Australian Dollar from Jan O7 to date Aug 2014.
Now in Downchannel (B) within Major Upchannel (A).
Australian Dollar decline should end above the lower UPchannel (A) for 2 years until Jan 2017

Figure . Comparison of the hight and low forecasts of a group of 20 economists prices 2003 to 2011. And the authors forecast of the share prices from 2011 to June 2016. **Forcast** - - - -
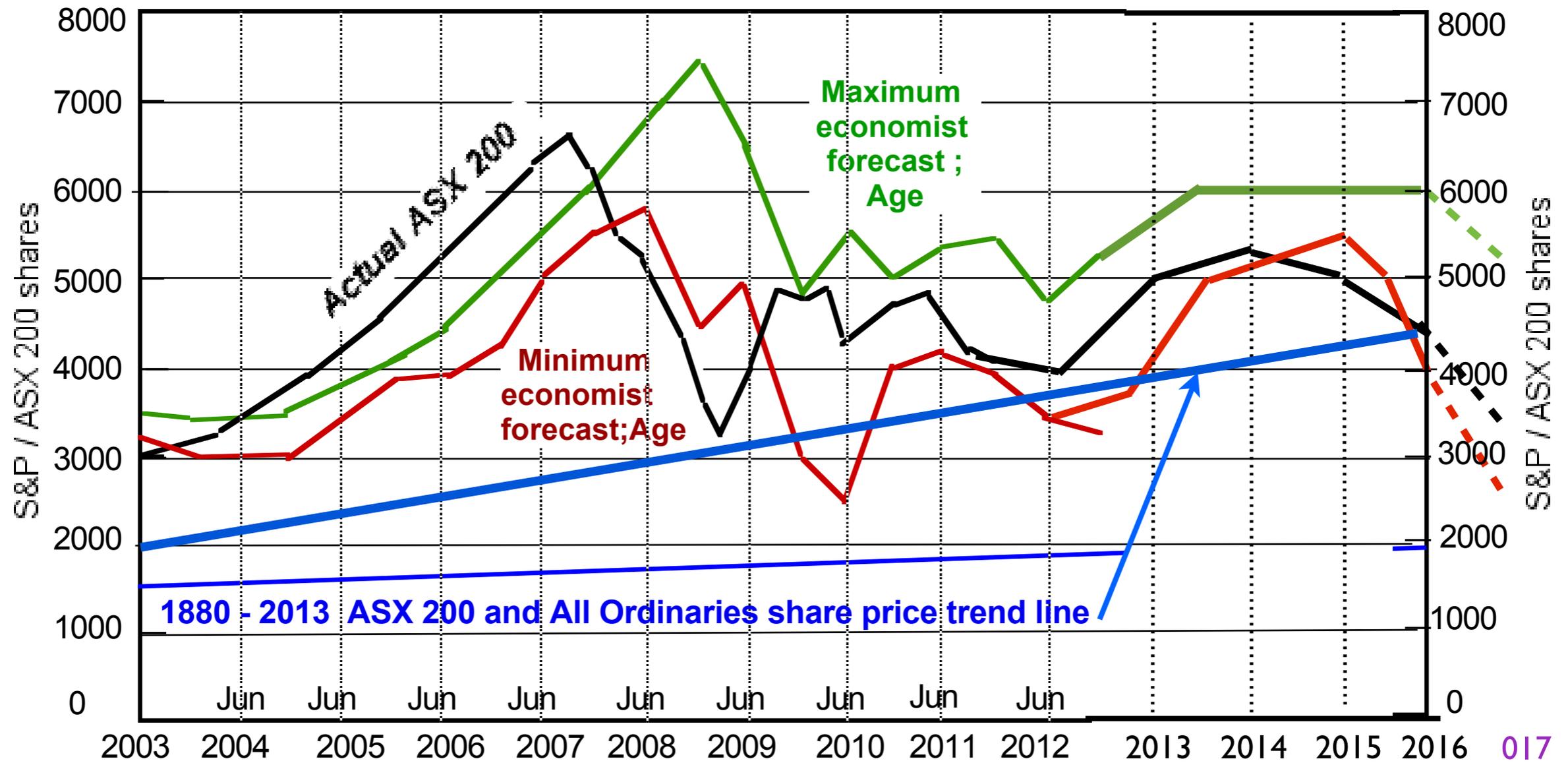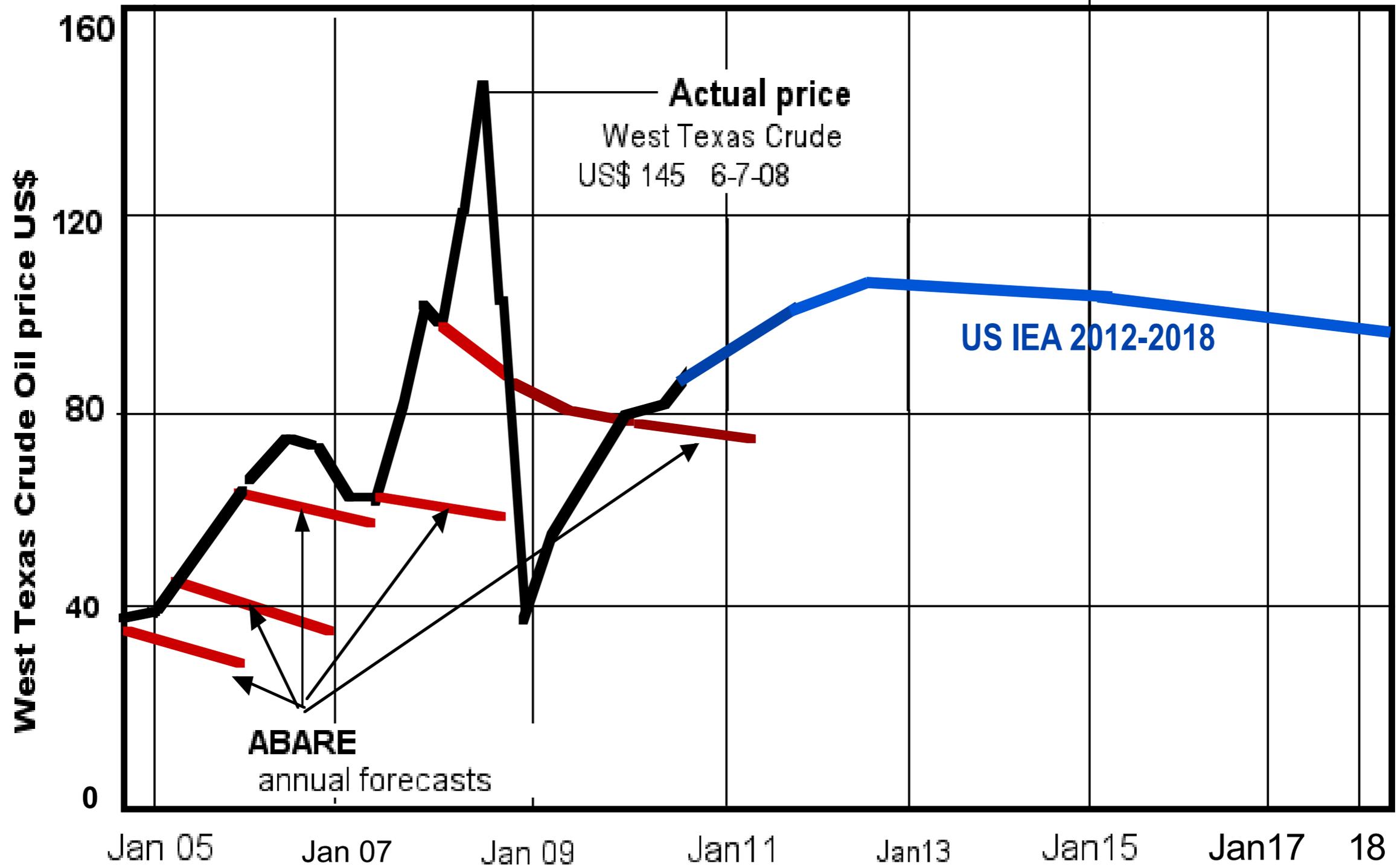
Figure 10. ABARE and the IEA recent oil price forecasts.

