

Sustainable Energy conference (SEC-2017)

Centre Maurits Coppieters (CMC) research

Presentation done by

Olrik Bouma
Elise de Groot





Introduction

Cooperation between Centre Maurits Coppieters & Fryske Nasjonale Partij

Head researcher Elise de Groot

Linking technical possibilities to political obstacles

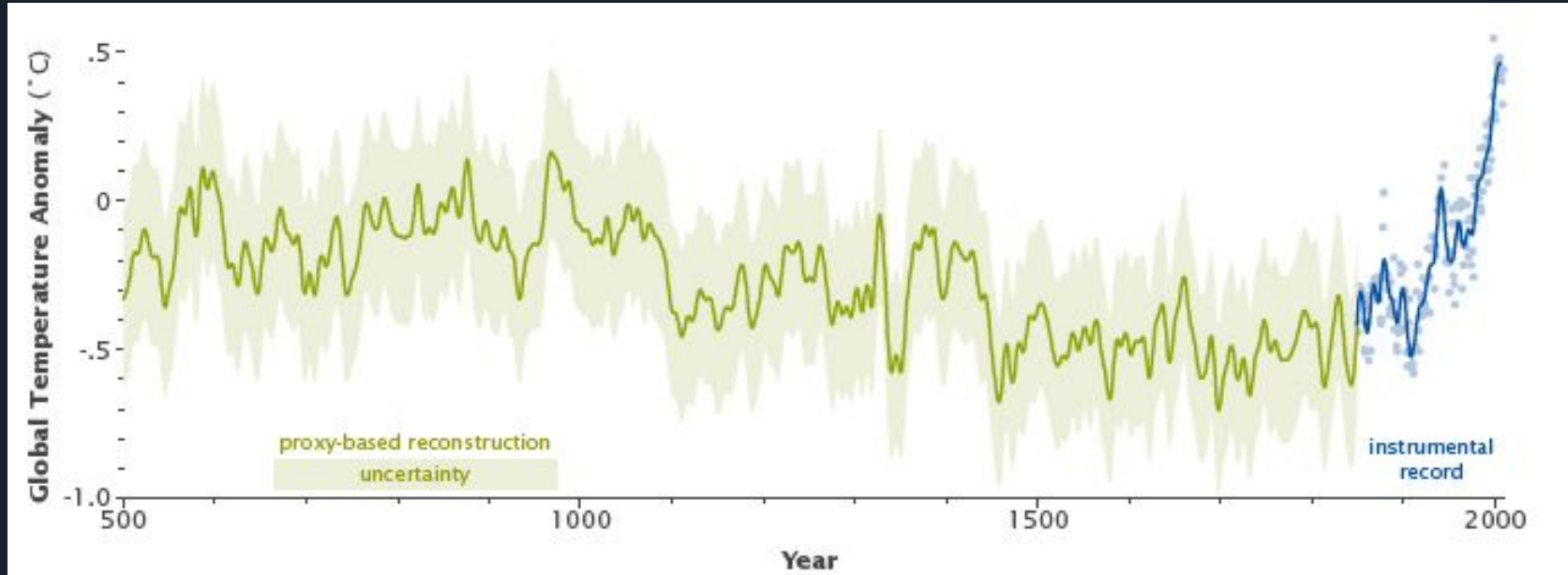


Why is this research relevant?

There several problems caused by climate change

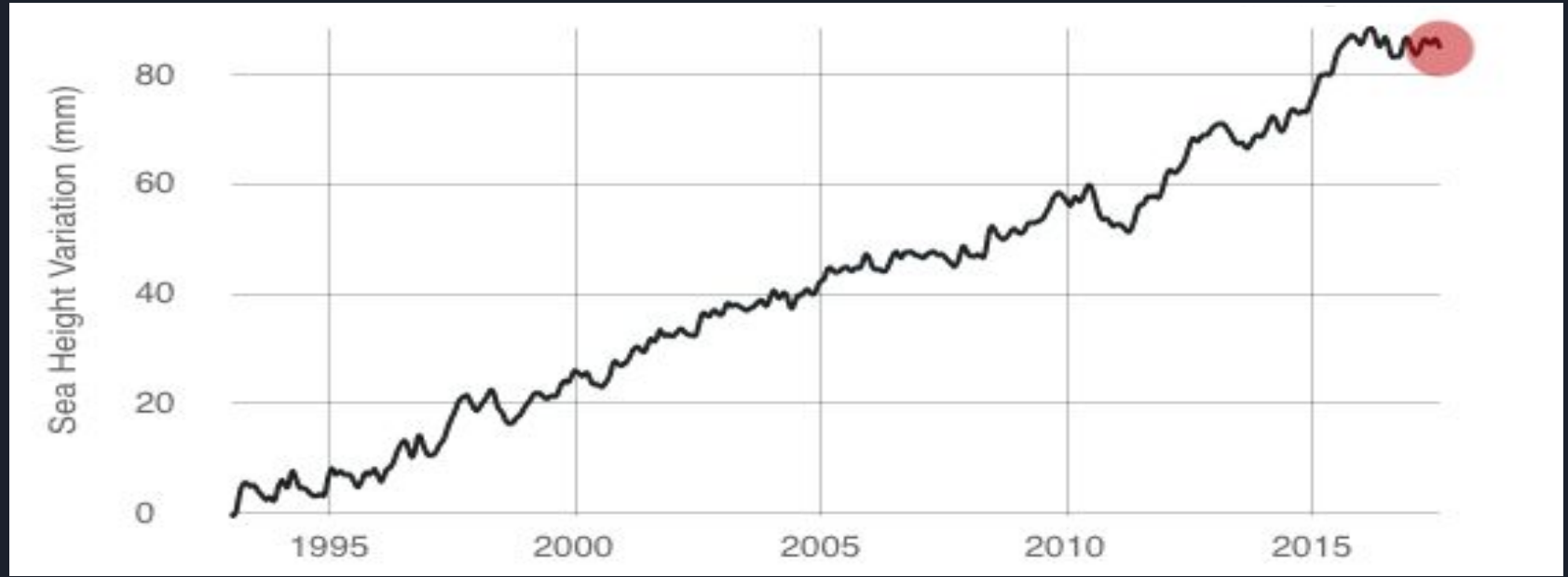
Why is this research relevant?

