

Climate Change as a Tragedy of the Commons type of challenge

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Climate Change as a Tragedy of the Commons type of challenge

Outline of my presentation:

- ❑ Understanding sustainability
- ❑ Understanding growth and development
- ❑ Understanding The Tragedy of the Commons
- ❑ Is Climate Change a Tragedy of the Commons type of challenge?



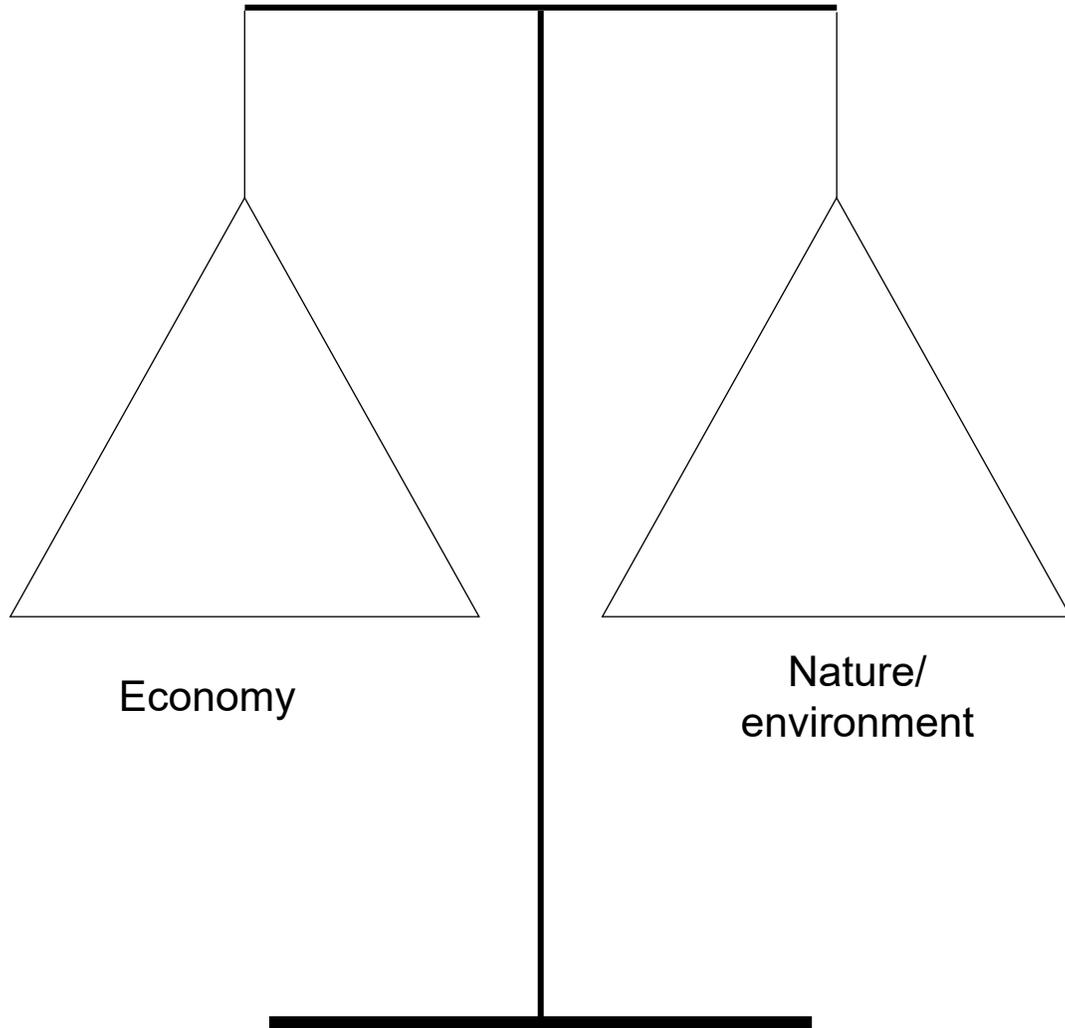
Understand sustainability

- the 2030 UN Sustainable Development Goals (SDGs)



Understand sustainability

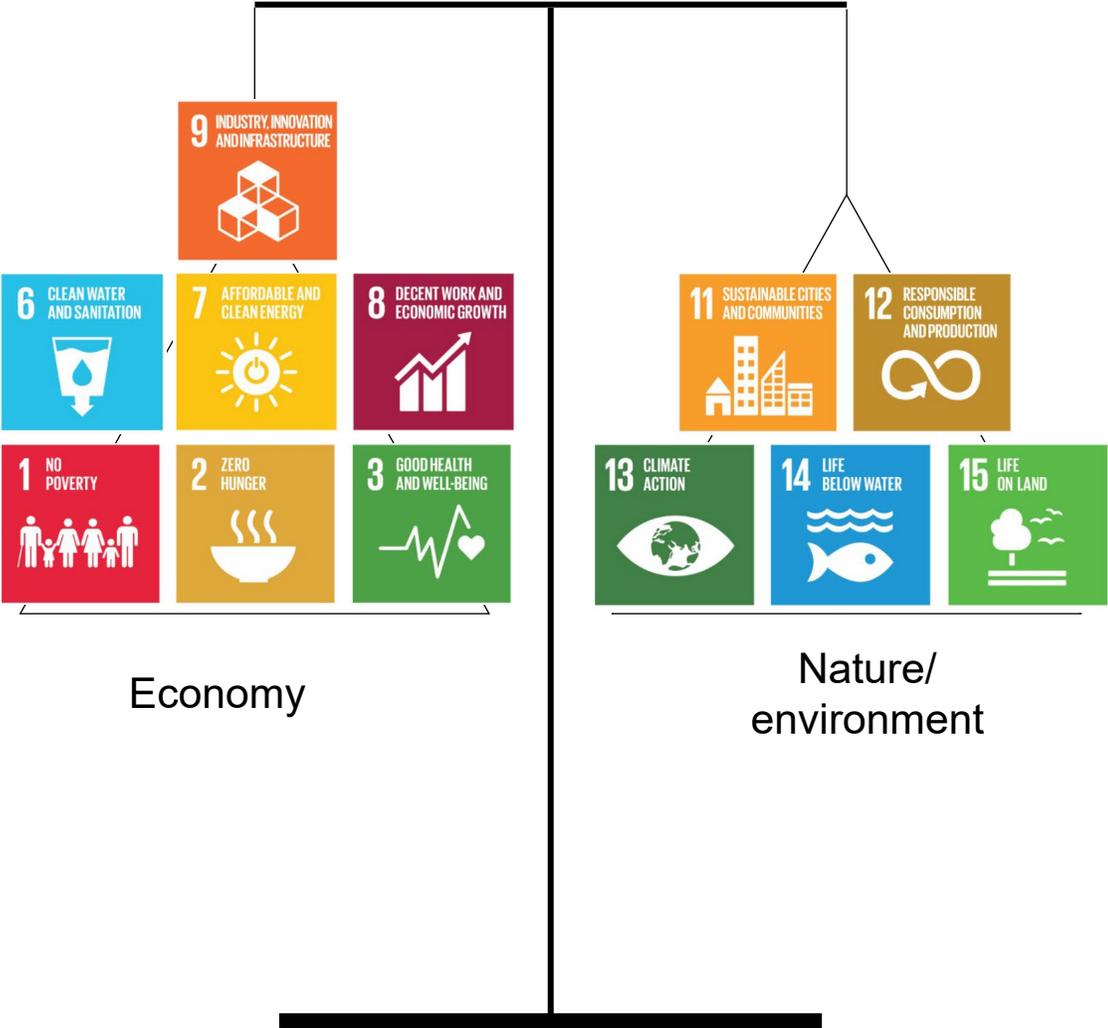
- the 2030 UN Sustainable Development Goals (SDGs)



- Planet, people, profit
- Finding the sustainable balance
 - including finding the balance between short, medium and long term concerns
 - ... the higher the living standards of people, the longer the perspective...

Understand sustainability

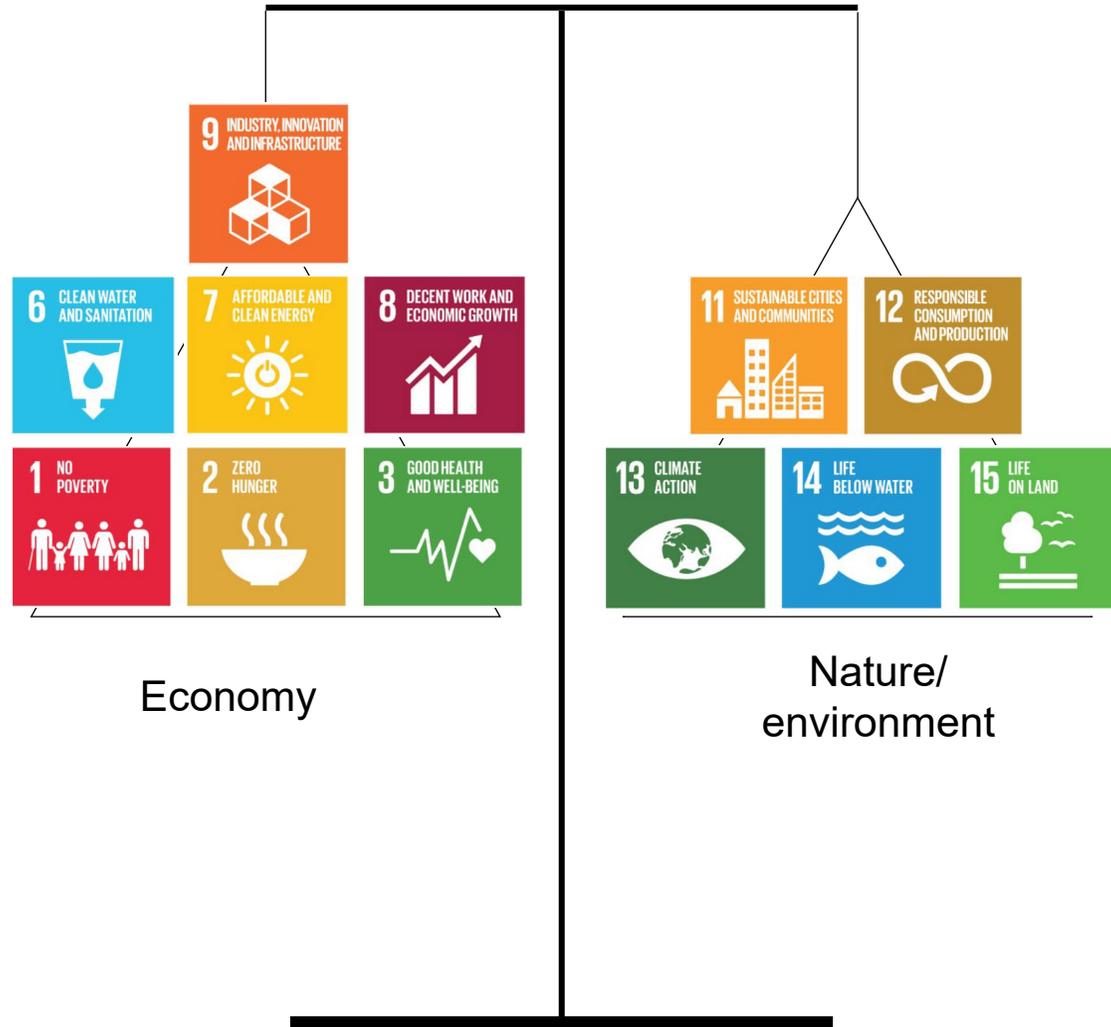
- finding the sustainable balance



Sociology

Understand sustainability

- finding the sustainable balance



The two most important issues

- for understanding sustainability and its relation to economic development

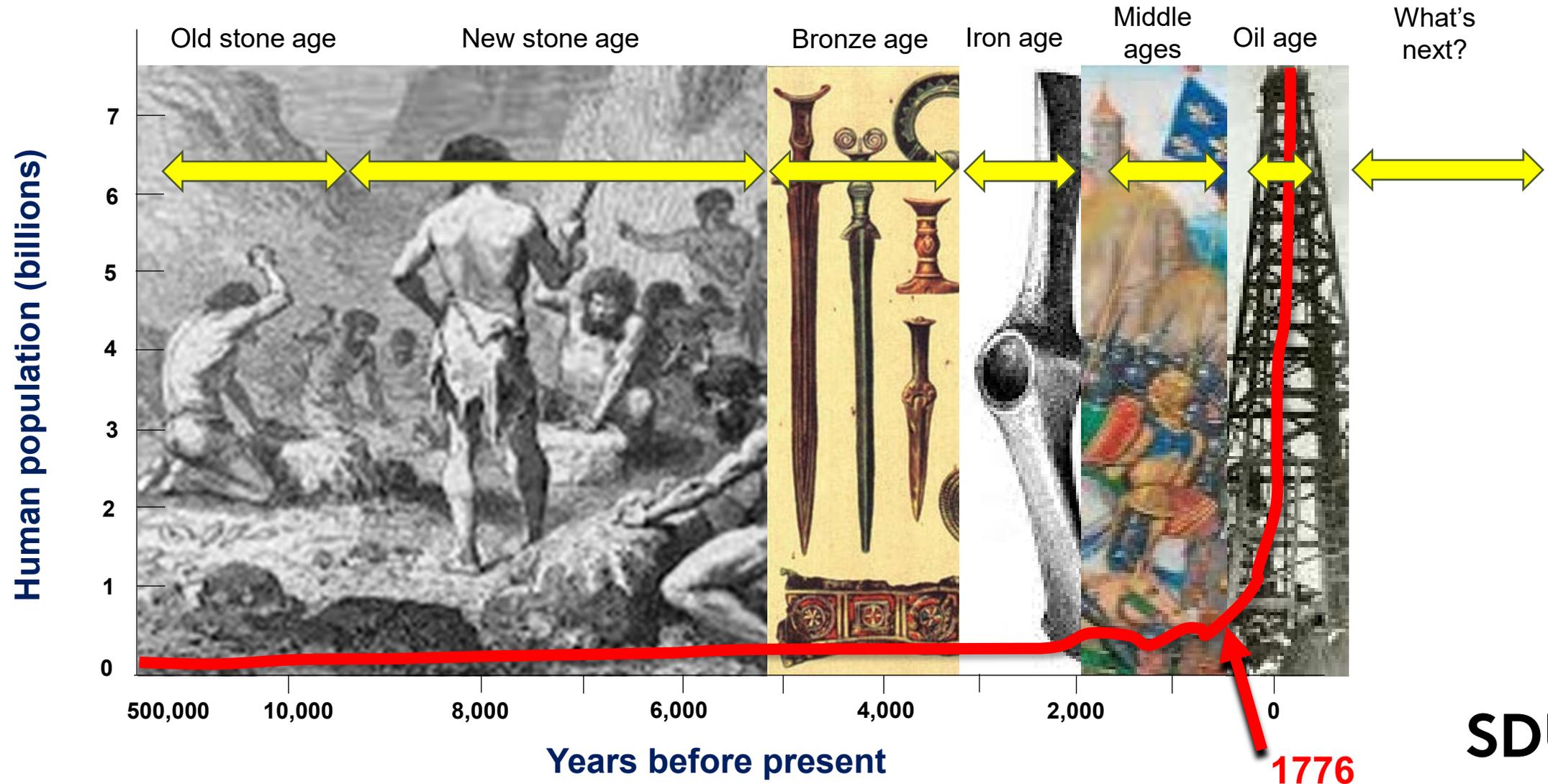
- ❑ The strength of a free market economy as a motor behind economic progress and improvements in welfare, living standards and public health
- ❑ The failure of an unregulated free market economy to support a sustainable development of our nature & environment

... and I don't know which is worst, i.e.:

- when we fail to understand the strength of market economy
- or
- when we fail to understand its weakness

Understand growth and development

- we didn't leave the stone age due to a lack of stones...



