



**Aberdeen
Climate
Action.org**

Aberdeen
Climate Week

Central Library
4 March 2015

18:30 – 19:30

What is Climate Change and Why Should I Care?

*Prof. Pete Smith,
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What is Climate Change and Why Should I Care? *(part 1)*

Ir. Erik Dalhuijsen

Principal Production Technologist,

Director

Oceanvalley Ltd

Where does Climate Change feature?

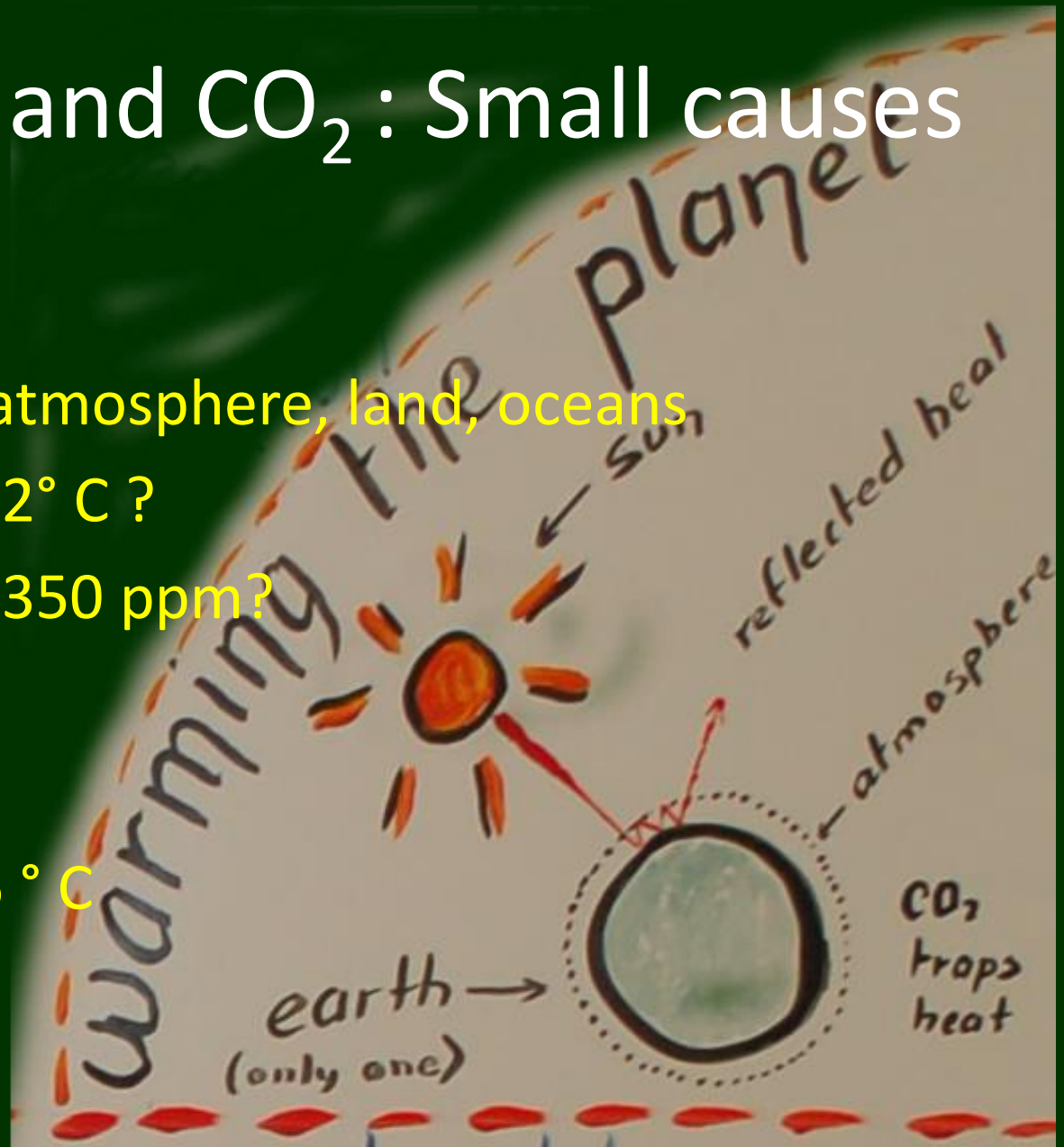
- Energy, Democracy, Industry lobbying, profit, economic growth, economical theory, Thatcherism, corporate governance, financial markets, banks, pollution, GDP, national debt and government spending ability, systemic pesticides, military industry, pharmaceutical research and patent law, forest destruction and habitat loss, overfishing, GM agriculture, oil exploration, Growth Economy, fashion industry, corporate land grabs, world hunger solutions, cancer rates, wars, refugees, infrastructure projects, World Bank, IMF, Western aid allocation, Trade Agreements (TTIP, WTO, TPP etc), Scottish Independence, land ownership, old conspiracy theories, Party Politics, academic independence and donor research bias, green political thought, organic food, biodiversity, indigenous peoples, free market capitalism, bonus culture, television, news media ownership, electoral processes, ...

