



MEDITERRANEAN ENERGY: PERSPECTIVES AND COOPERATION



Sohbet Karbuz

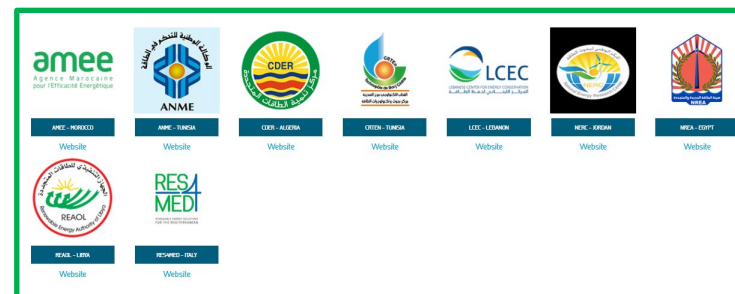
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- A private, non-profit Association
- Created in 1988 and incorporated in 1991
- Bringing together the major energy companies of the Mediterranean region
- OME also serves as the secretariat of the UfM Gas Platform

Partners - Affiliates



Associated Members





For over 30 years, OME is committed to promote energy dialogue in the Mediterranean Region to strengthen regional cooperation and favour the socio-economic development.

Overall objective of the UfM Gas Platform

to enhance a regional structured dialogue allowing the progressive development of a more secure, transparent and predictable Euro-Mediterranean gas market

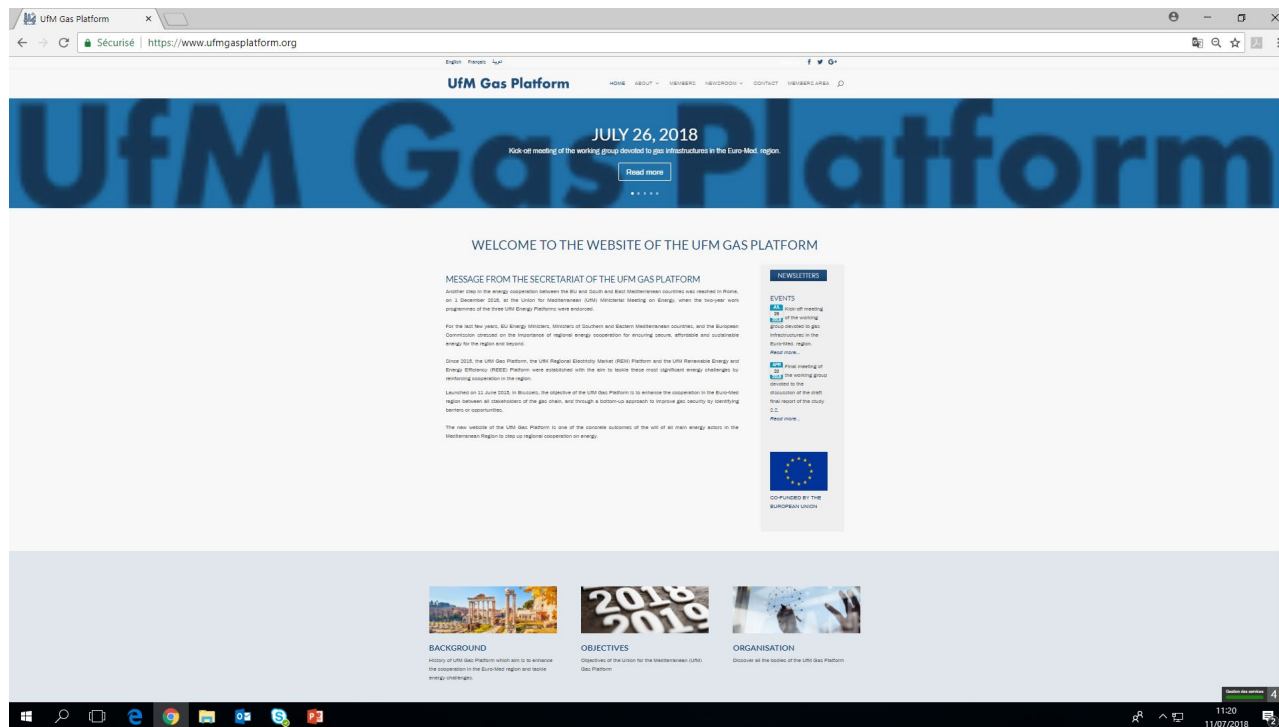
- Thematic studies
- Workshops, Capacity building activities
- Annual UfM Gas Platform conferences
- Promotional video, [upd](#)