Understand growth
and development

Paris France



We have set out to leave the oil age

– and are apparently happy about it

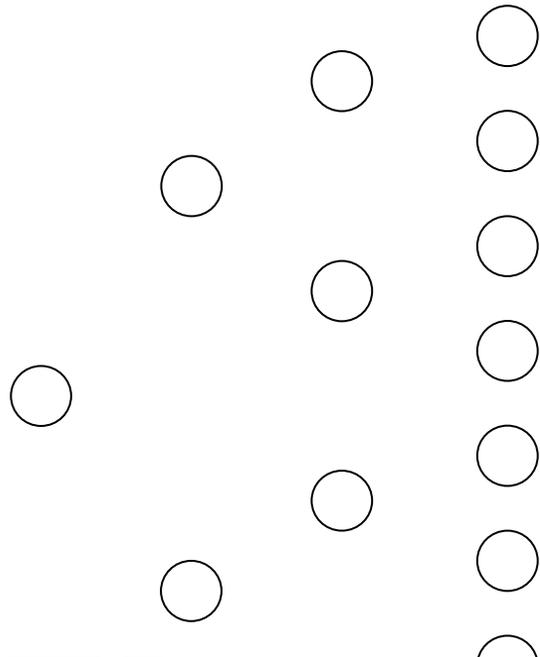
Understand growth and development

- the three faces of growth

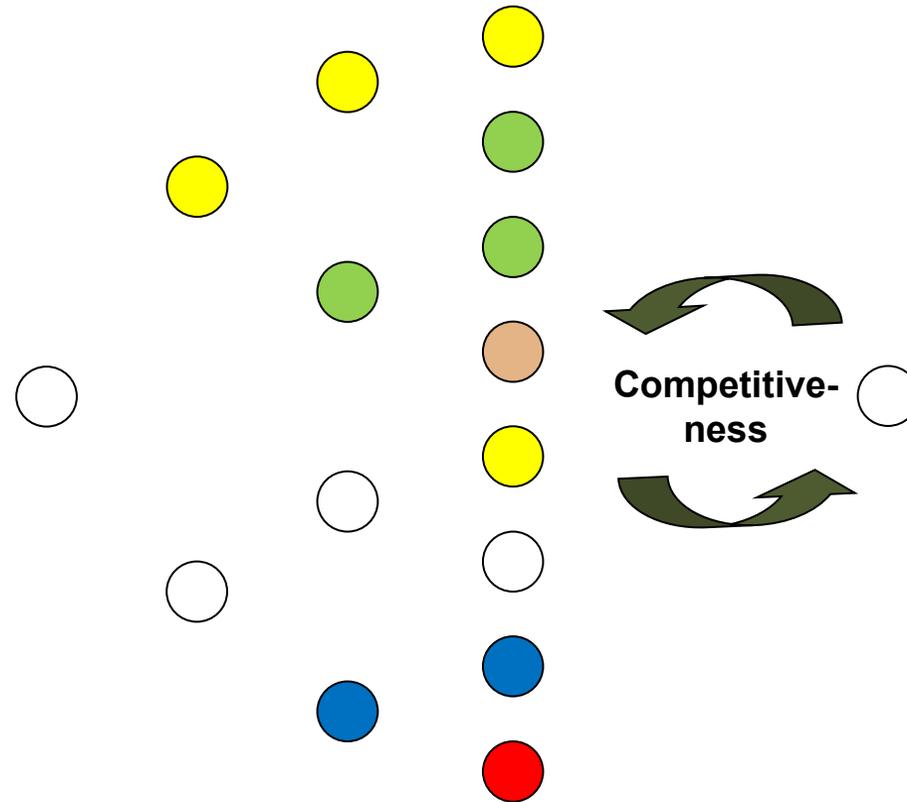
Darwin C (1859) – survival of the fittest

Smith A (1776) – individual optimization leads to societal optimum. The 'invisible hand'

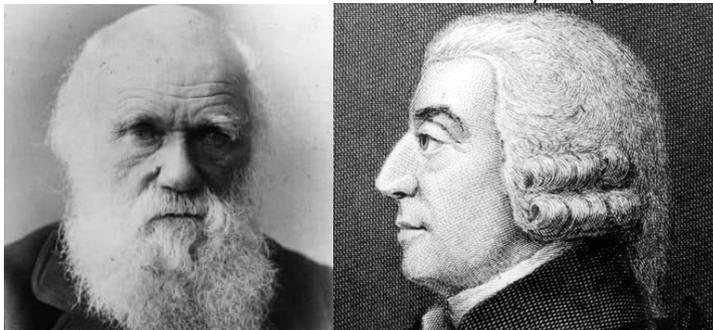
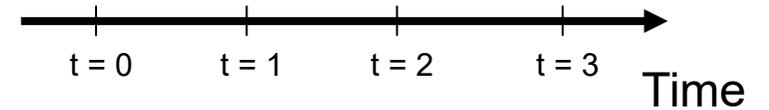
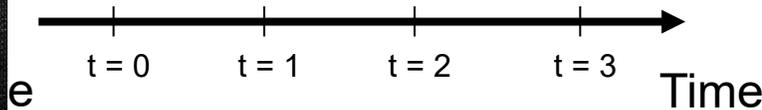
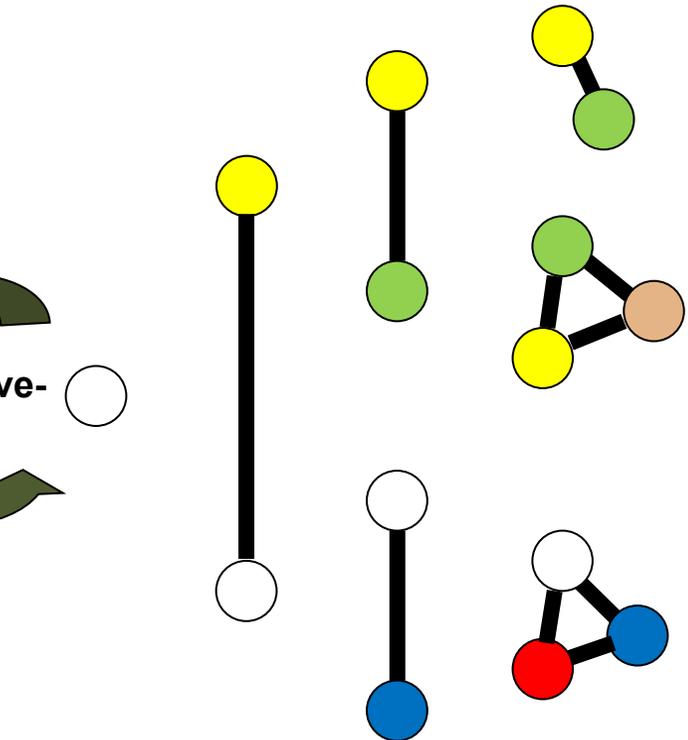
...multiplication



...differentiation

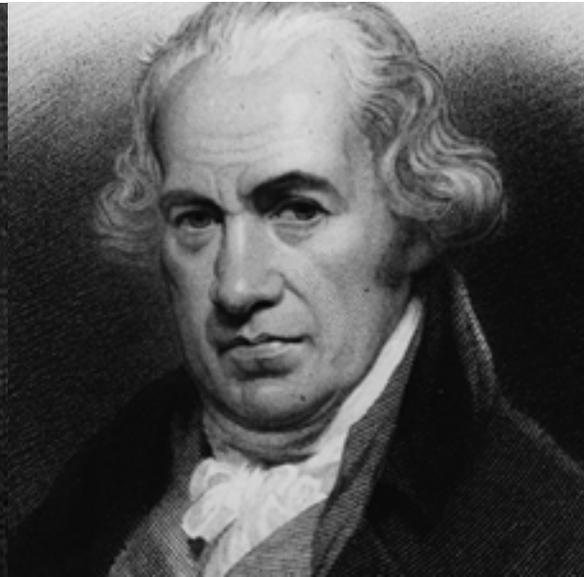
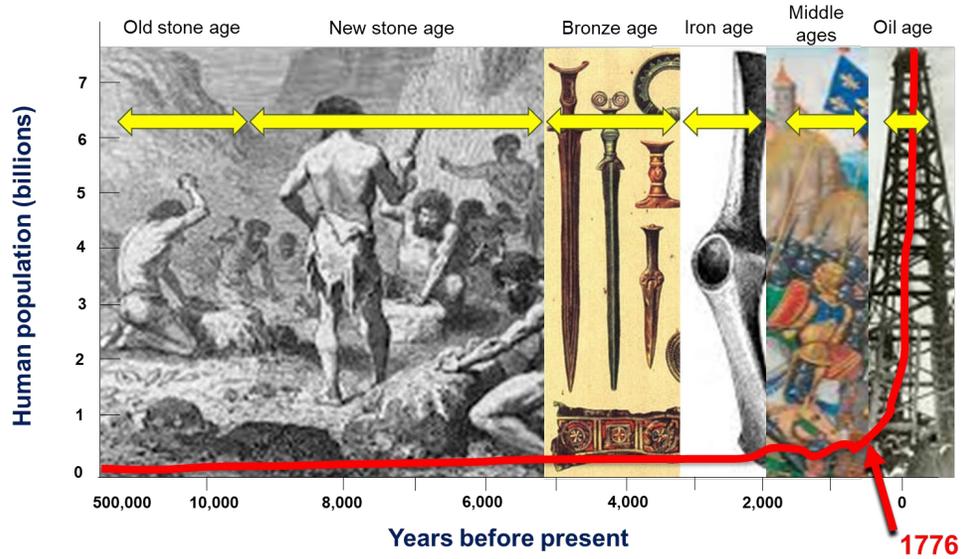


...collaboration/organization



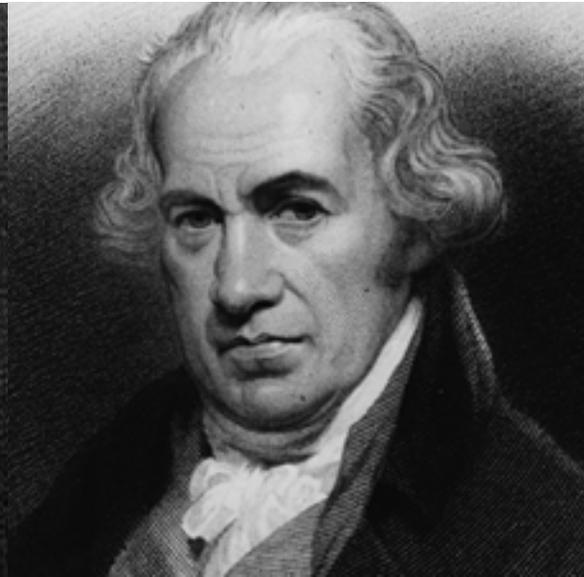
Understand growth and development

- back to 1776, the start of industrialization



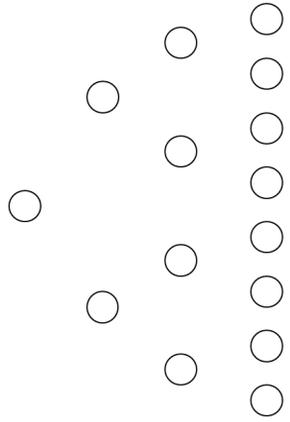
Understand growth and development

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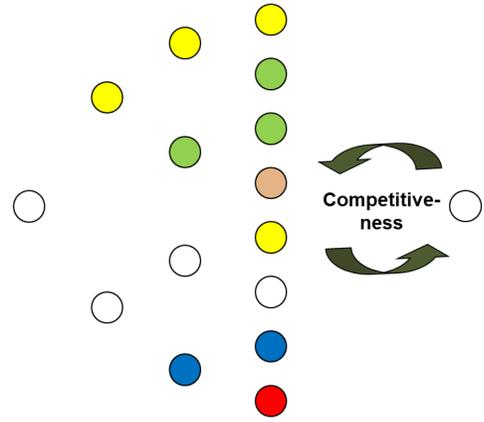