Climate Change & Warming

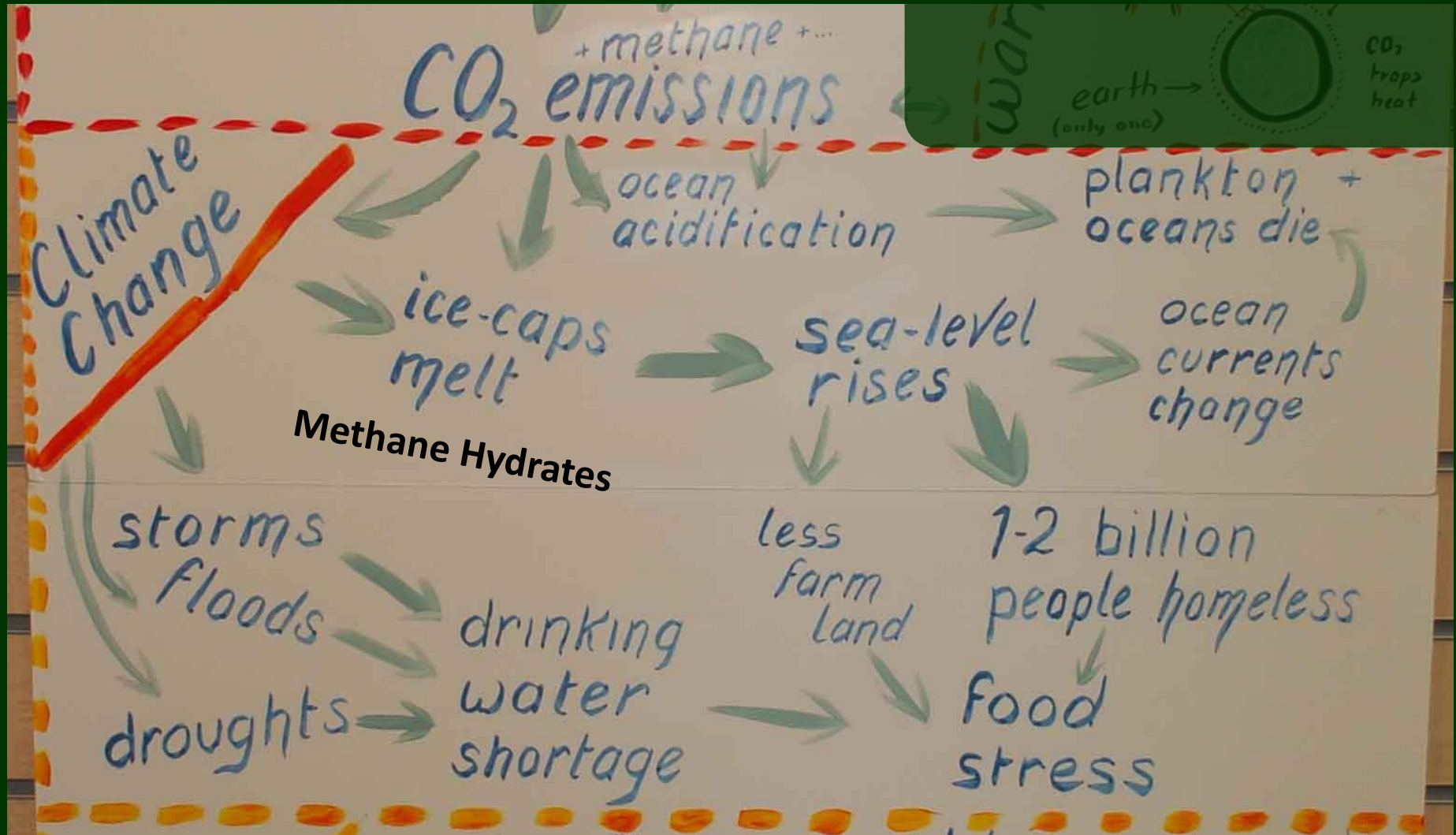
- Small Causes, Large Effects
- Slight
 - warming of atmosphere, land, oceans
- Large
 - potential for irreversible damage, negative change
 - impact on all people now and in the future
 - risk to established political power systems
 - opportunity to “make things better”

