

Resources of fossil fuels

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Pathways examines global oil resources - as well as natural gas and coal resources - and the future global supply/demand balance.

Global oil resources have been investigated on three levels; country level, company level and field level.

Significant resources have already been discovered beyond proven reserves, many prospective regions remain to be fully explored and there are vast volumes of recoverable unconventional oil. However, it is also concluded that global supply of oil probably will continue to be tight, both in the medium-term as

“oil resources appear to be sufficient to meet demand up to 2030”

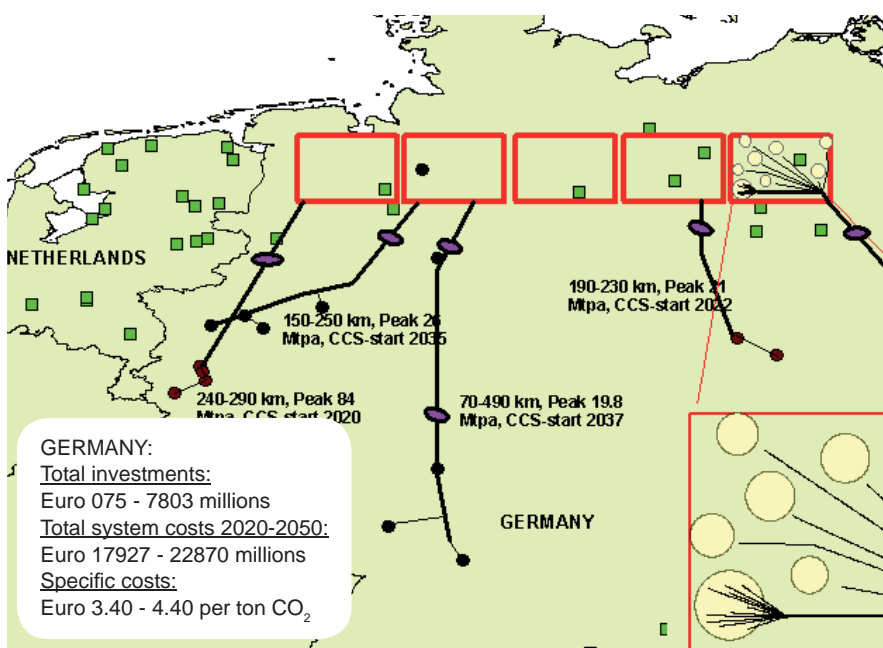
well as in the long-term. Production of unconventional oil and synthetic fuels is not believed to significantly alter this situation. Although an increasing number of recent reports have indicated an imminent or “soon to come” peak in global oil supply, it has not been found that any of these reports have contributed

with any new information on oil resources or oil supply ability. Nevertheless, there is a distinct possibility that global oil production may peak

or plateau in a relatively near future, not caused by limited resources but because too many factors over long time constrain investments into exploration and production.

CO₂ capture and storage in the European Union

- security of supply and the role of coal based power generation



CO₂ transport and storage in Germany

Pathways analyses conditions for Carbon Capture and Storage (CCS) in EU25 with respect to Security of Supply, CO₂ emission reduction targets, age structure of EU power plants and timing of investments and storage opportunities. Various barriers to renewable energy sources, the resistance to nuclear power and increasing import dependency indicates that coal may continue to play an important role in EU energy supply, but then only in combination with carbon capture and storage (CCS). Today most member states have identified structures that may be suitable for subsurface storage of CO₂ although looking at R&D activities it seems as if CCS will first be implemented in the region around the North Sea.