Understand the Tragedy of the Commons

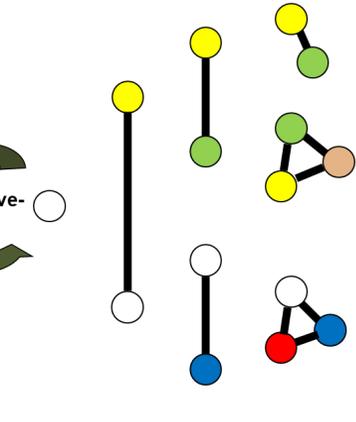
...multiplication



...differentiation

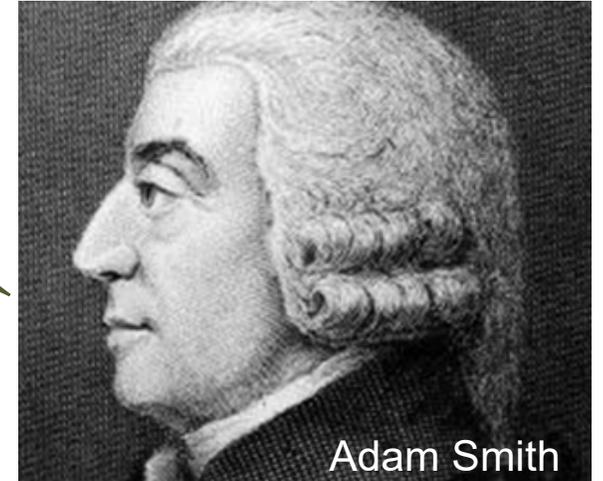


...collaboration/organization



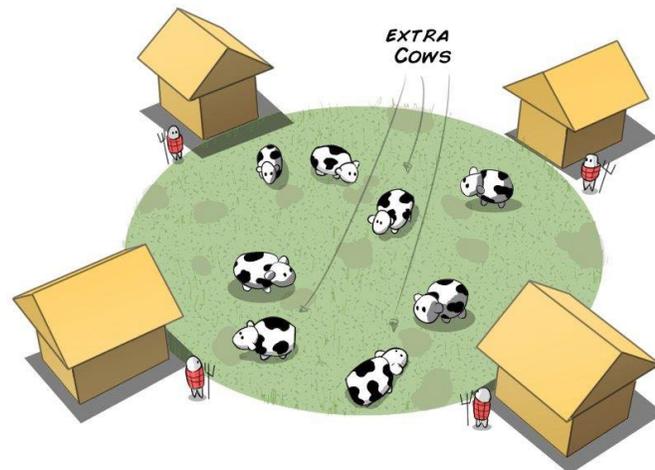
Competitive-ness

Individual optimization leads to societal optimum

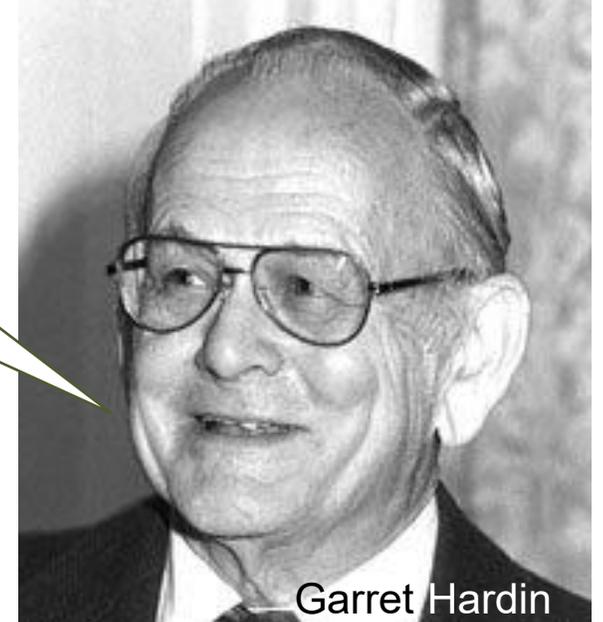


Adam Smith

The commons



No, not in a Tragedy of the commons type of situation

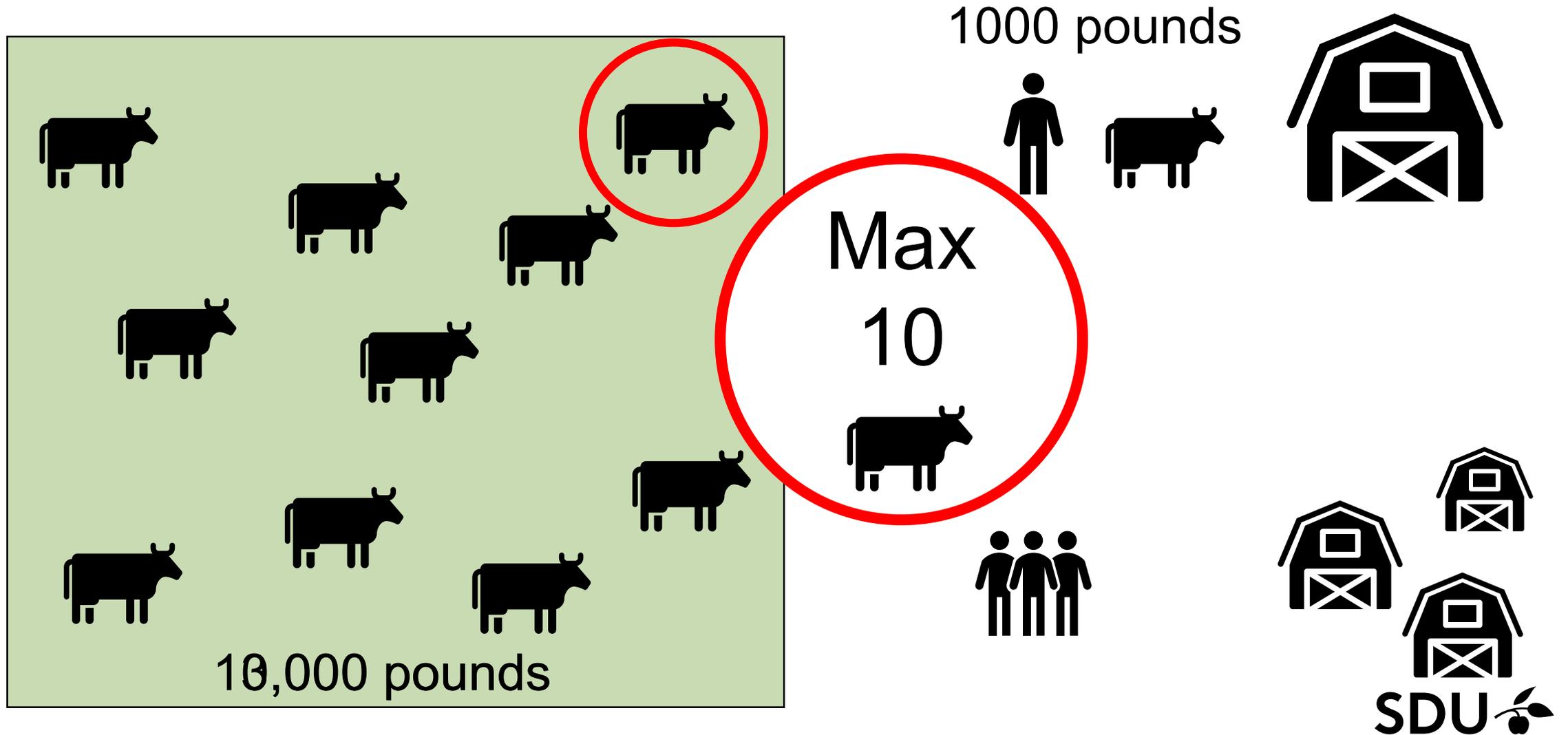


Garret Hardin

Hardin G (1968): The tragedy of the Commons. *Science*

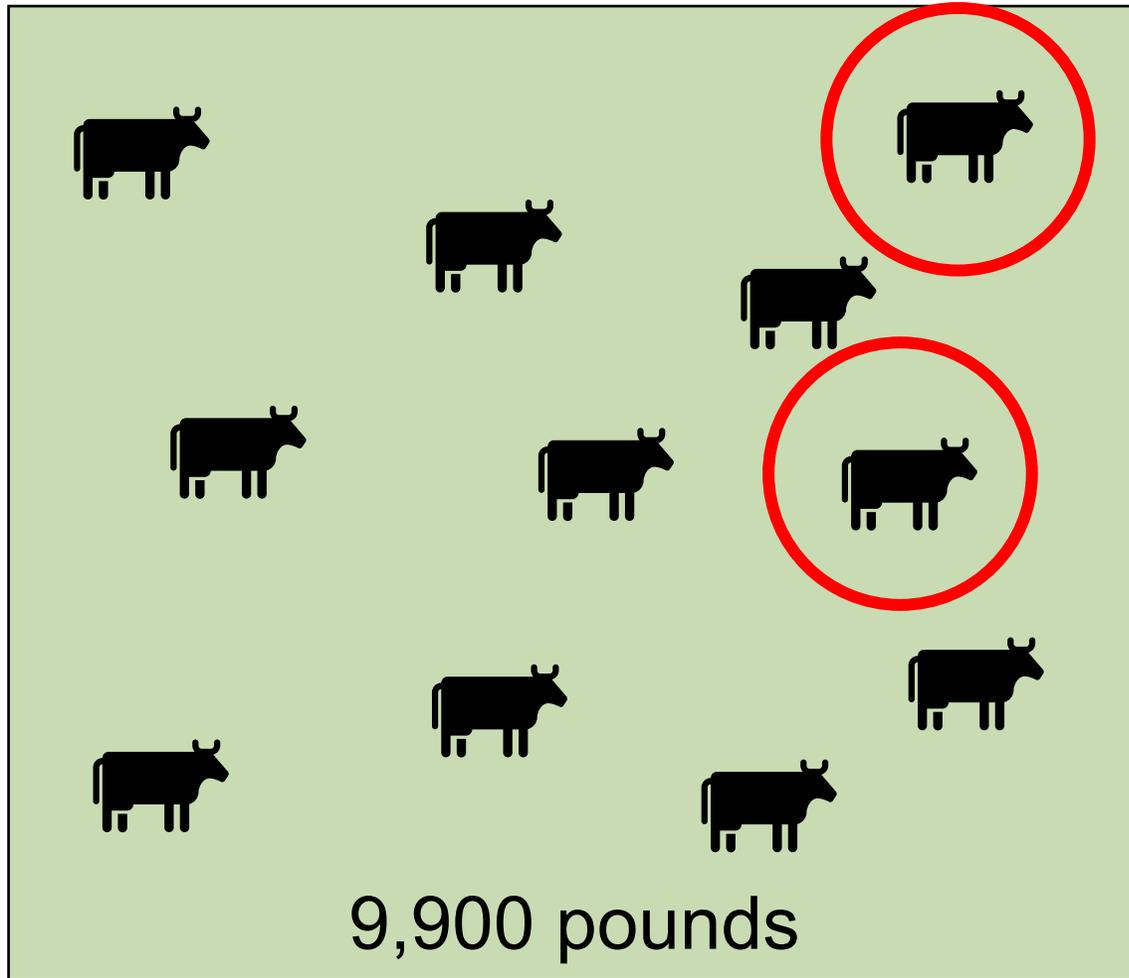
Understand the Tragedy of the Commons

Garret Hardin, (1968)



Understand the Tragedy of the Commons

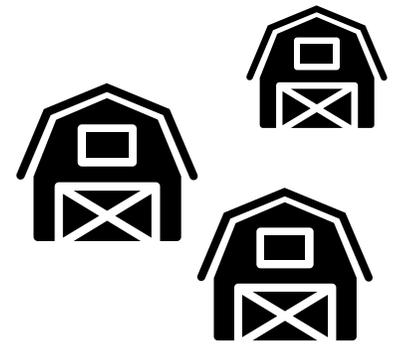
Garret Hardin, (1968)



4800 pounds



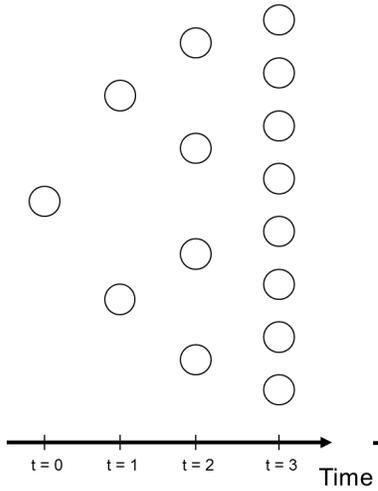
-100 pounds



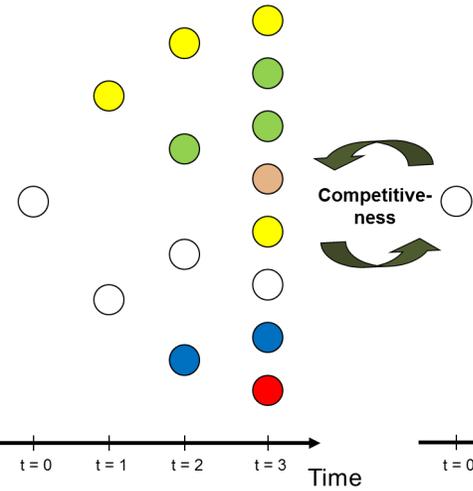
SDU 

Understand the Tragedy of the Commons

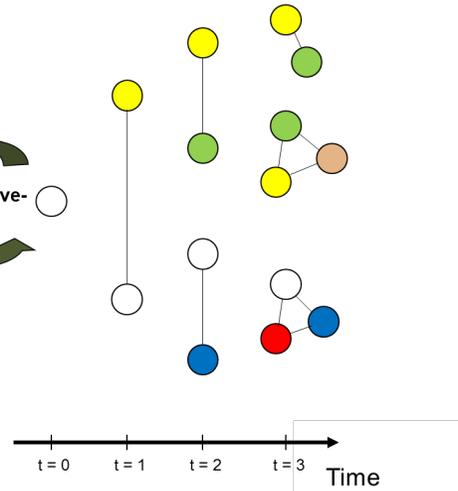
...multiplication



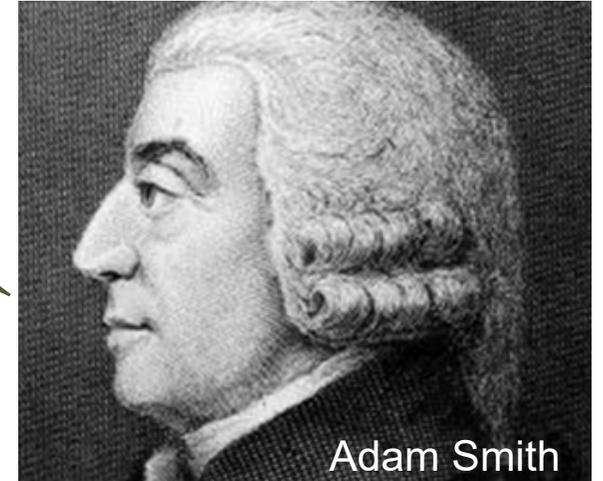
...differentiation



...centralization/organization



Individual optimization leads to societal optimum



No, - as I said ... and fishery is another example...



