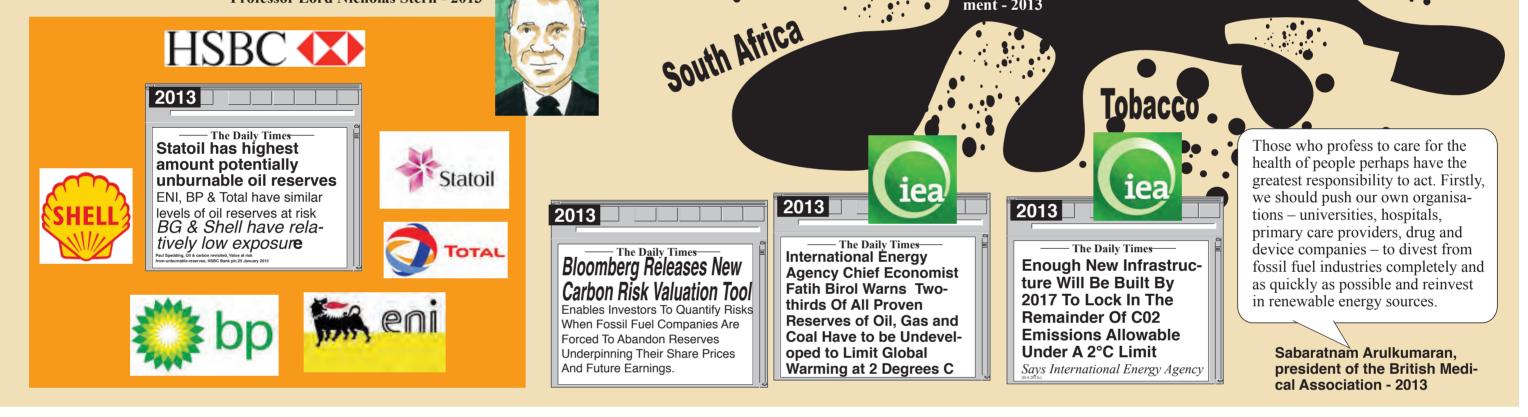
Bubble In The Next Decade Urges Carbon Tracker and the Grantham Research Institute On Climate Change Report And The Environment At London

Regulators, Governments And Inves-

tors Must Re-evaluate Energy Busi-

ness Models Against Carbon Budgets

2013



Divestment movement grows rapidly



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