Crude prices have been falling as analysts scaled back expectations of an OPEC production cut. But the sharp dive after Thursday's meeting showed the decision was not priced in. Brent futures were down by $US5.20 a barrel at $US72.5 by 1801 GMT, after hitting a four-year low of $US71, the biggest monthly fall since 2008. US crude was at $US69 was down $US4.7. At its lowest point on Thursday, it traded at $US67.75 or nearly $US6.00 down on the day. Its weakest since May 2010.
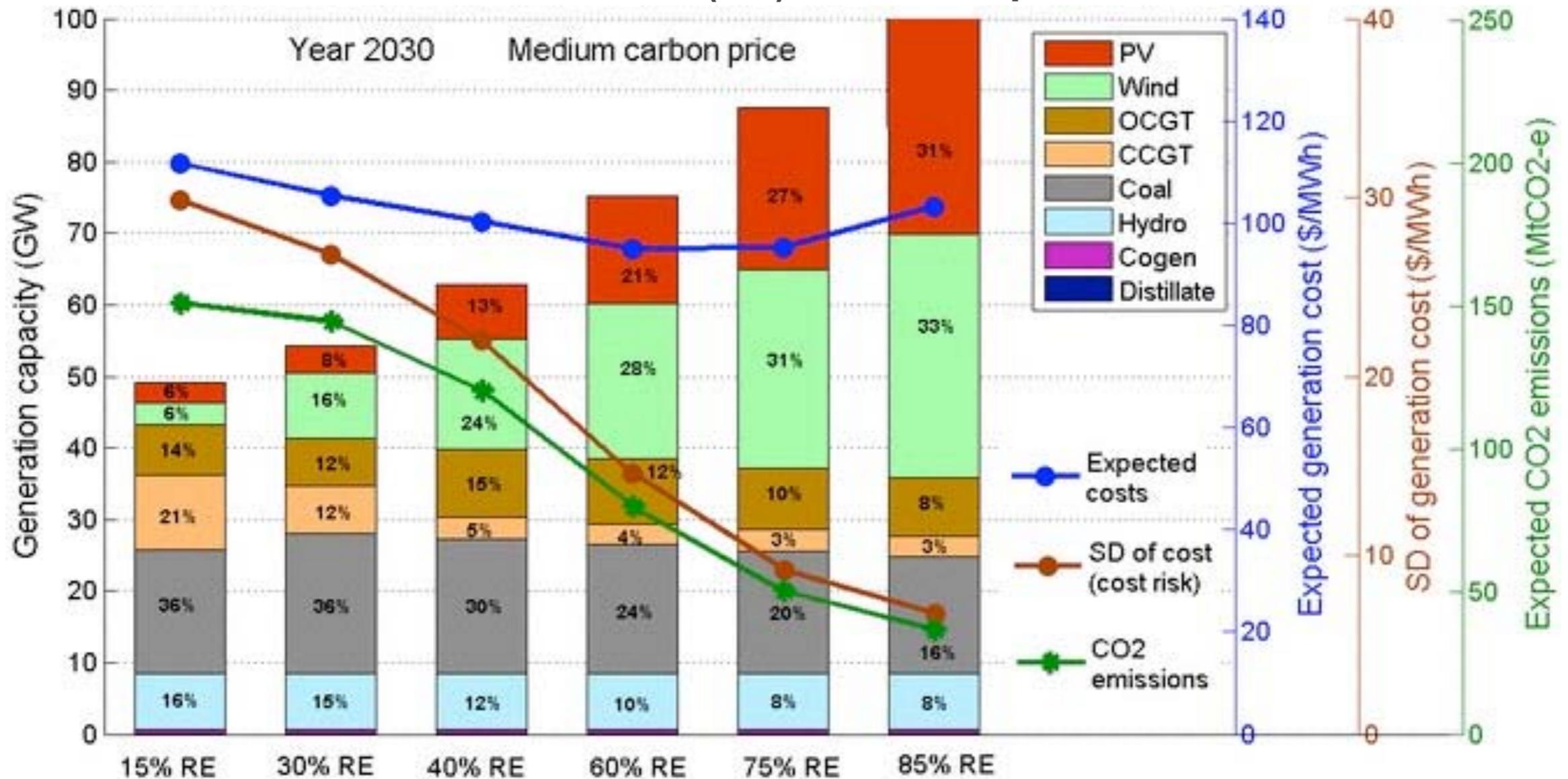
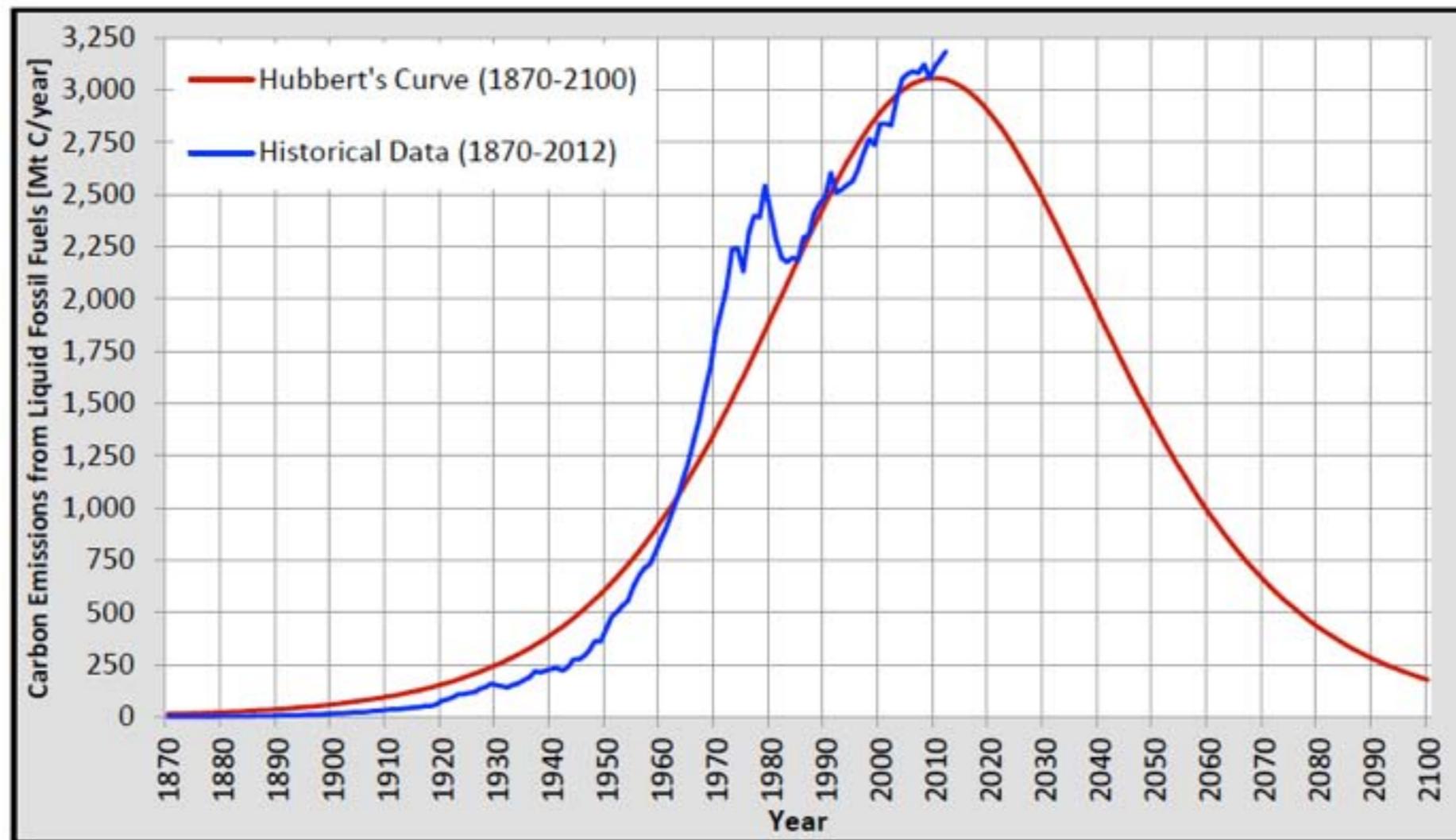**The table shows two versions of a series of break-even points.**