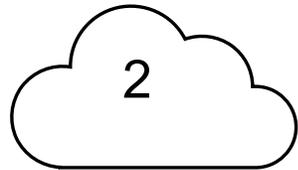
We need quota and regulation to achieve societal optimum

Is Climate Change a Tragedy of the Commons type of challenge?

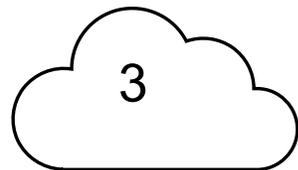
3 criteria must be fulfilled:



The natural resource/recipient shall be common and with unlimited access for all – i.e. a so-called ‘common pool resource’

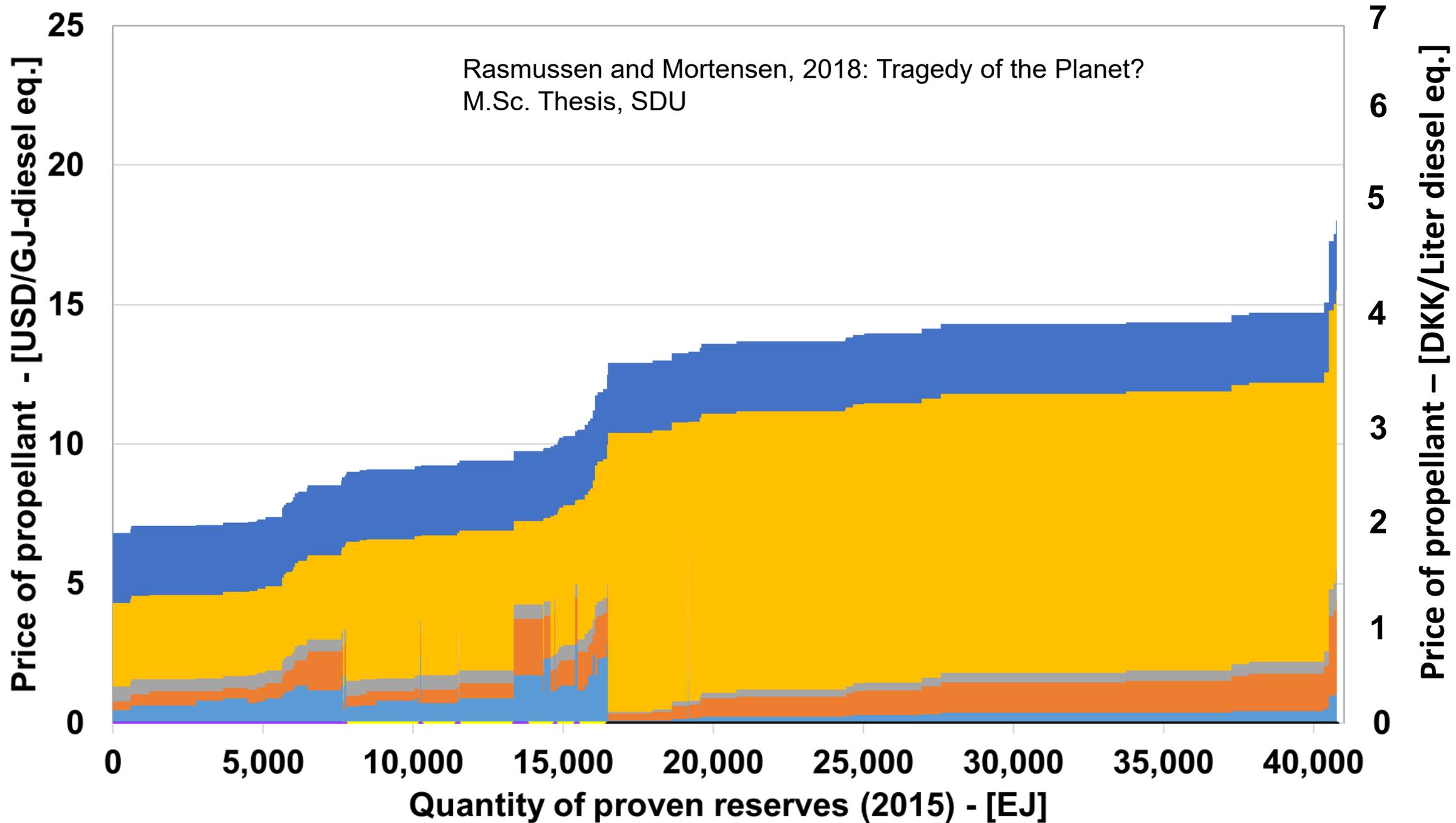


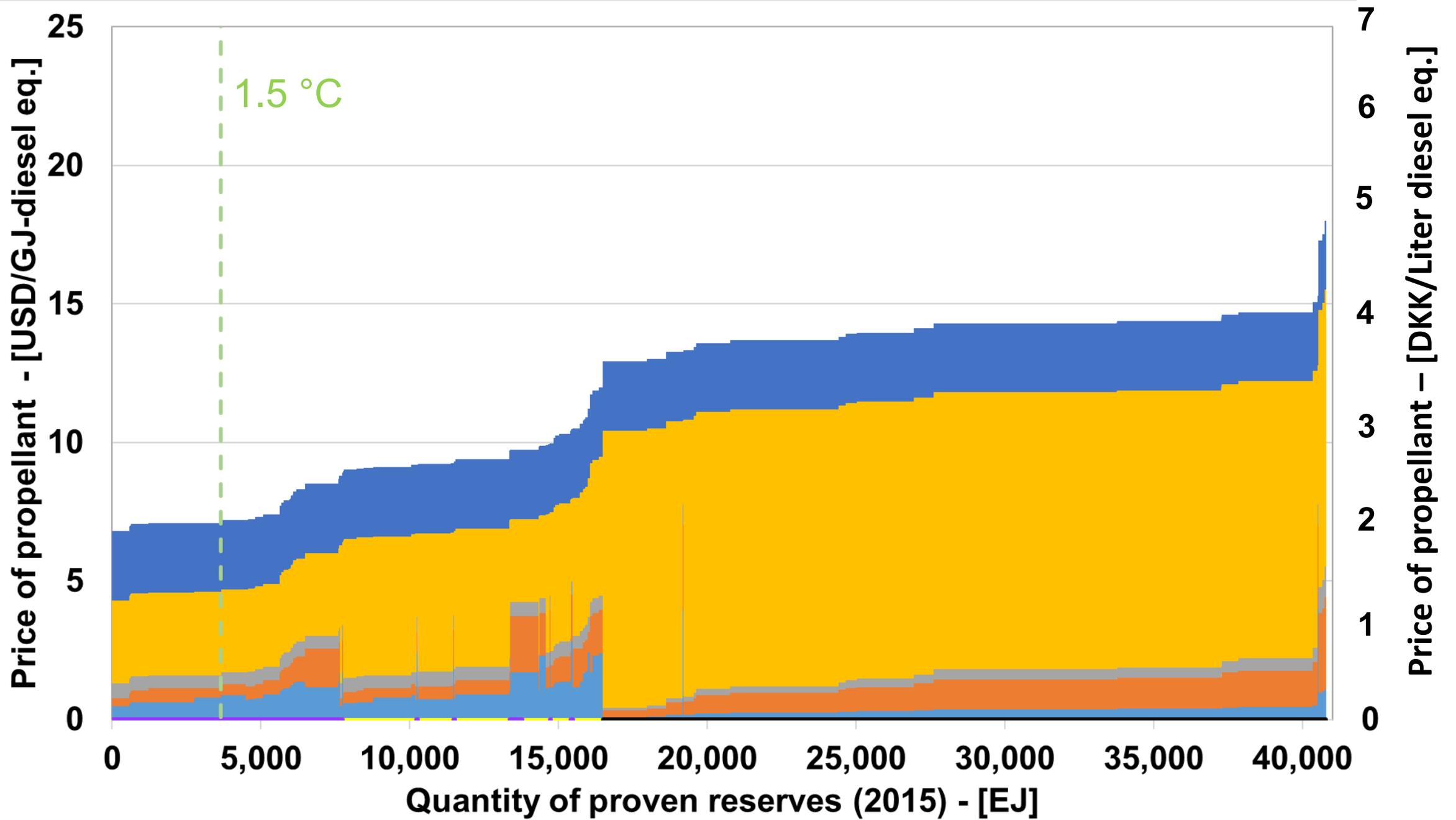
The carrying capacity of the natural resource/recipient can be exceeded