www.ufmgasplatform.org

English, French, Arabic versions are available

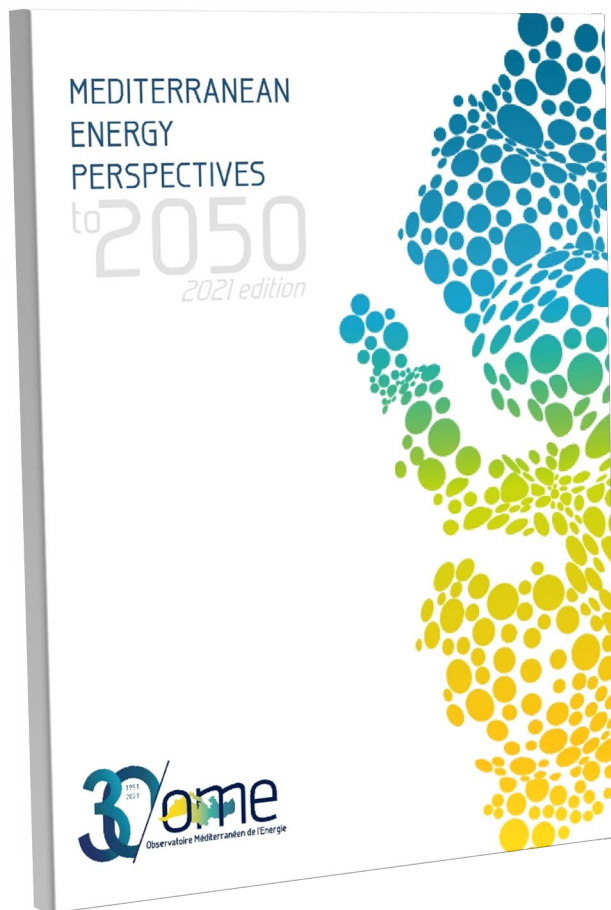
Member Area





- In-depth study of the region
- Country specific analysis
- Historical and current assessment
- Mid and long-term perspective and prospective
- Assessing the most important factors and uncertainties likely to affect the Mediterranean energy future

OME is the only organization dealing with regional transverse analysis of the energy issues in the Mediterranean region