Warming and CO₂ : Small causes

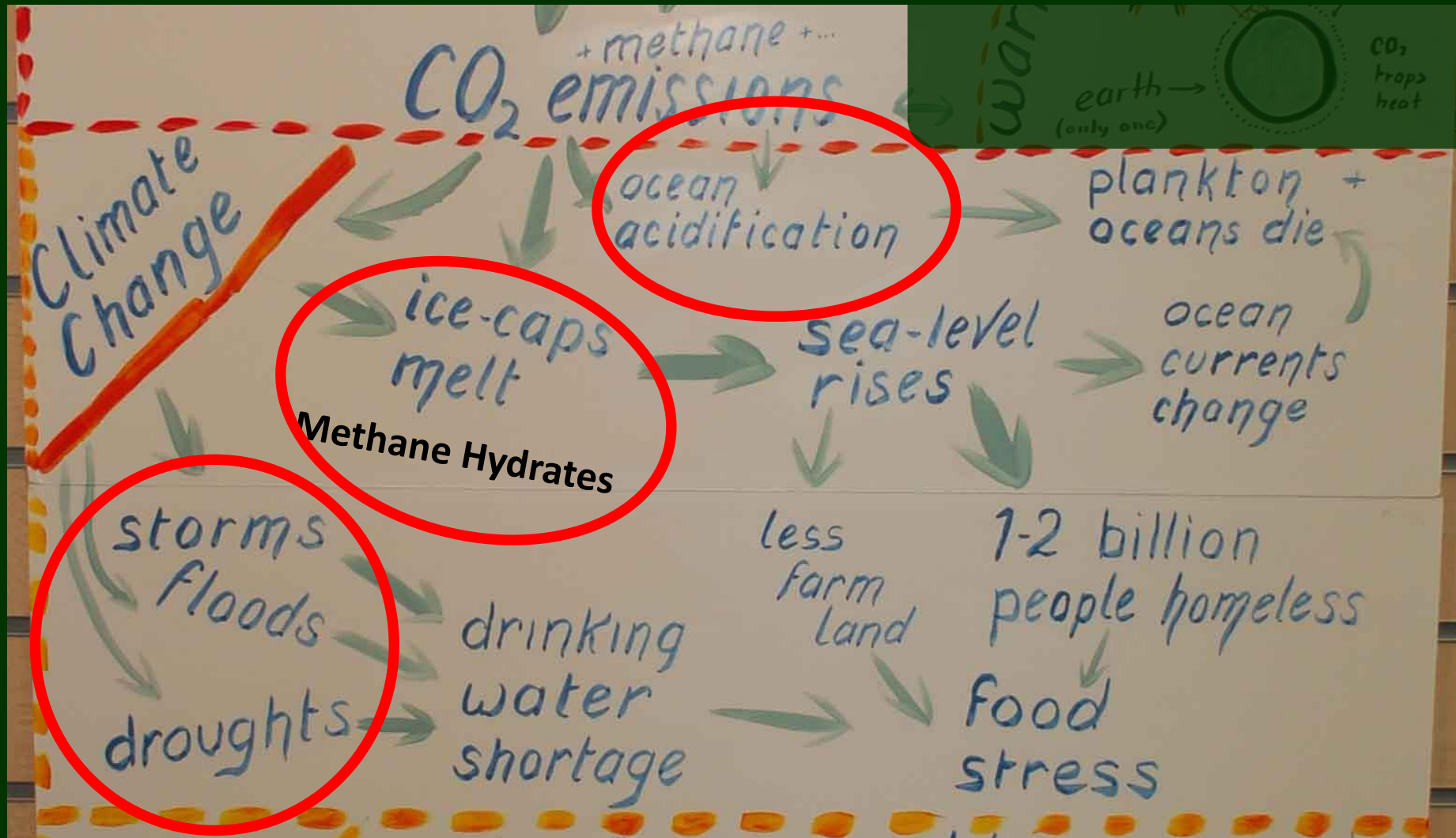
- Slight
 - warming of atmosphere, land, oceans
 - Stable up to 2° C ?
 - Stable up to 350 ppm?
- Now at
 - 0.8 ° C -> 1.6 ° C
 - 400 ppm