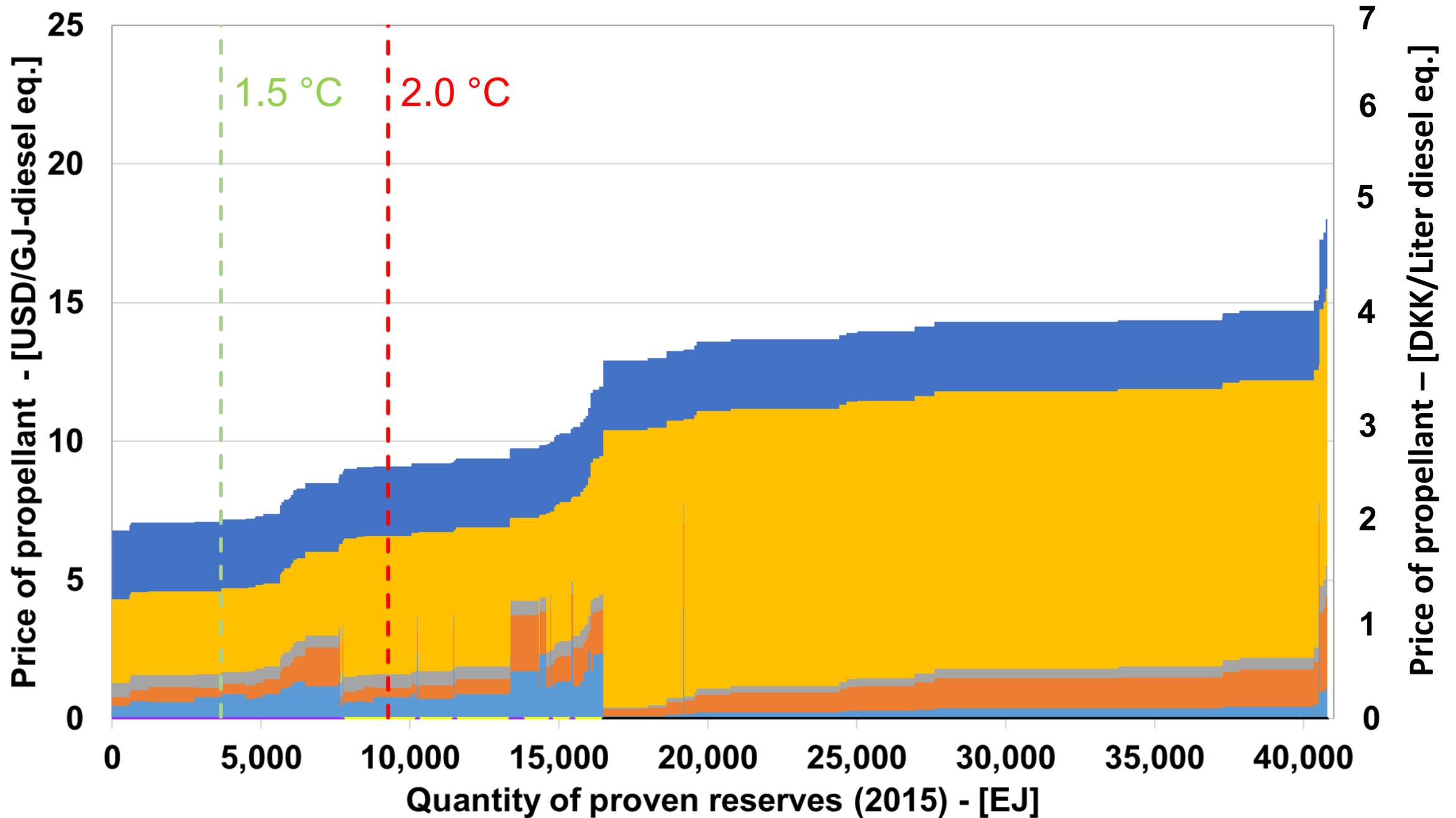


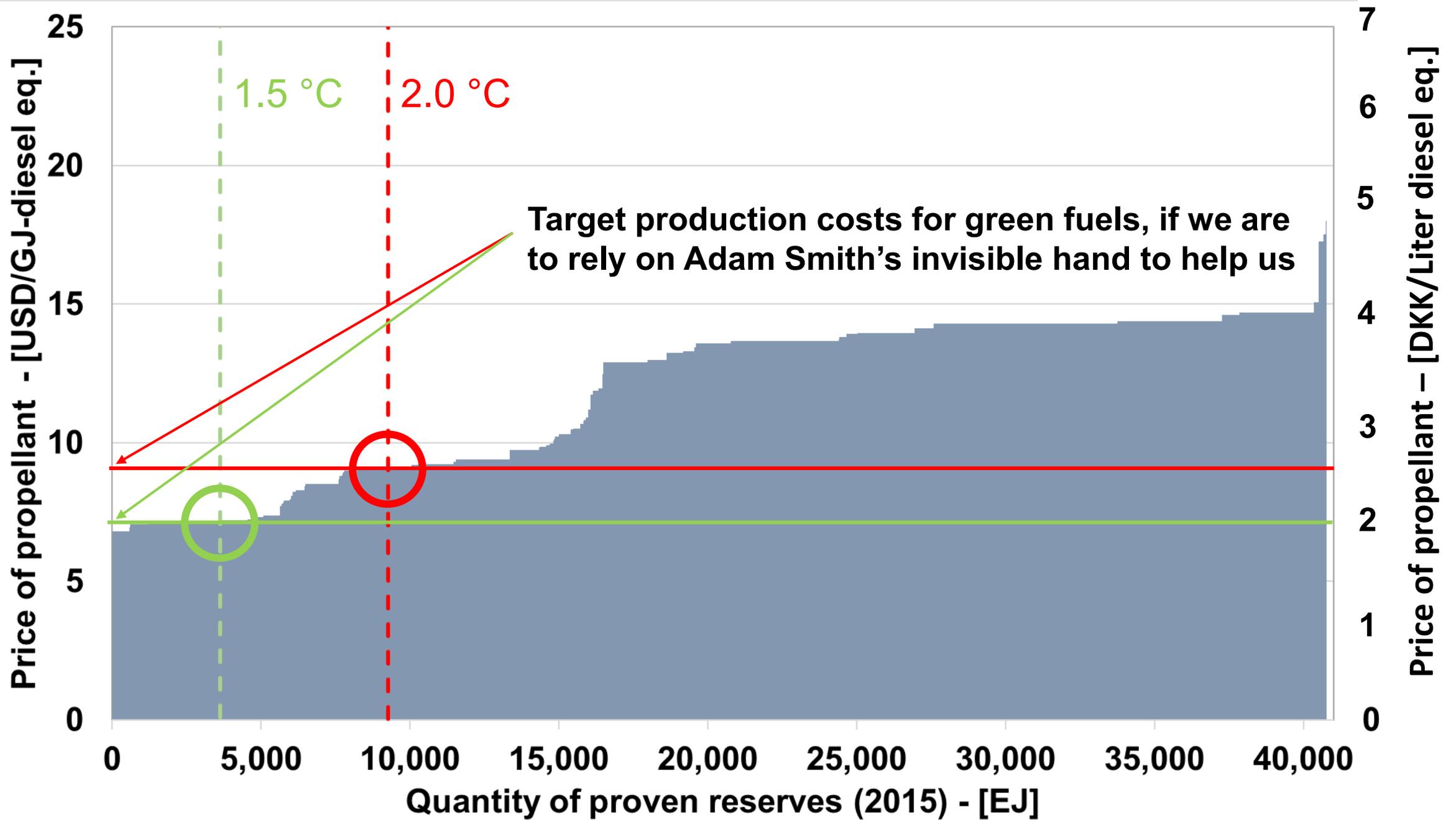
There shall be no competitive alternatives – in a free market economy – to the activity that threatens the carrying capacity of the natural resource/recipient

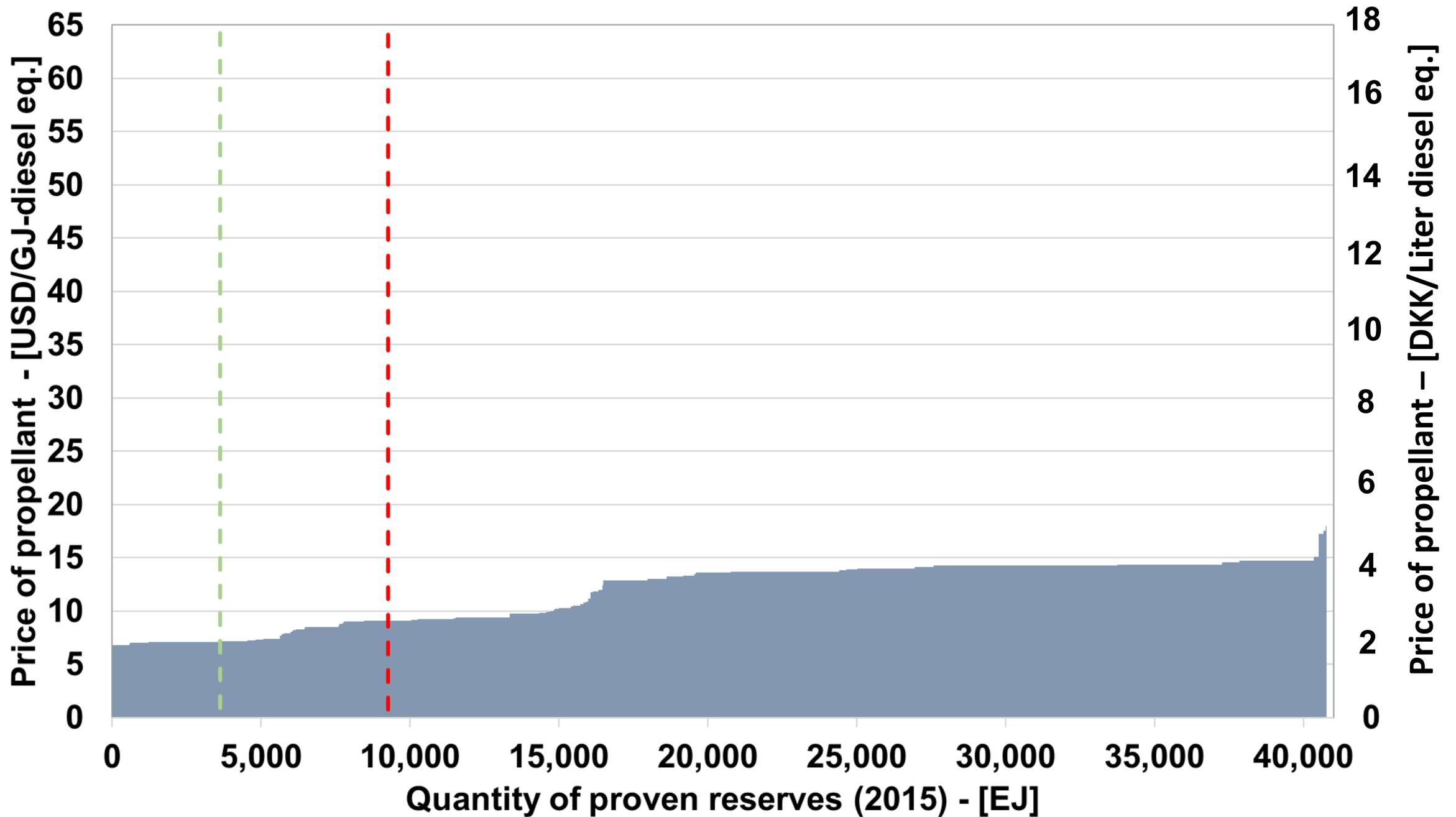
Rasmussen and Mortensen, 2018: Tragedy of the Planet?
M.Sc. Thesis, SDU