Below which oil producer states, budgets suffer as the price of oil declines.

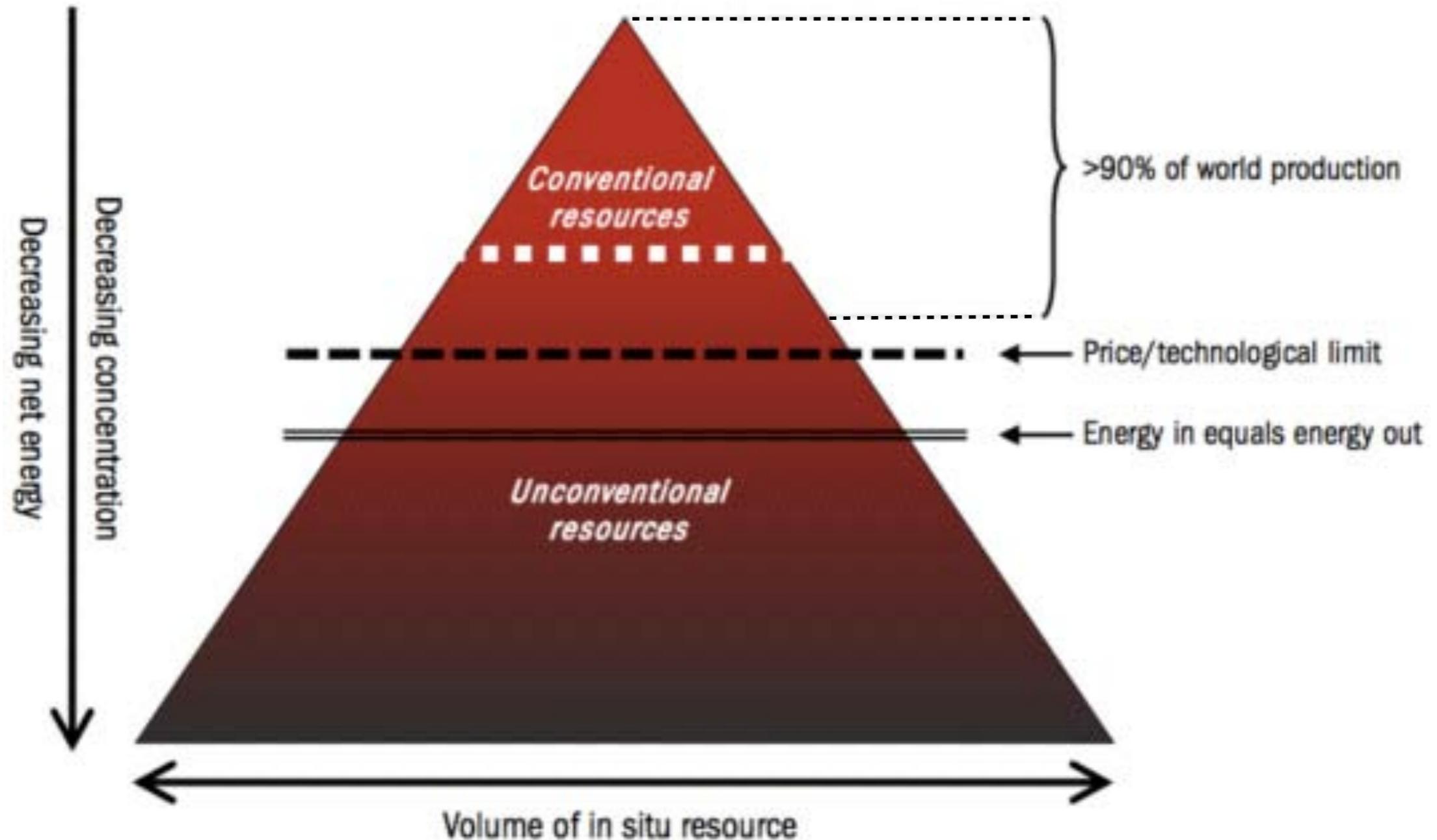| Oil-producer	RT a	The Economist b
	(US$/b)	(US$/b)
Iran	148	137
Venezuela	121	120
Algeria	121	119
Nigeria	119	118
Equador	117	121
Iraq	106	115
Angola	98	94
Saudi Arabia	93	93
Libya	90	110
Kuwait	75	71
UAE	70	69
Qatar	65	70