Warming and CO₂ : Large Effects



Warming and CO₂ : Large Effects



Climate Change Causes

- Industry (+ people)
 - coal, oil, gas
 - chemical, agrochemical, construction, airline & travel, manufacturing..




+ influenced press (as financiers)

+ influenced government (as advisers and financiers)

+ trade agreements (lock-in regulatory powers)

- Burning Carbon Fuels (or selling them)
- (+ deforestation, industrial methane, cow farts, other pollutants)

- 
- CO₂ emissions

– (+ methane, etc)

The Scale of the Problem

2° C - Carbon Budget – Carbon Reserves

- 2°C
 - Agreed as max by most governments and scientists
- 565 GT of carbon
 - Cumulative emissions to get there
 - 15 years at current rate

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- 2795 GT of carbon
 - Proven reserves of carbon industry

5x too much
80% unburnable

Stranded Assets

- **Mark Carney, Governor, Bank Of England**
 - With a letter dated 30th October 2014, the Governor has formally informed the Environmental Audit Committee of the UK Parliament of the Bank's decision to widen and deepen the enquiry into "unburnable carbon" – those fossil fuel assets that will need to remain unexploited if climate change is to be kept to the internationally agreed 2°C level of warming. As part of the enquiry, the Financial Policy Committee will investigate the potential risks fossil fuel assets pose to financial stability. This is the first major acknowledgement from a financial regulator that most of the world's listed coal, oil and gas reserves could become "stranded assets" and have significant financial consequences. (CarbonTracker)
- **Paul Fischer, Prudential Regulation Authority, BoE**
 - "As the world increasingly limits carbon emissions, and moves to alternative energy sources, investments in fossil fuels – a growing financial market in recent decades – may take a huge hit,"
- **Divestment**
 - (including Norwegian state "petroleum fund")