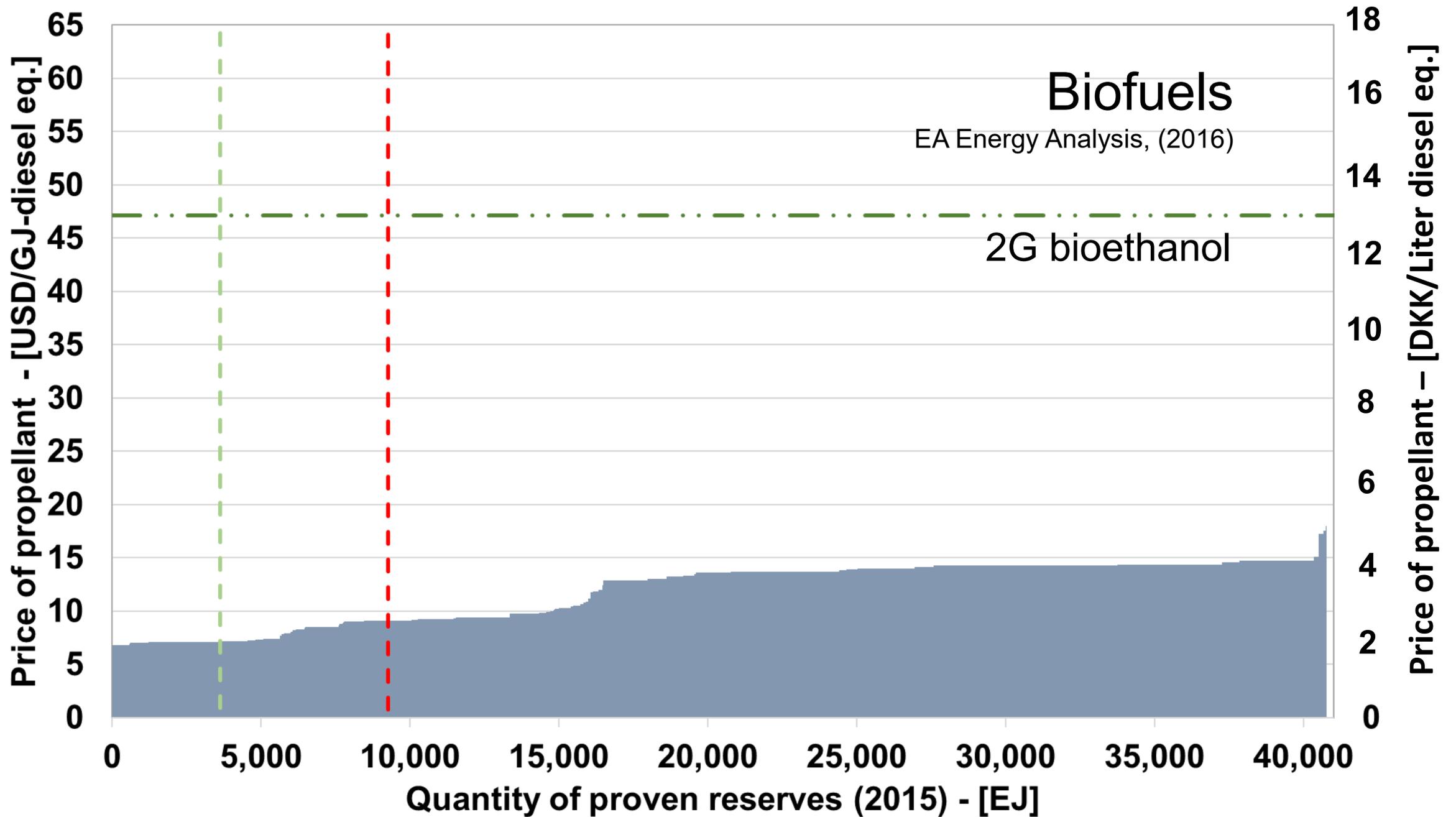


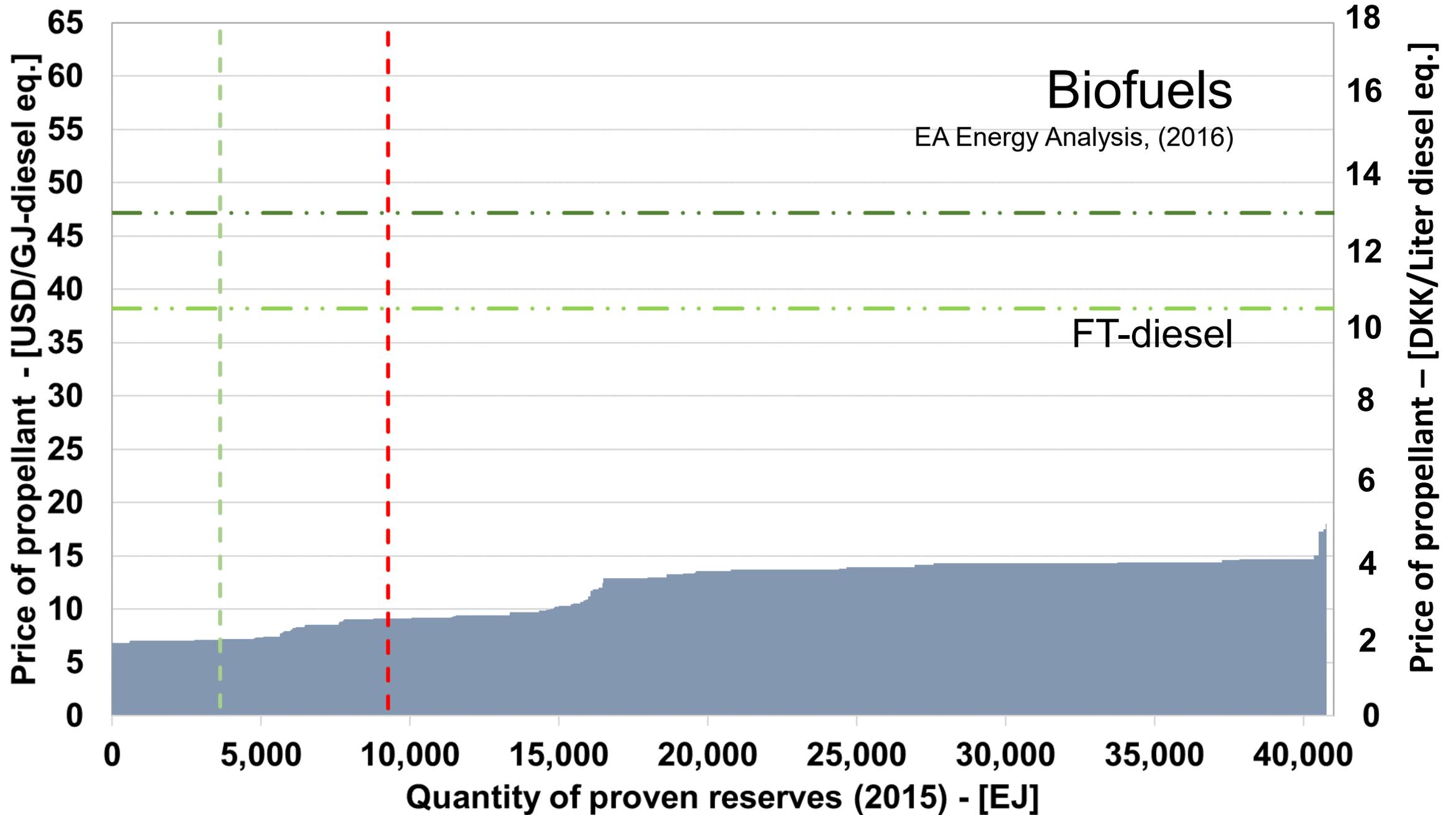


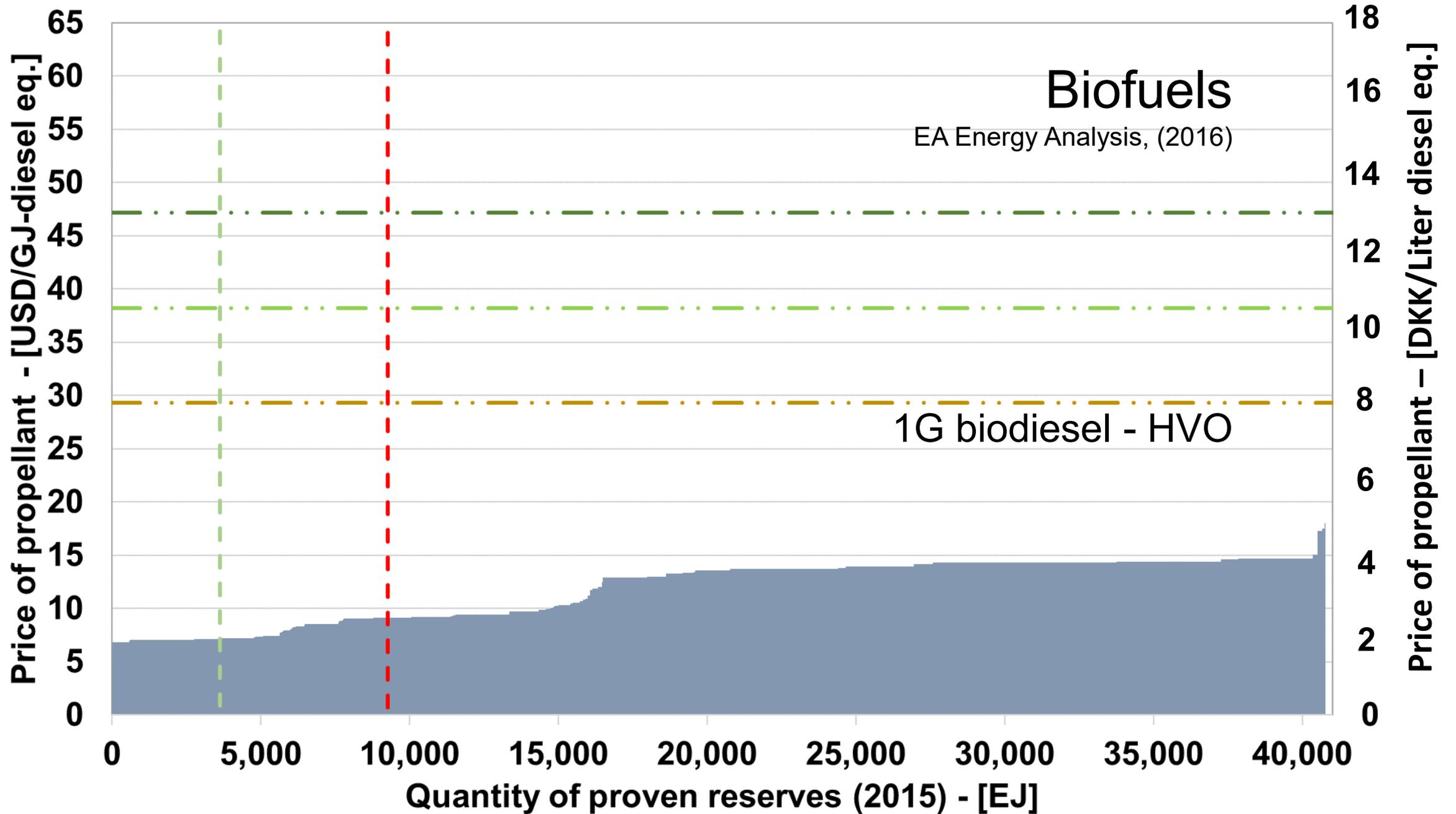


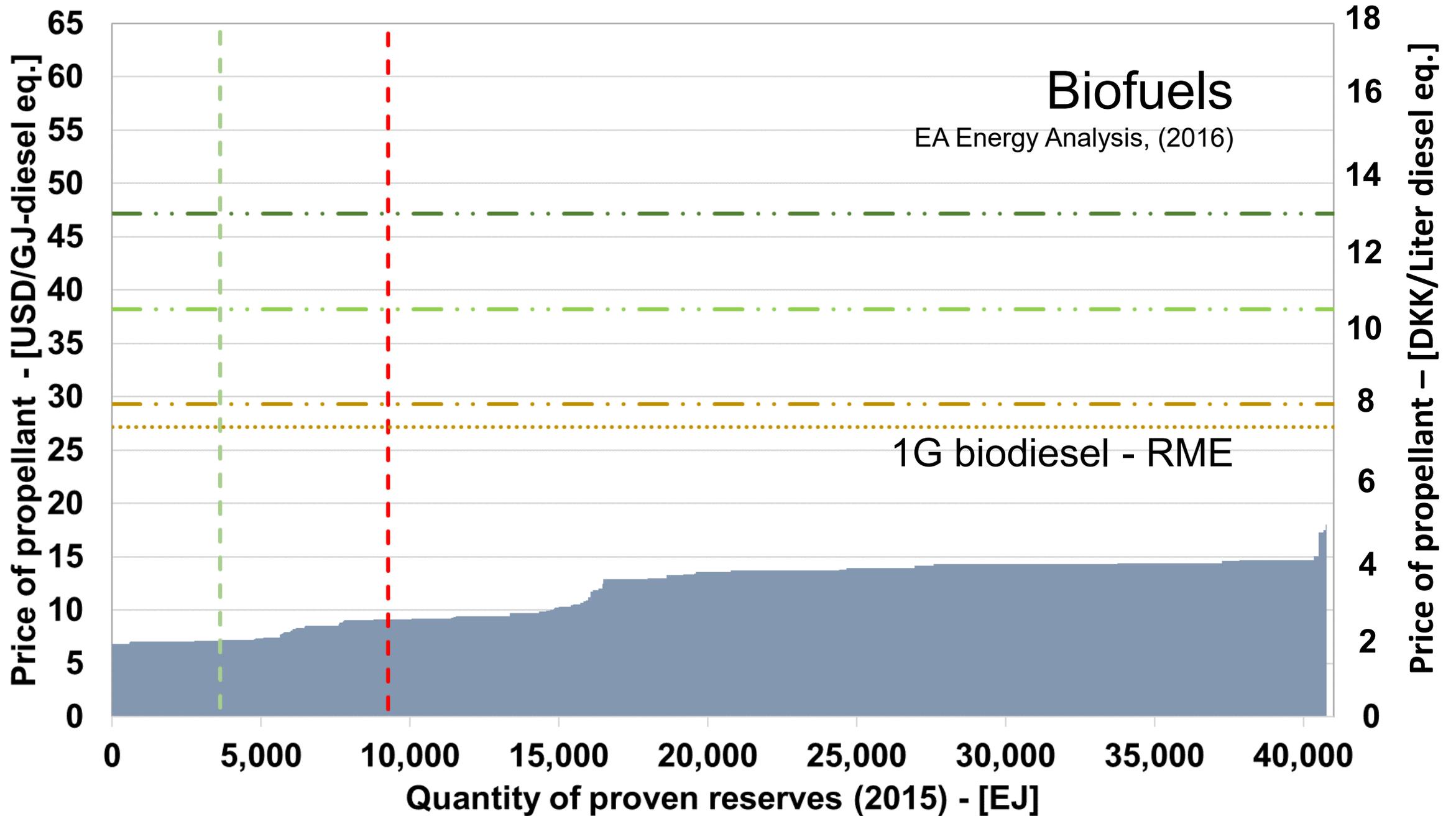


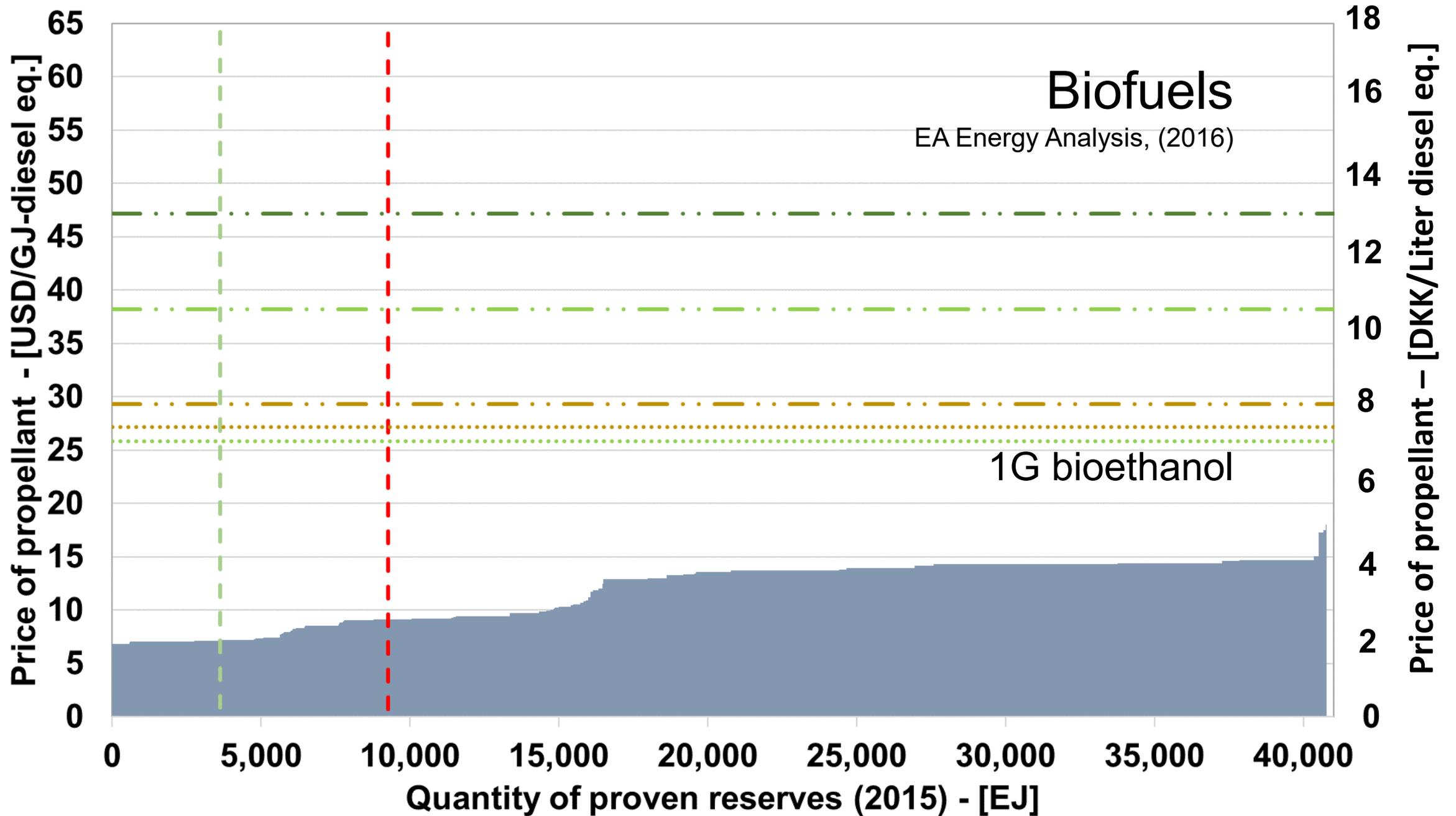


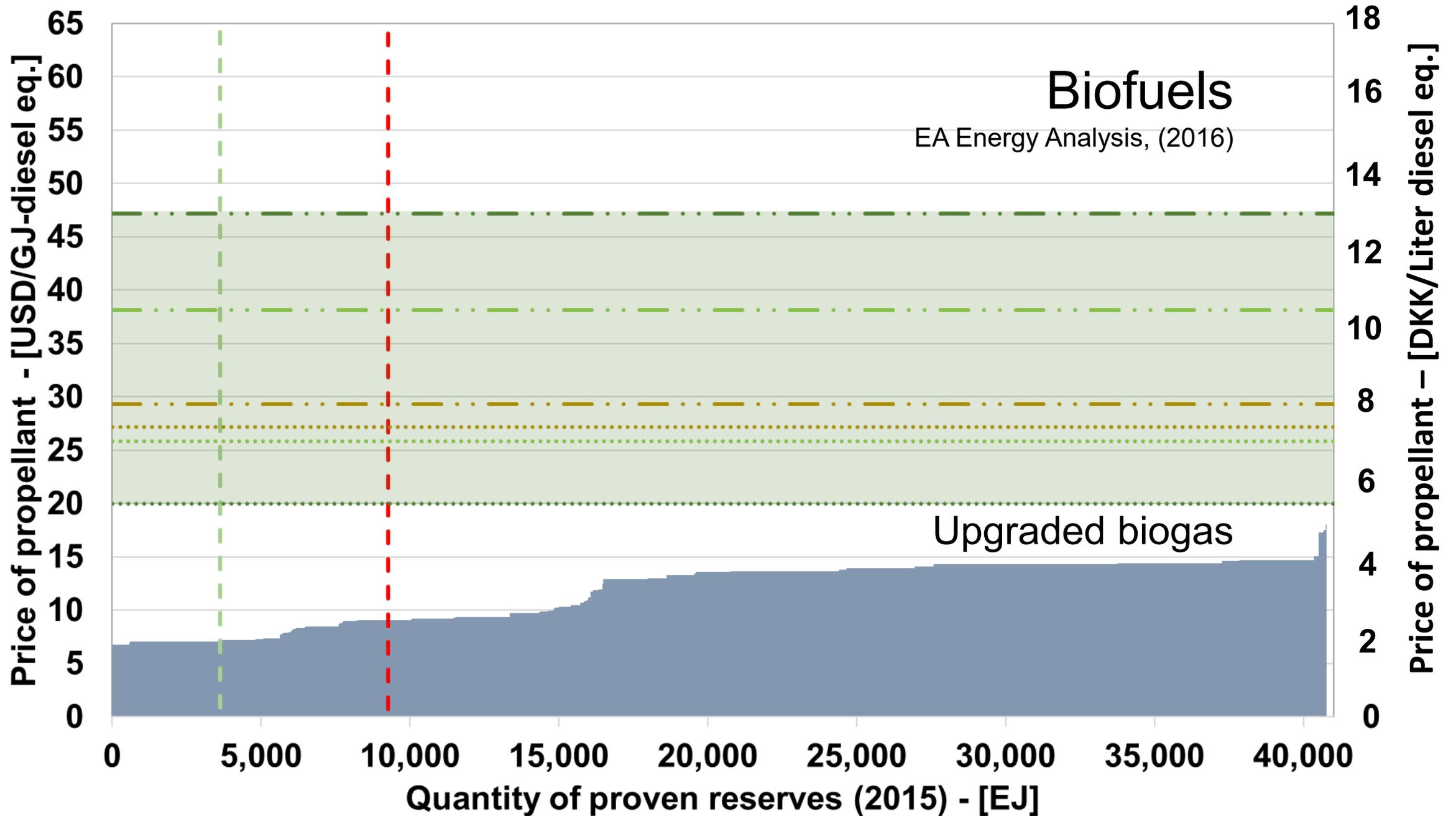


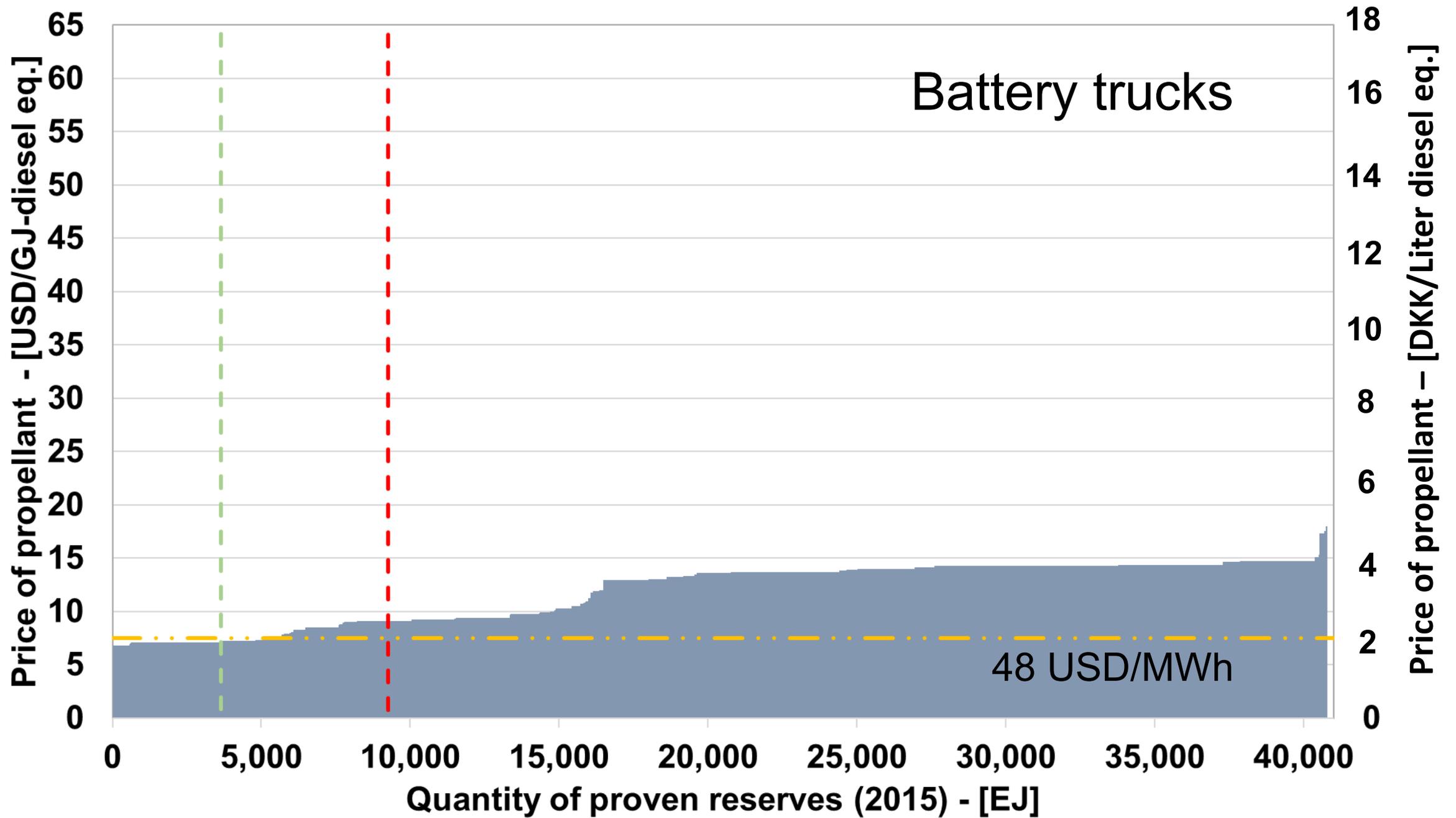


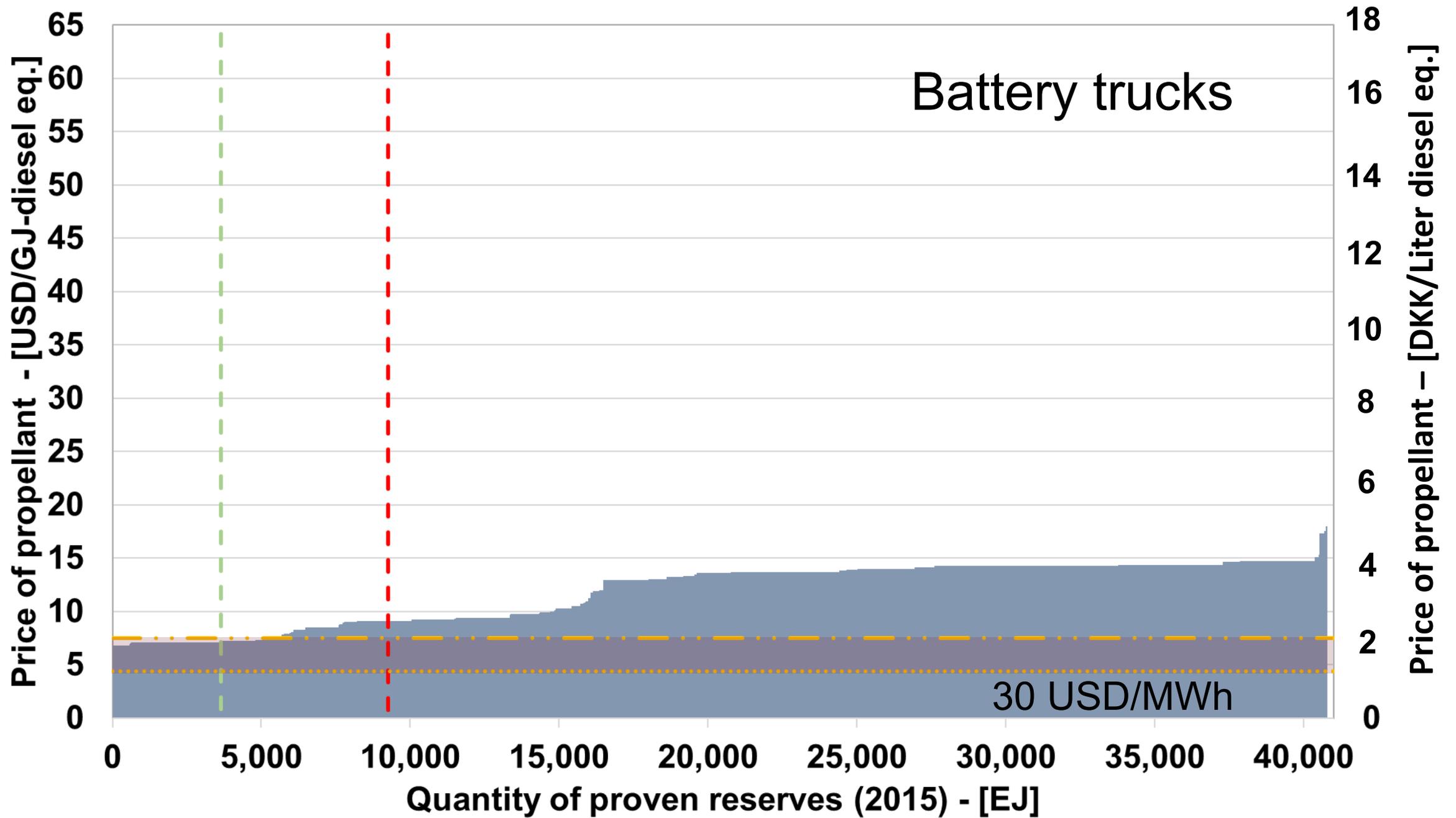


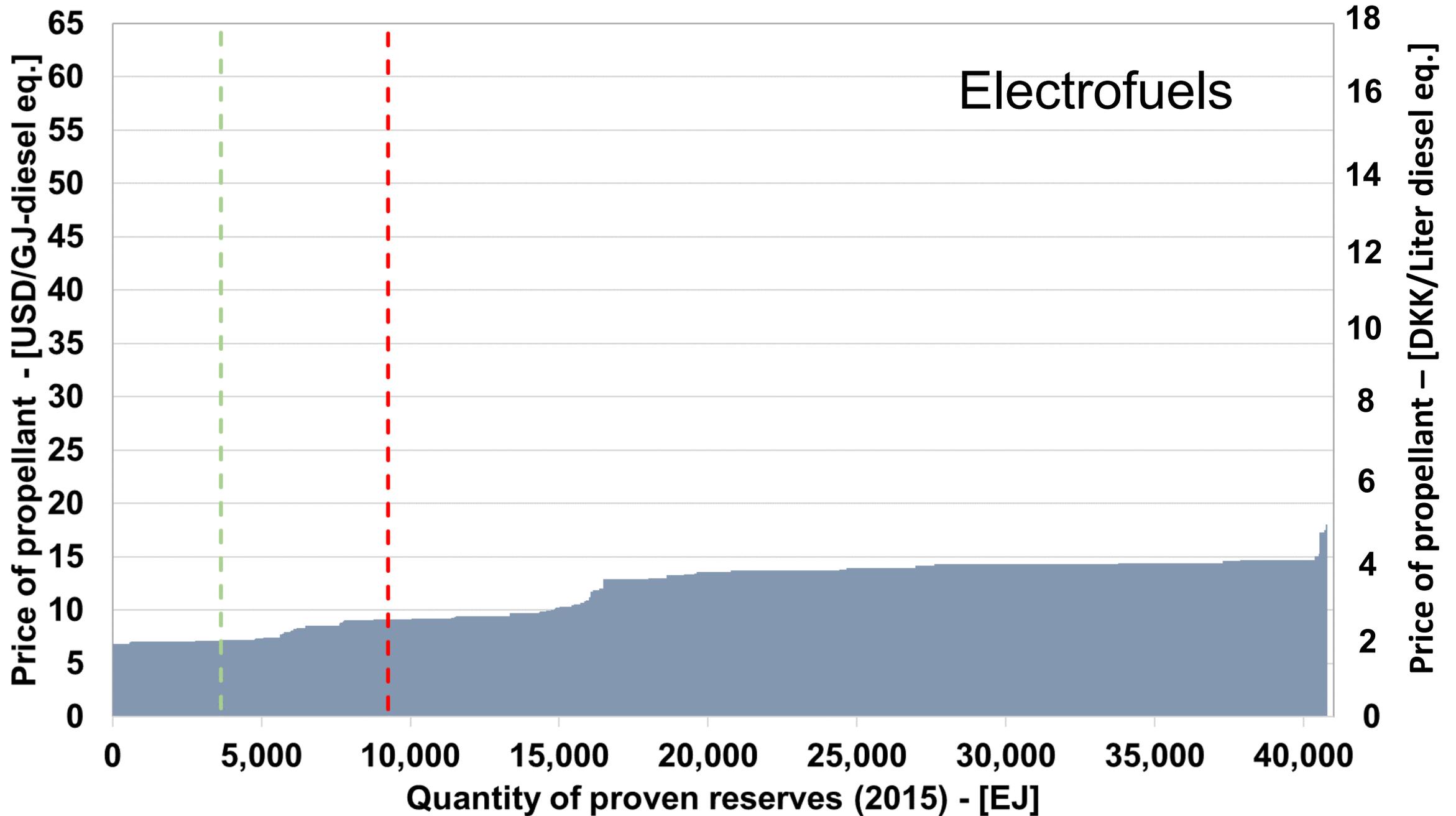


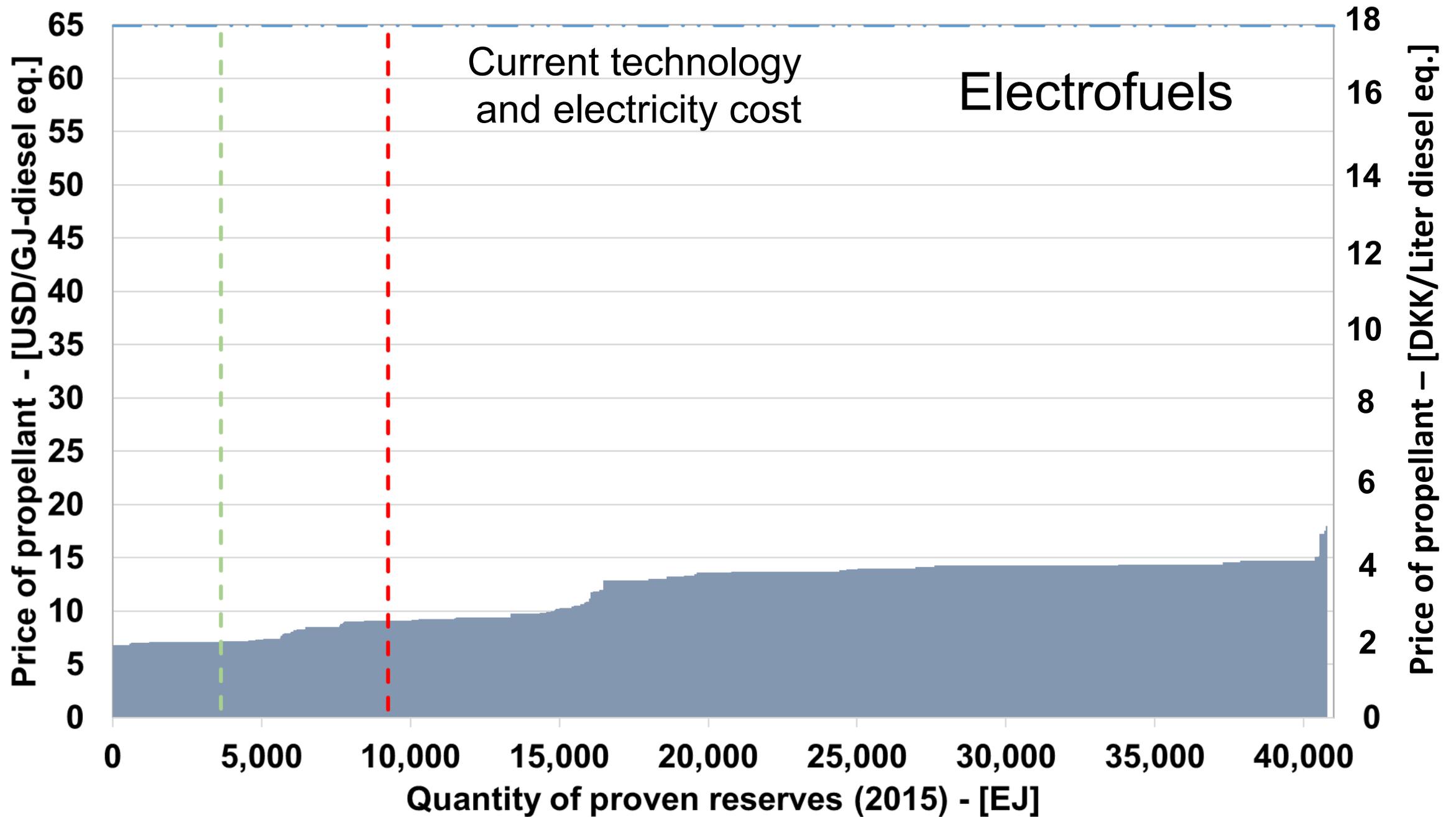


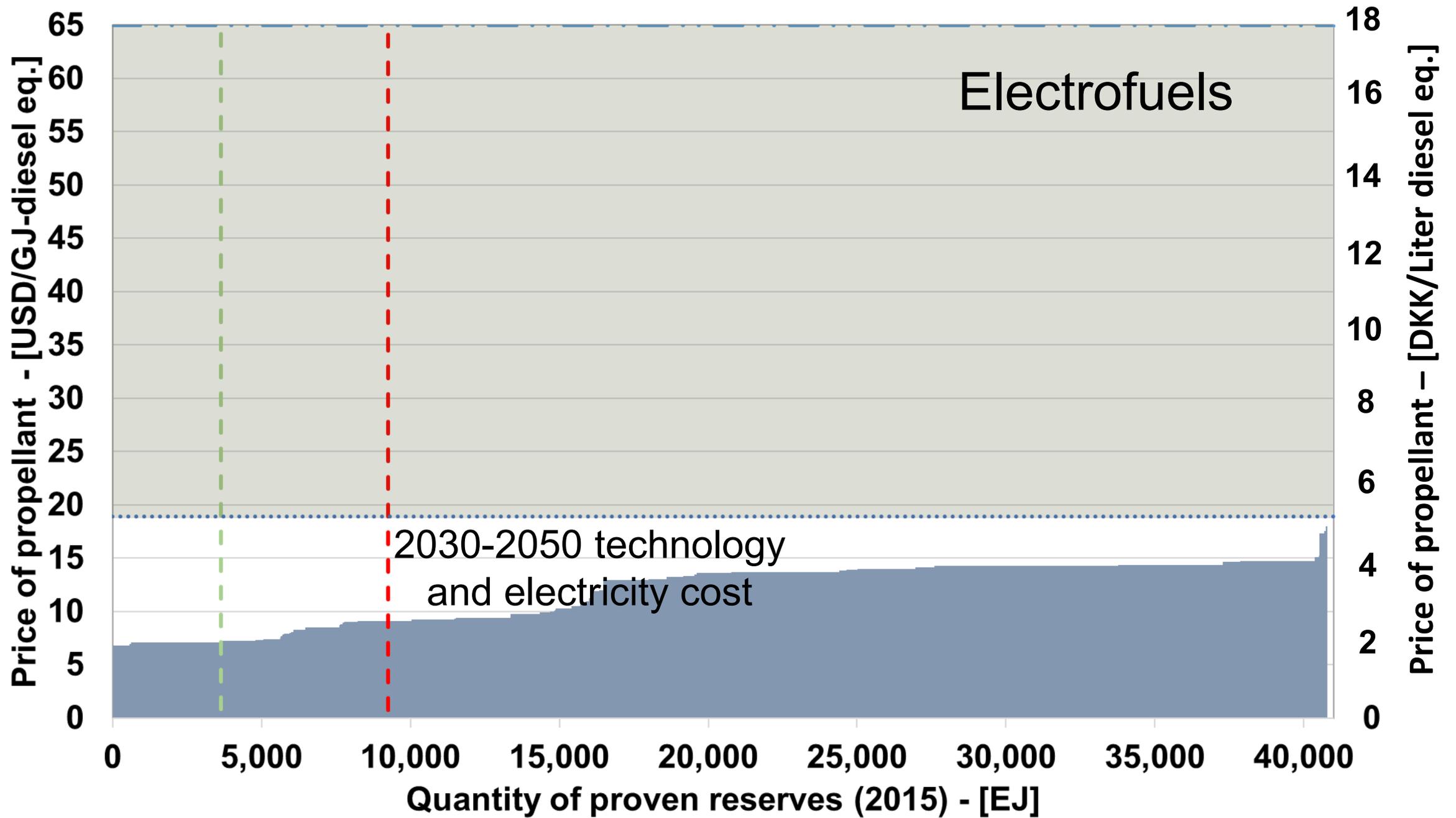