Renewable generation can mitigate cost risk associated with gas and carbon price uncertainty, with each addition of 10% renewable energy reducing this cost risk by an average of 20%. So the cost of investing in renewable generation at present can be framed as an "insurance" or hedge against future extreme prices. If and when the world becomes serious about addressing climate change. Results of the modelling are shown in Figure 1 where standard deviation (SD) of costs represents cost risk.
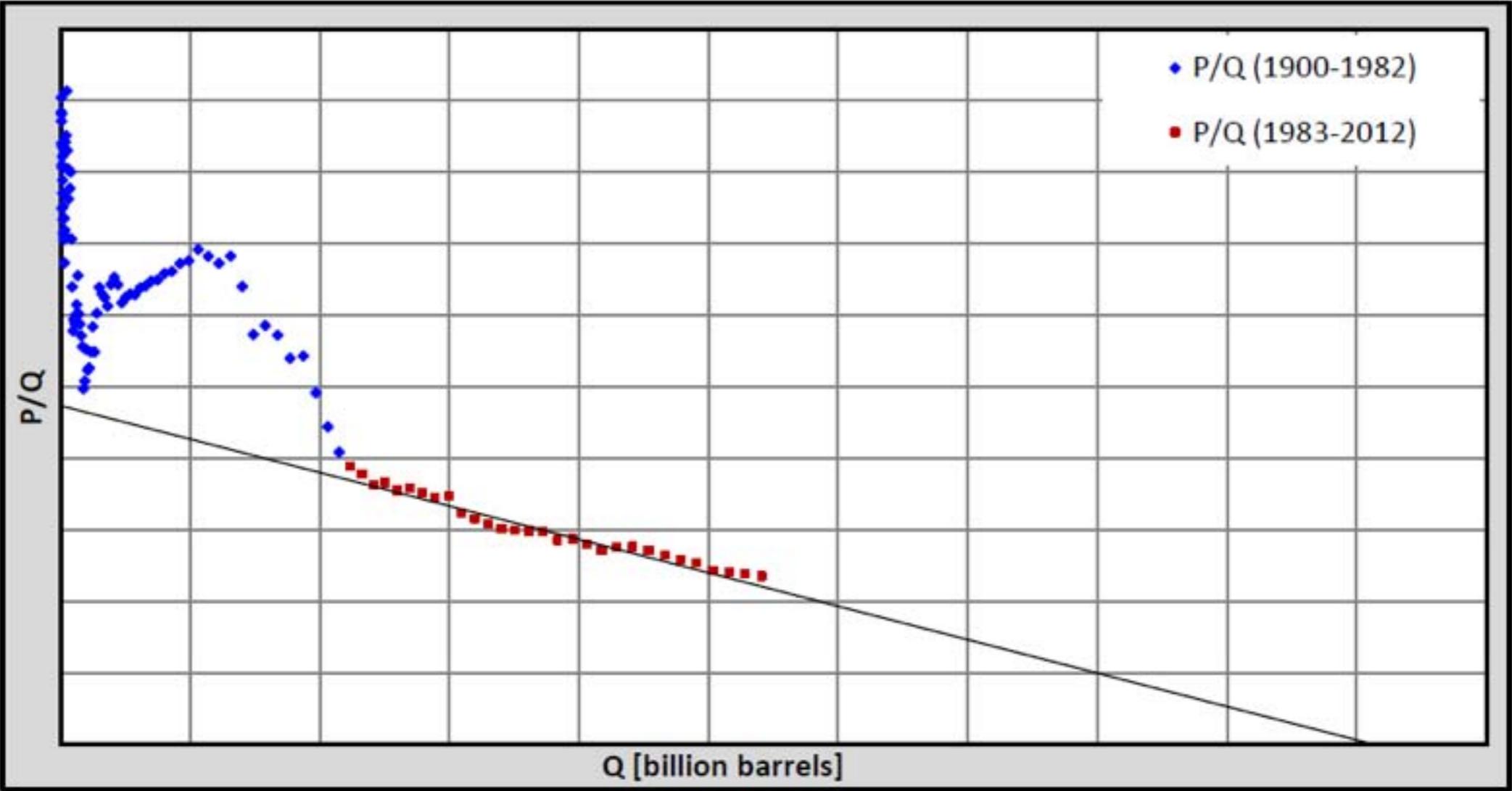
Until Colin J. Campbell and Jean H. Laherrère published their paper, "The End of Cheap Oil" in 1998. It stated that the petroleum geologist Marion King Hubbert (1903 – 1989) was all but forgotten, including his correct forecast – back in 1956 – of the US's peak of oil production in 1970. They also said that barring a global recession, it seems most likely that world production of conventional oil will peak during the first decade of the 21st century." It took another 12 years but eventually the oil production optimists in the International Energy Agency (OECD data), also had to admit in their World Energy Outlook of 2010 (IEA, 2012) was that Hubbert was correct .