- 1.) Increase in temperature & heat-trapping gasses



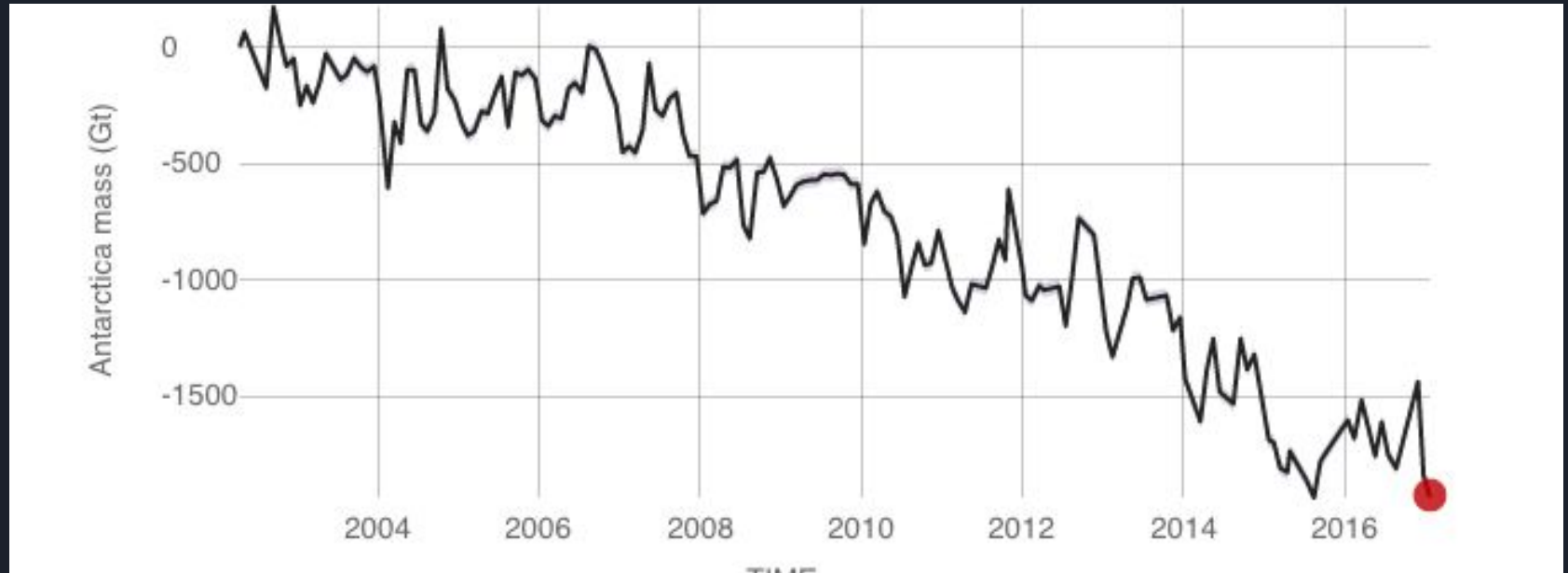
Why is this research relevant?

2.) Rising sea level, warming of the oceans & Ocean acidification



Why is this research relevant?

3.) Shrinking ice & increase in 'extreme events'





Why is this research relevant?

Human activities most likely caused warming our planet.

A group of 1,300 independent scientific experts from countries all over the world under the auspices of the United Nations, concluded there's a more than 95 percent probability that human activities over the past 50 years have warmed our planet.



Why is this research relevant?

Fossil Fuels are depleting

It is known that within years all fossil fuels will be depleted. Some faster than others but most importantly a change is needed.

Already in 2008 researchers concluded that in 2112 all fossil fuels will be gone and oil/gas will be completely gone after 2042.



Why is this research relevant?

Some projects are Technological and Economical feasible

The reason why it has not come to reality are Political Obstacles

Therefore this research is relevant.

Determine the problems and obstacles, then act on it



What are the political obstacles within the transition towards renewable energy?