Extra

slide Oil+Gas Industry 25 years and on

- Energy companies 1990



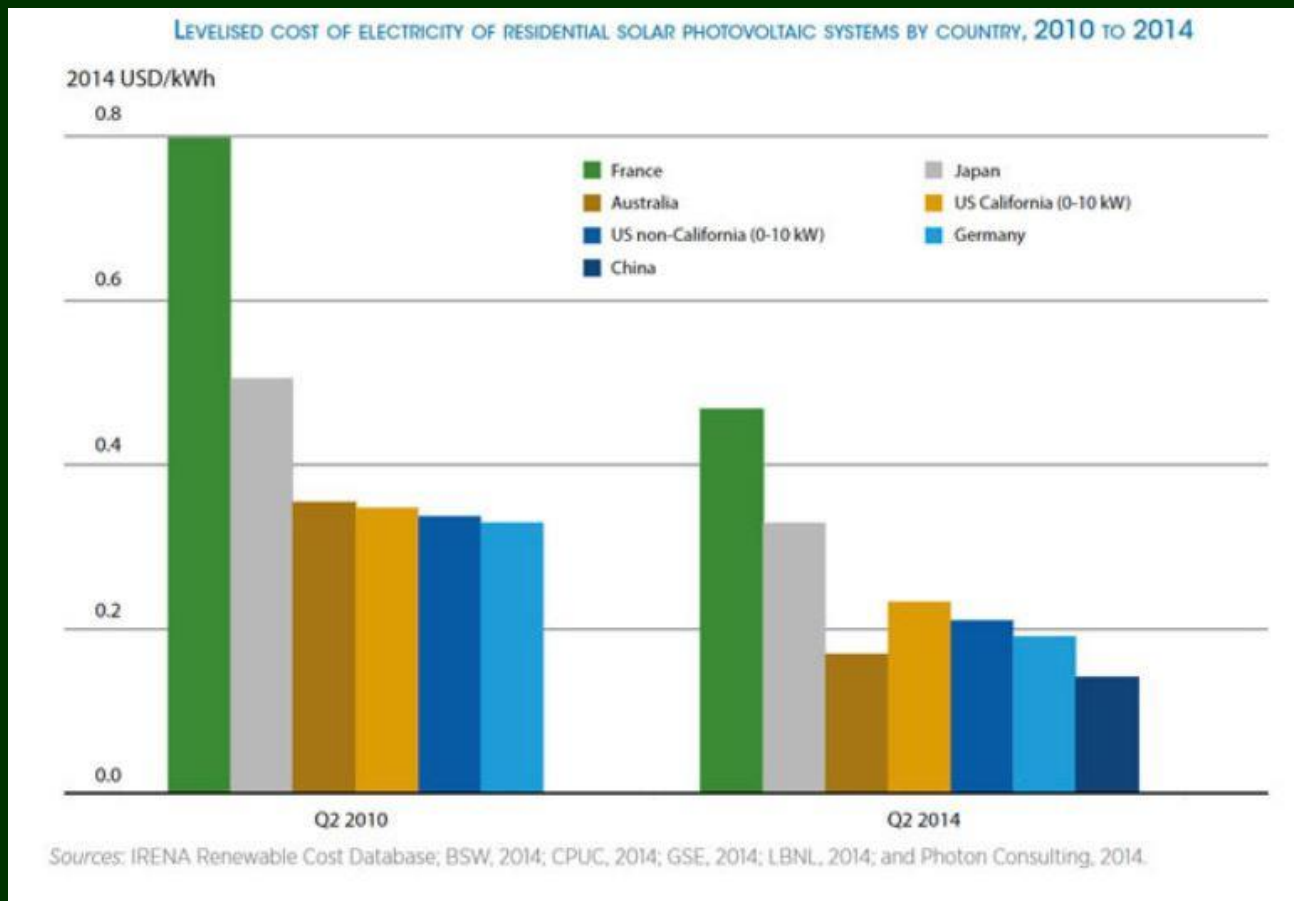
- Oil Companies 2000 - 2014



- Energy Companies 2015?
 - Buy BP ?
 - Or buy Iberdrola + Eon + Scottish Power + spare change

Cost Of Renewables - Solar

- IRENA (International Renewable Energy Agency)





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