It seems world production of conventional oil will peak during the first decade of the 21st century.
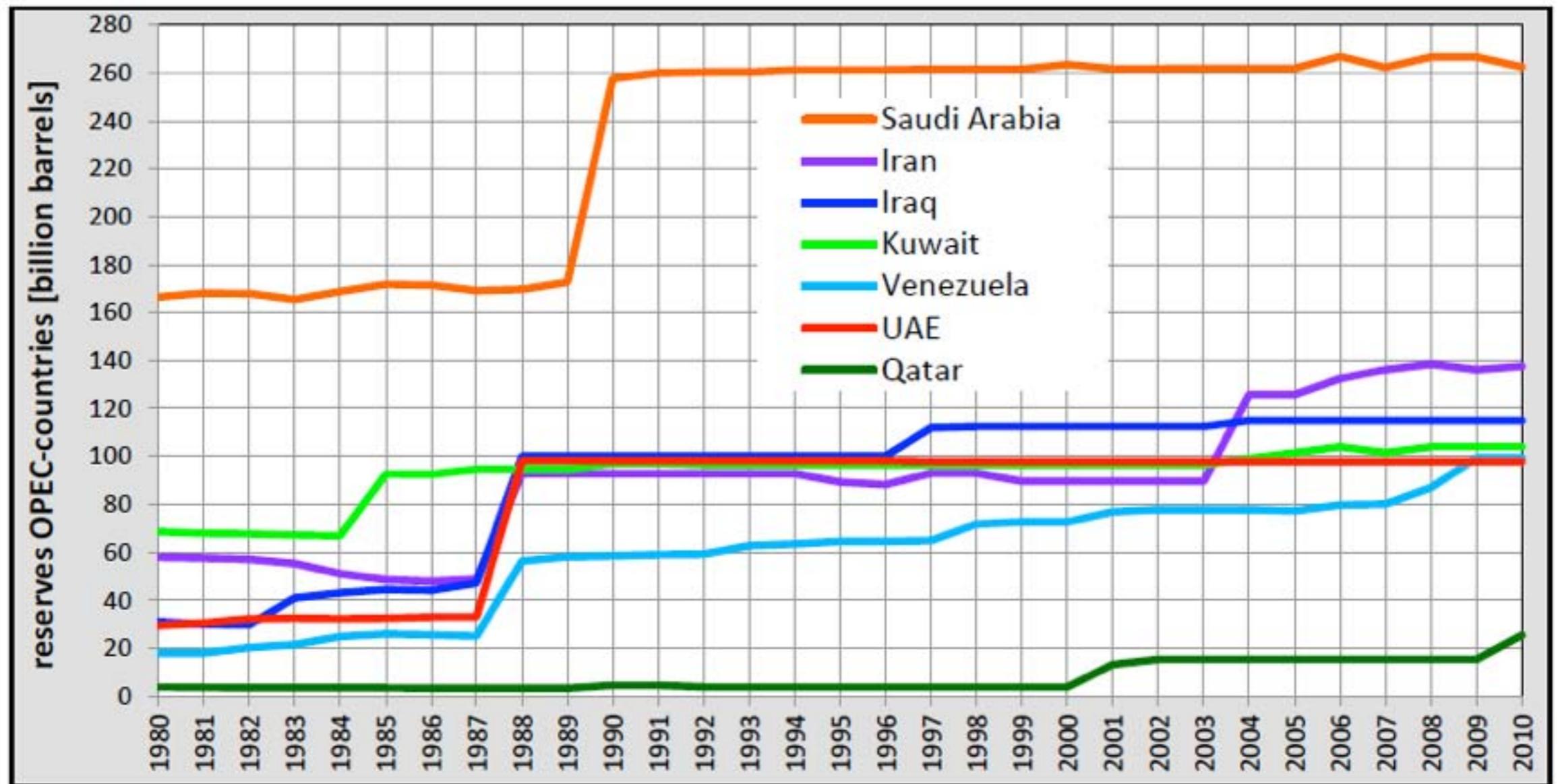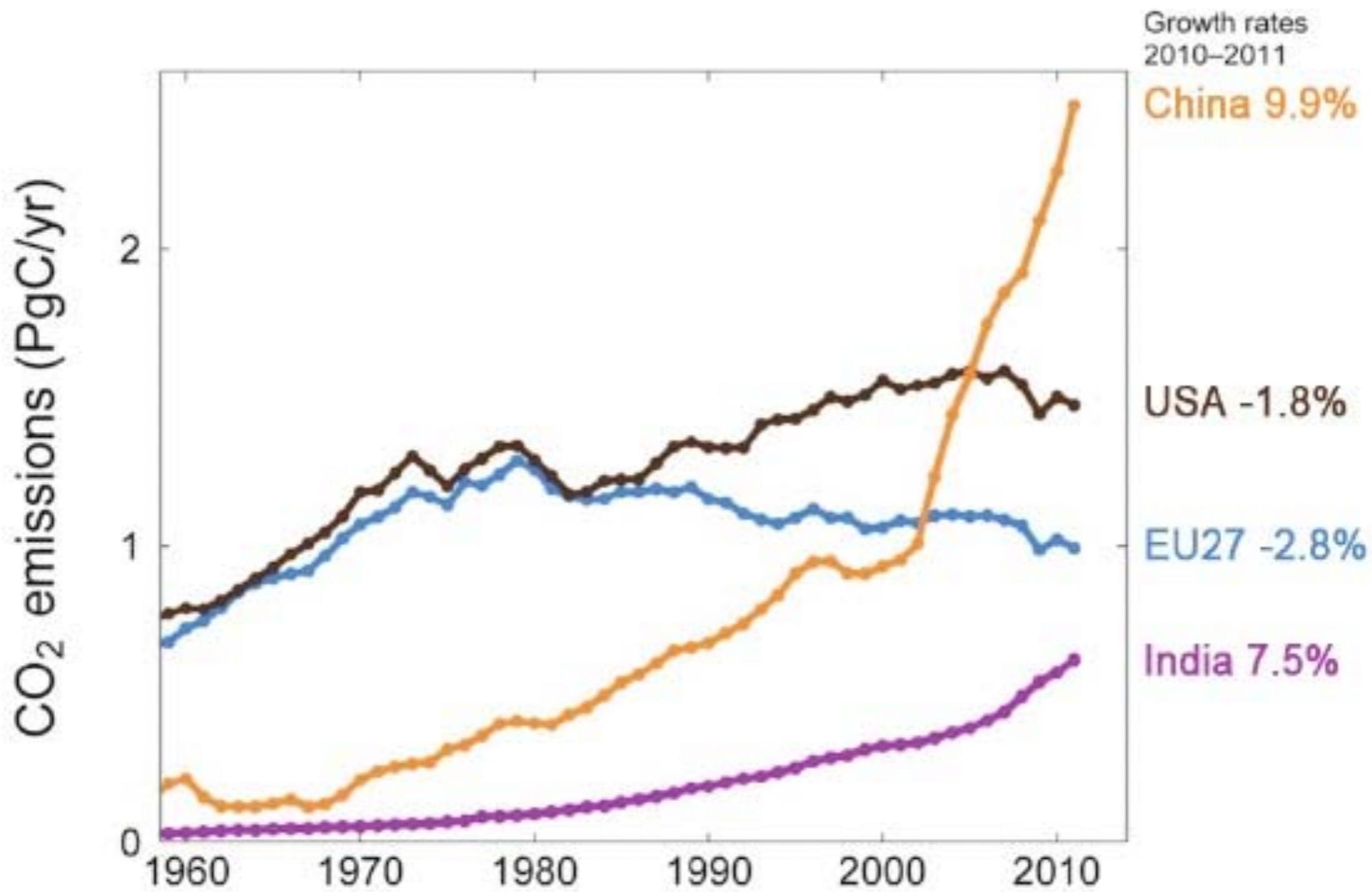
Marion K. Hubbert discovered a peculiar pattern in oil production data, which allowed him to make a fairly accurate estimate of the amount of oil "yet to be discovered". This almost sounds like a contradiction of terms: how can you know how much oil you are going to discover in future decades? Still, Hubbert discovered a linear trend in historical oil production data and a linear trend can easily be extended into the future. The graph 2 shows the pattern of oil production that Hubbert discovered:

It's not the amount of fossil fuel reserves that counts; it's the rate at which they can be extracted. The big oilfields with high quality and easy to get petroleum are mostly depleted. We are now looking for ever smaller fields in ever harder to reach locations, like the ocean floors and the arctic. When it's ever harder to get the oil, this will result in a slowdown of the rate of extraction (i.e. going down the other side of Hubbert's curve).
Source: compilation of U.S. Energy Information Administration data (EIA, 2013)
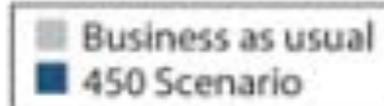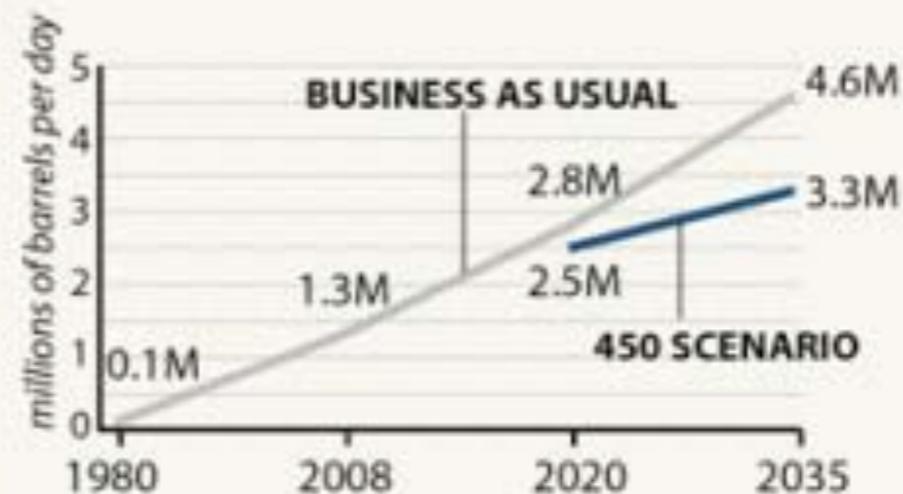
The 450 Scenario: Oil Sands in a Low-Carbon World

Scientists warn that the CO_2 concentration in the atmosphere must not exceed 450 parts per million. How can we understand the oil sands and Keystone in the context of a low-carbon world that meets that target?

The State Department did not consider this question, but the International Energy Agency has. The IEA found:

- Business as usual
- 450 Scenario

1 Under the 450 scenario, oil sands production would have to decline by 1.3 million barrels per day over the next 20 years, relative to business as usual — close to double the capacity of KXL.

CANADIAN OIL SANDS OIL SUPPLY, 1980-2035

millions of barrels per day

BUSINESS AS USUAL — 4.6M

2.8M — 3.3M

1.3M — 2.5M

0.1M

450 SCENARIO

1980 · 2008 · 2020 · 2035

2 Under the 450 ppm scenario, oil consumption in the U.S. and the rest of the world would decline significantly.

OIL SUPPLY AND DEMAND PROJECTIONS, 2035

U.S. oil consumption
16.7M
10.5M

Global oil liquids demand
111M
78.2M

barrels per day

inside climate news

Keystone XL's Carbon Footprint in Context

The fuel that would be delivered by the Keystone XL is estimated by the EPA to cause roughly **1 billion tons of extra carbon dioxide emissions** over its lifetime, compared to a typical mix of fuels.

That's roughly the same as the amount of carbon emissions spewed by the 100 biggest coal plants in the U.S. in 2011...

...which is the equivalent of the annual emissions of all passenger vehicles in the U.S....
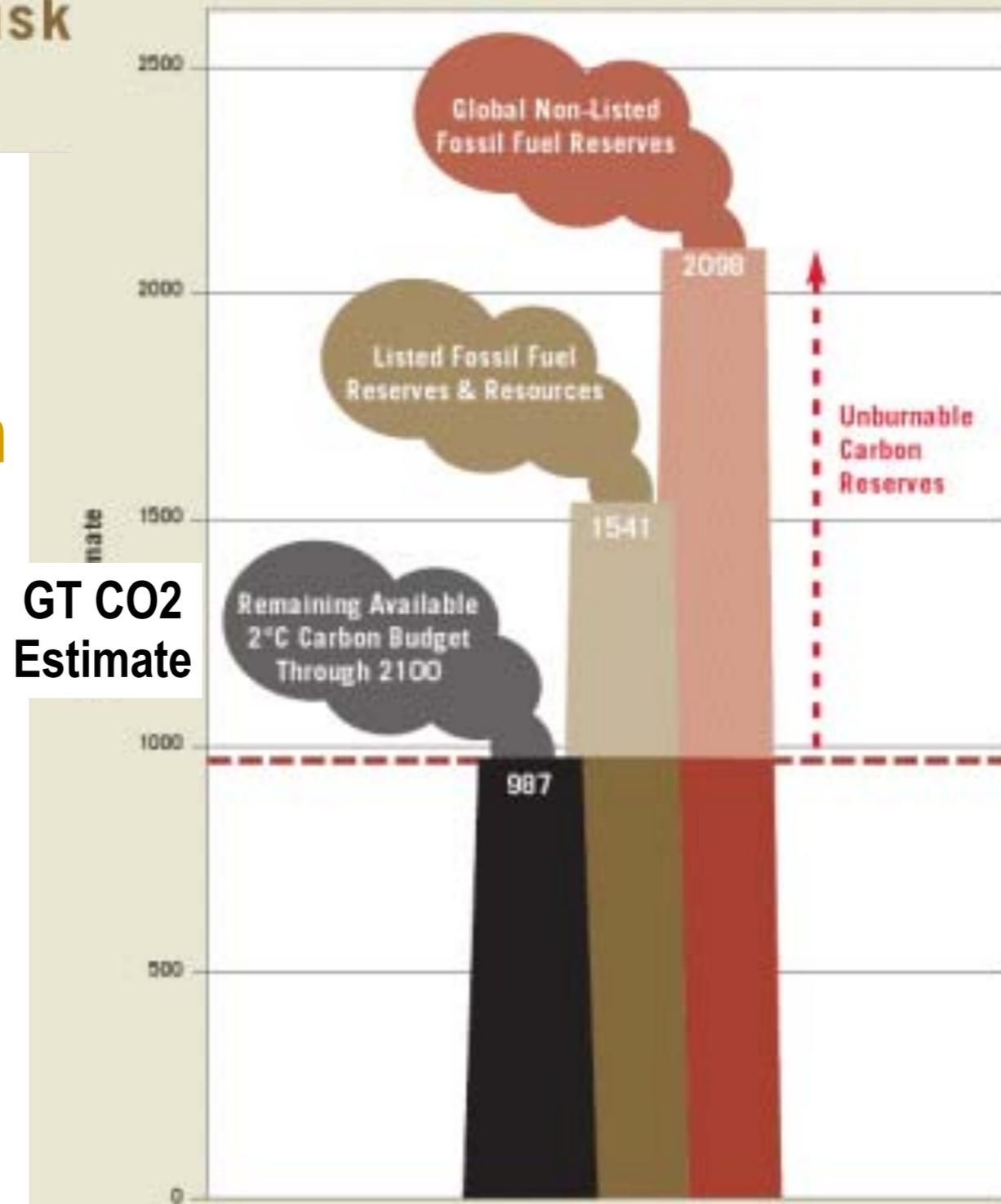
The Deepwater Horizon explosion
(Courtesy: U.S. Coast Guard)

Fossil Fuel Assets at Risk
Unburnable Carbon Reserves

Only energy efficiency and the long haul towards decarbonisation can tackle rising energy bills. Everything else is a sideshow. The significant portion of global fossil fuels must remain in the ground.