The research methodology

Interviews & Literature research

Investigation per region

The regions

Fryslân



The regions

Fryslân



Galicia



The regions

Fryslân



Galicia



Silesia



The regions

Fryslân



Galicia



Silesia



Yorkshire



Fryslân



One of twelve regions of the Netherlands

646874 inhabitants

5.748,74 km²



Fryslân

History

1970 - high investment for wind energy production

2001 - green market liberalized

2005 - Kyoto protocol 5% reduction of greenhousegasses before 2012

2007 - Dutch government strives to double sustainable energy production



Fryslân

Current situation

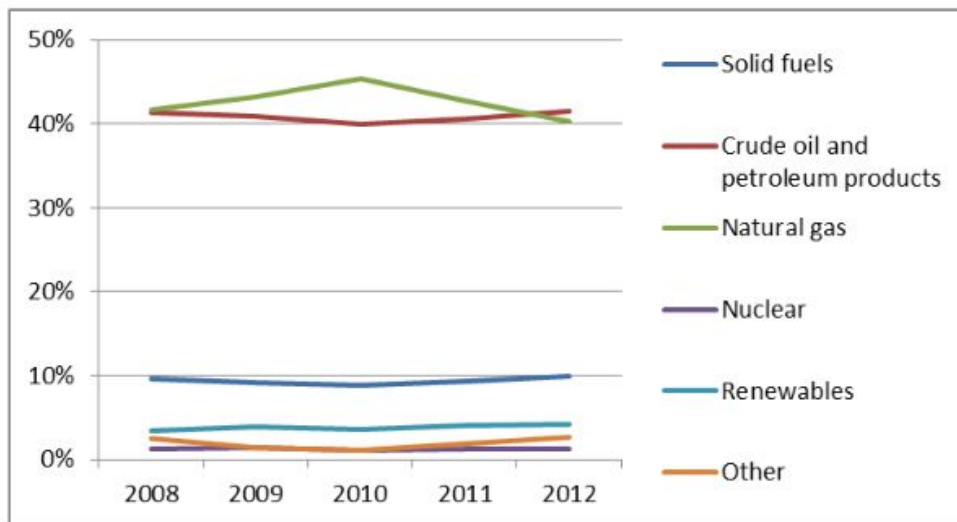
Strongly dependent on other countries and fossil fuels

Unable to reach the 2020 target if transition continues the same speed

Current goal is to have 14% of the Dutch production to be done by renewable energies , based on the European Union's Energy Directive

Fryslân

Figure 1: Gross inland consumption mix 2008 – 2012 (source: Eurostat)





Fryslân

Obstacles

Local society

Urgency

Insecurities

Public opinion

Yorkshire



Known as the County of York.

Largest historical English county of the United Kingdom.

Combination of the counties of East, West, and North Yorkshire, with some territory contributed to the county of Humberside.

Produce 15.83% of the National energy within the United Kingdom



Yorkshire

History

1912 - peak of coal production

1990 - Switch to gas and biomass

2003 - Closing of all deep-pit coal mines

2006 - UK government strives all coal is phased out by at latest 2025



Yorkshire

Current situation

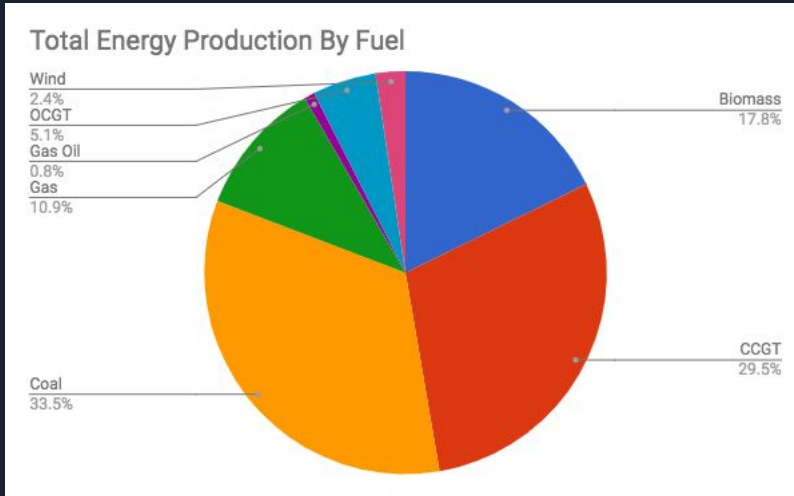
Greg Clark, Secretary of State for Business, Energy and Industrial Strategy stated:

“My priority is to ensure that our country has the electricity it needs to meet all of our needs, at the lowest possible cost and to ensure that we decarbonise our energy supplies in line with the UK’s legally-binding commitments.”

In 2016 - 51.9% of the participating UK electorate voted to leave the EU

The EU Renewable Energy Directive demands a 15% of the energy production to be renewable by 2020.

Yorkshire



Coal

CCGT

Biomass

Gas

OCGT

Wind

Gas Oil



Yorkshire

Obstacles

Brexit

- Insecurity
- Incentive EU

Biomass



Last remarks and questions?



What's next?



Centre
Maurits
Coppieters