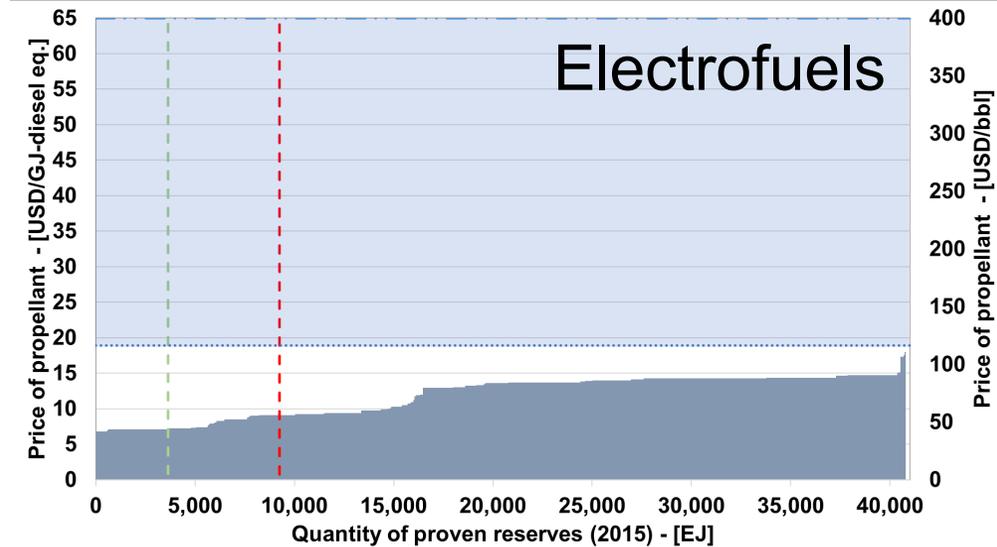
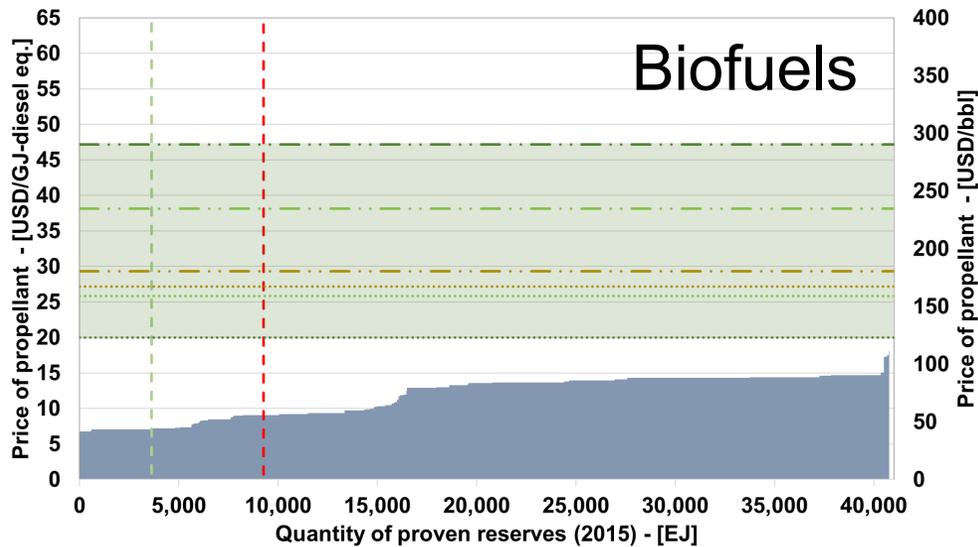
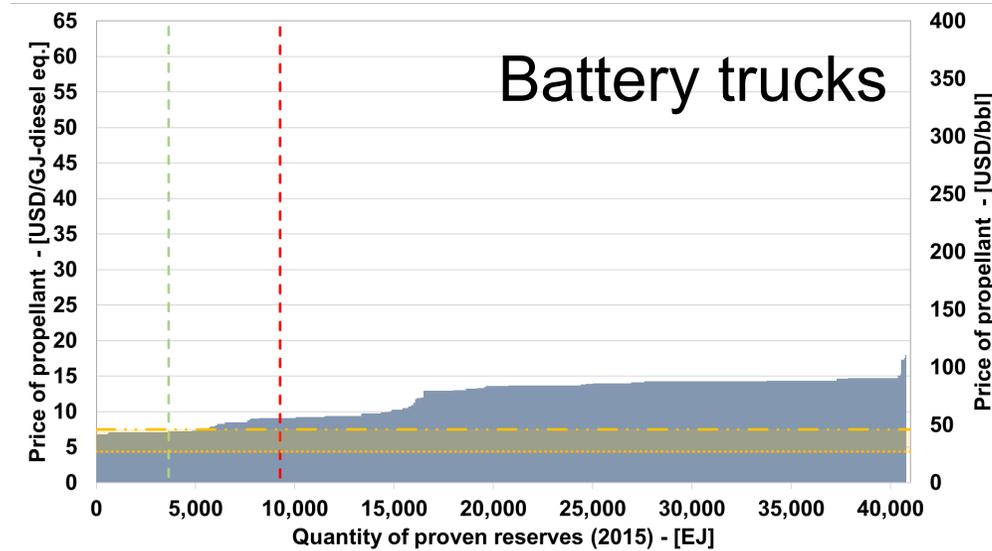








Competitive alternatives?



Tragedy of the Planet?

1.

Common pool
ressource/recipient?



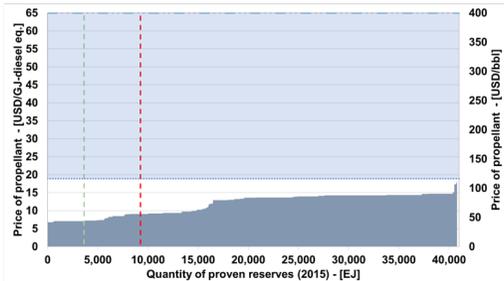
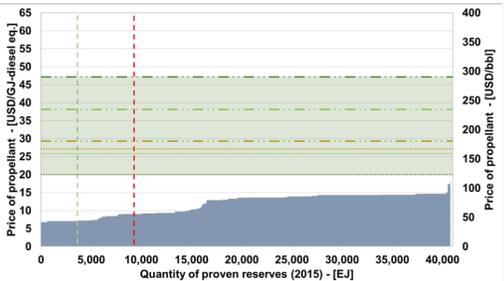
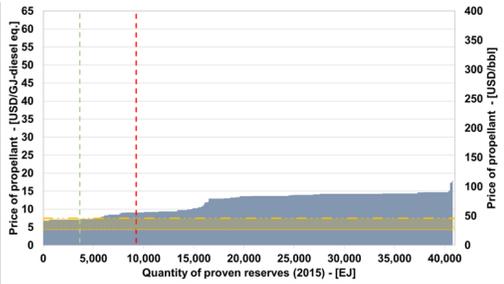
2.

Carrying capacity can be
exceeded?



3.

No competitive
alternatives?



Is Climate Change and the decision to leave fossil fuels a Tragedy of the Commons type of challenge?

- ❑ Can we hope to find alternatives that can outcompete fossil fuels in free competition?
- ❑ Will Adam Smith's invisible hand help us from the grave?

Easy now – we did not leave the Stone Age due to a lack of stone – something better will come up, we just need more research

No – more research won't do it, when it comes to green fuels. We need regulation