GT CO2 Estimate

Global Non-Listed Fossil Fuel Reserves

2098

Unburnable Carbon Reserves

Listed Fossil Fuel Reserves & Resources

1541

Remaining Available 2°C Carbon Budget Through 2100

987

2500
2000
1500
1000
500
0

Ecological Cuban Recipes Boost Sustainable Agriculture

They began sun-drying root vegetables such as cassava, sweet potato and taro (malanga), and making all-natural homemade pickles using cucumbers, peppers and mixed vegetables. They founded the Community Food Preservation Project

Renewable generation can mitigate cost risk associated with gas and carbon price uncertainty, with each addition of 10% renewable energy reducing this cost risk by an average of 20%. So the cost of investing in renewable generation at present can be framed as an "insurance" or hedge against future extreme prices. If and when the world becomes serious about addressing climate change. Results of the modelling are shown in Figure 1 where standard deviation (SD) of costs represents cost risk.
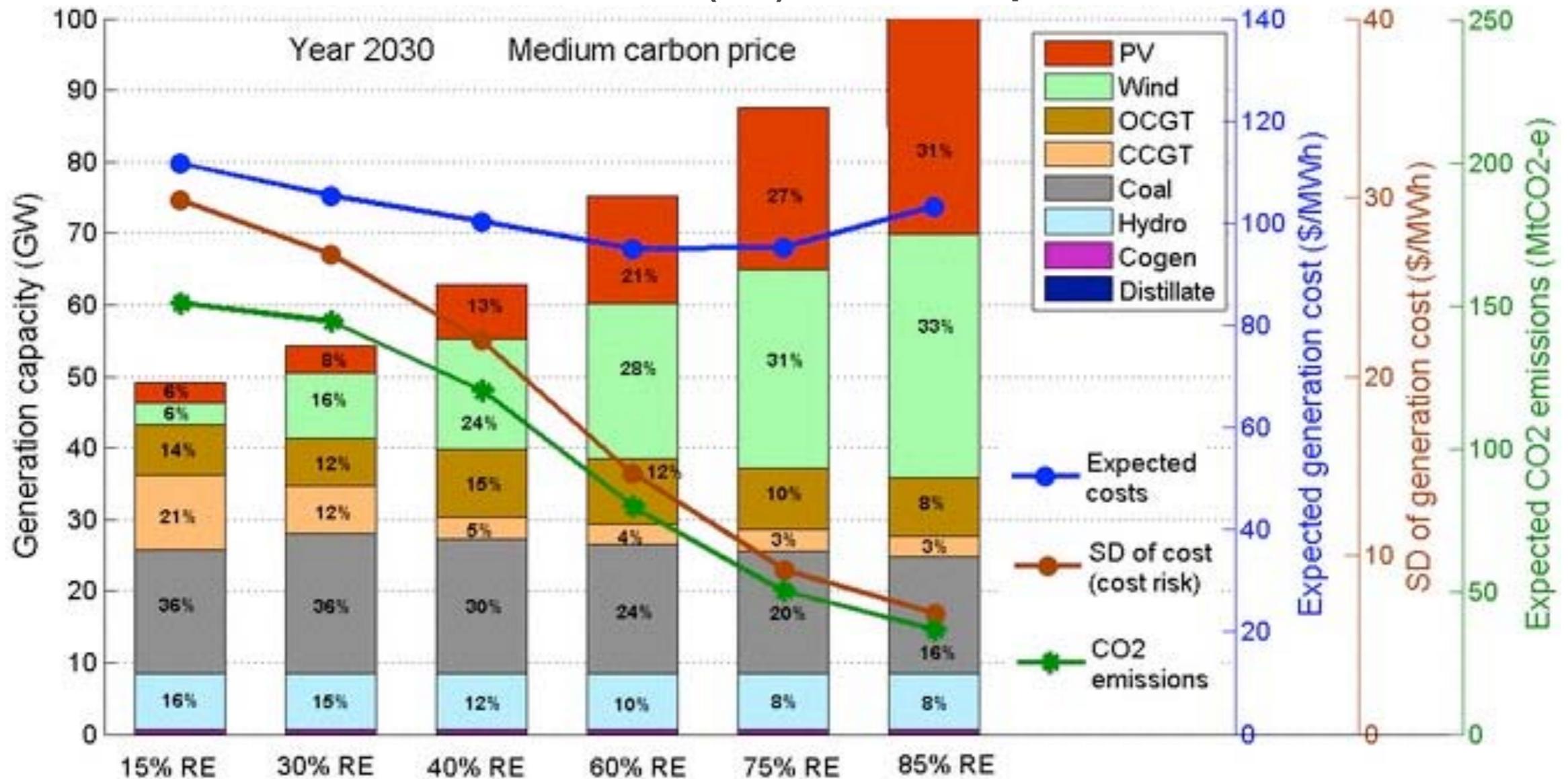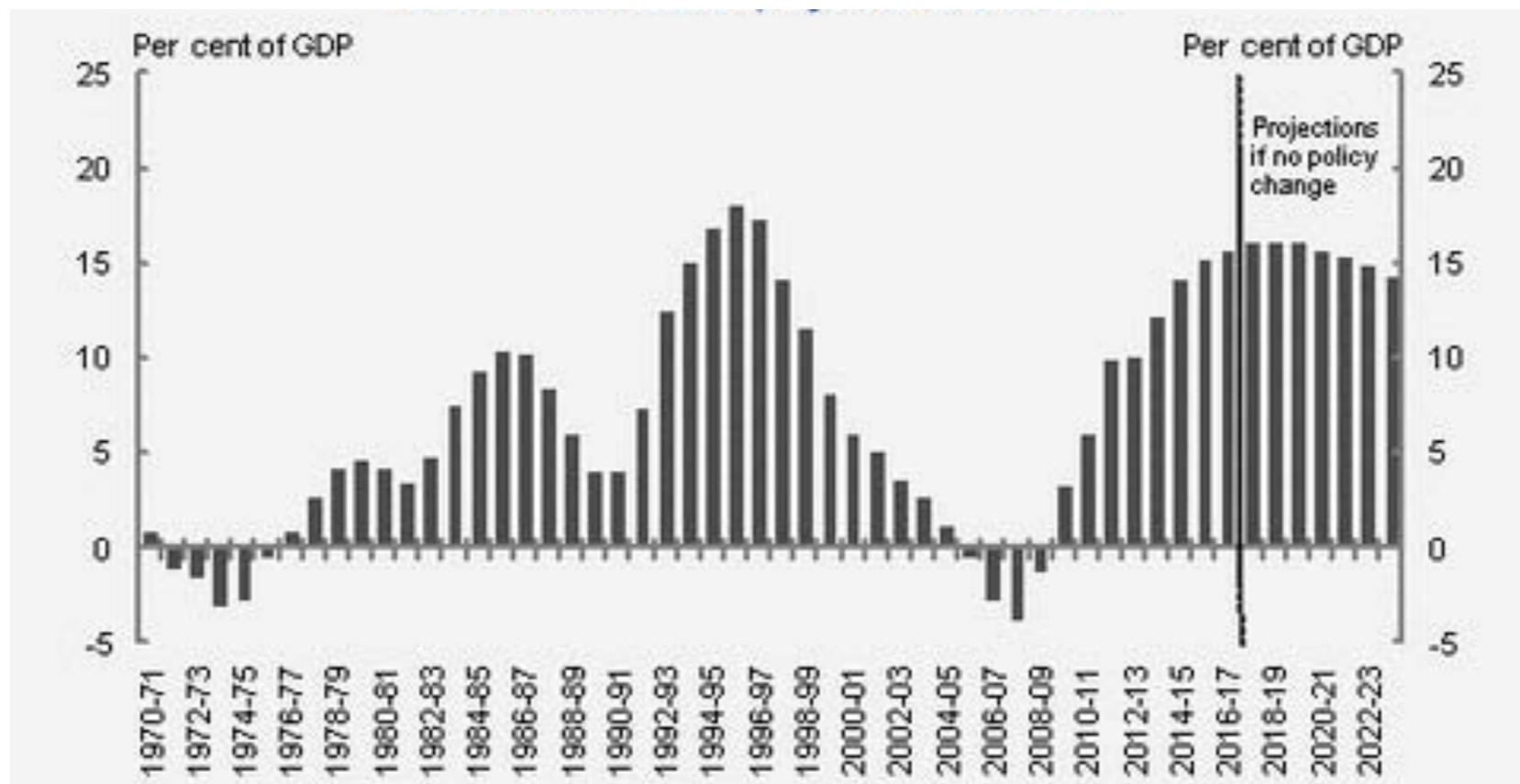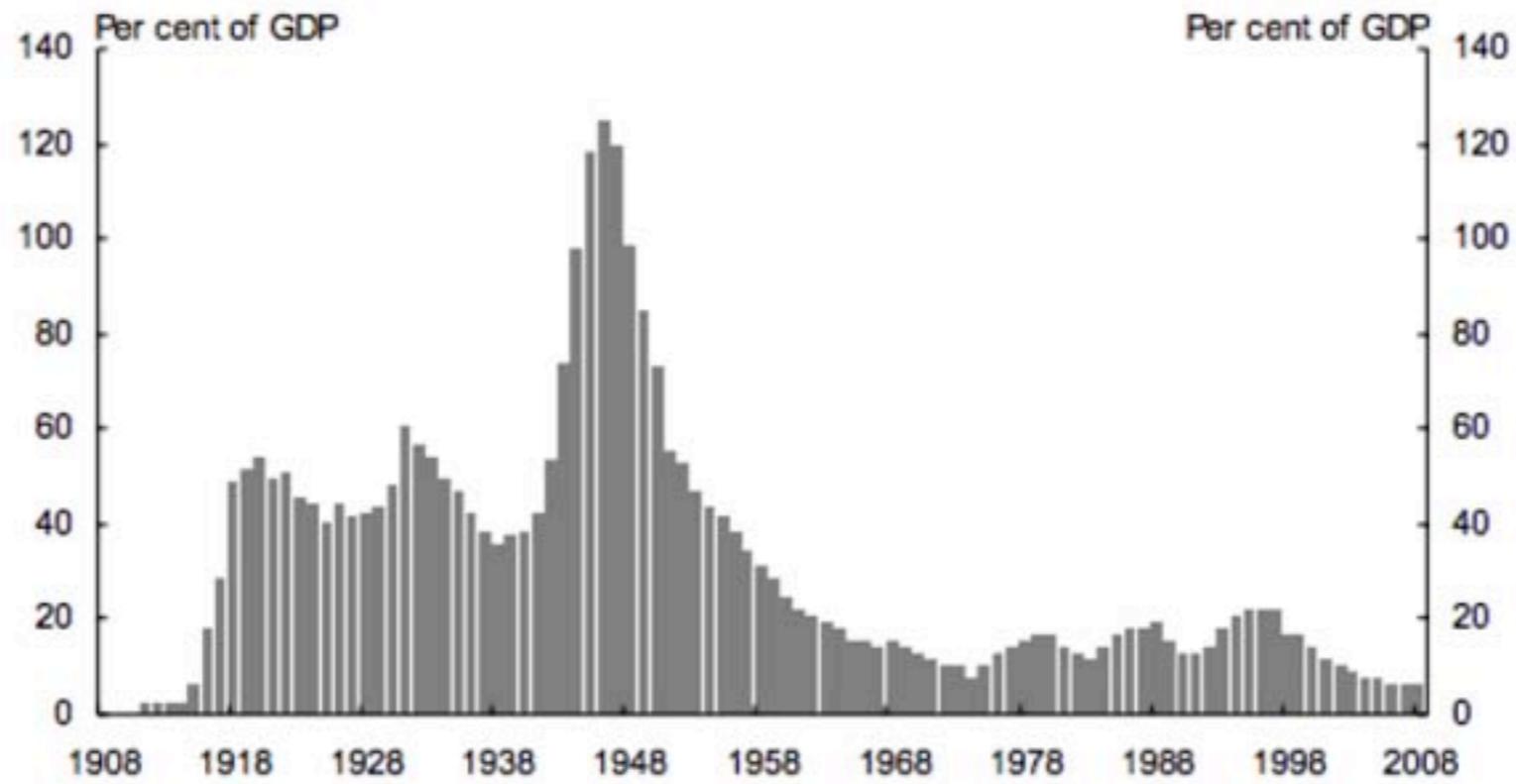
Chart 5: Australian Government public debt (at 30 June)[6]

Per cent of GDP

Per cent of GDP

Per cent of GDP

Per cent of GDP

Projections if no policy change

Energy-related carbon dioxide emissions
percent change from 2005

history | projections

- coal
- natural gas
- petroleum
- all fossil fuels