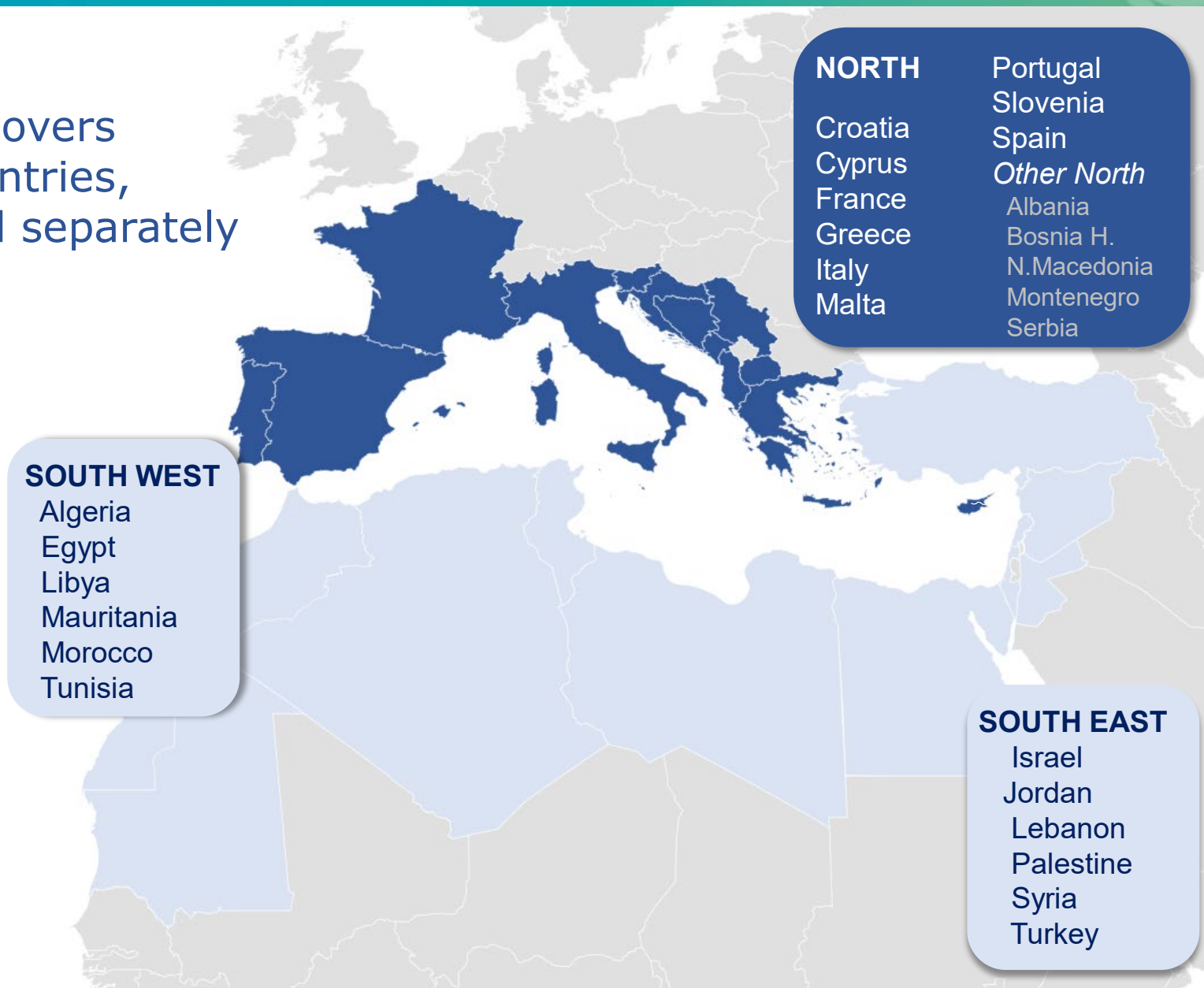


- **Seventh opus in the MEP series.**
- **Covers 26 countries**
- **Energy Perspectives for supply and demand up to 2050.**
- **COVID-19 Impact**
- **Two demand scenarios by sector by fuel: Reference and Proactive Scenarios**
- **A “Near Zero Carbon 2050” the ProMED scenario is based on the expertise drawn from experts' workshops organized with the contribution of the UfM energy platforms and was co-funded by the European Commission.**



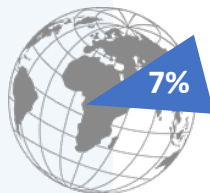
Co-funded by
the European Union

MEP Covers
26 countries,
21 modelled separately

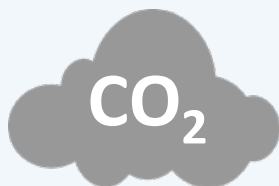
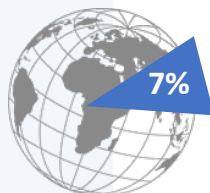




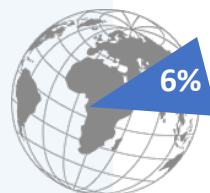
Population
550 million



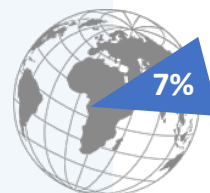
Energy Demand
1 000 Mtoe



CO₂ Emissions
2 000 MtCO₂

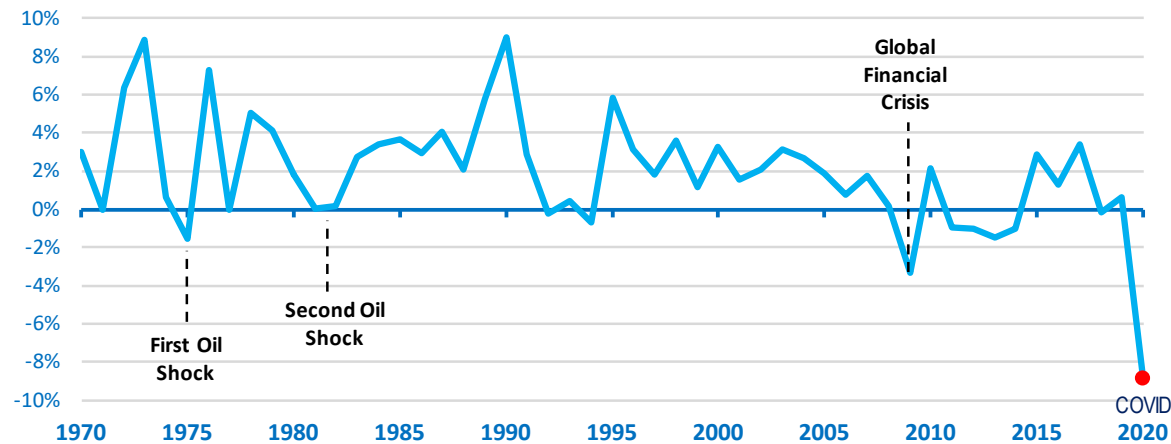


GDP
10 000 bnEuros

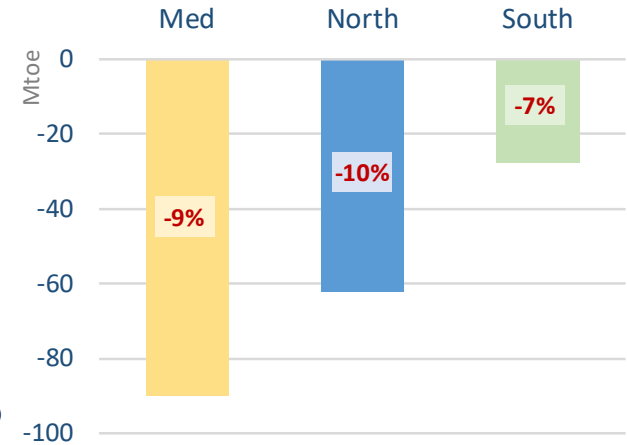


- Data Sources: OME members, national and international sources;
- Latest data point: **2018** and **2019/2020** partially
- In-house developed supply-demand model;
- Bottom-up model;
- Main exogenous assumptions: Population, GDP & Energy prices

Rate of change in Mediterranean energy demand, 1970-2020



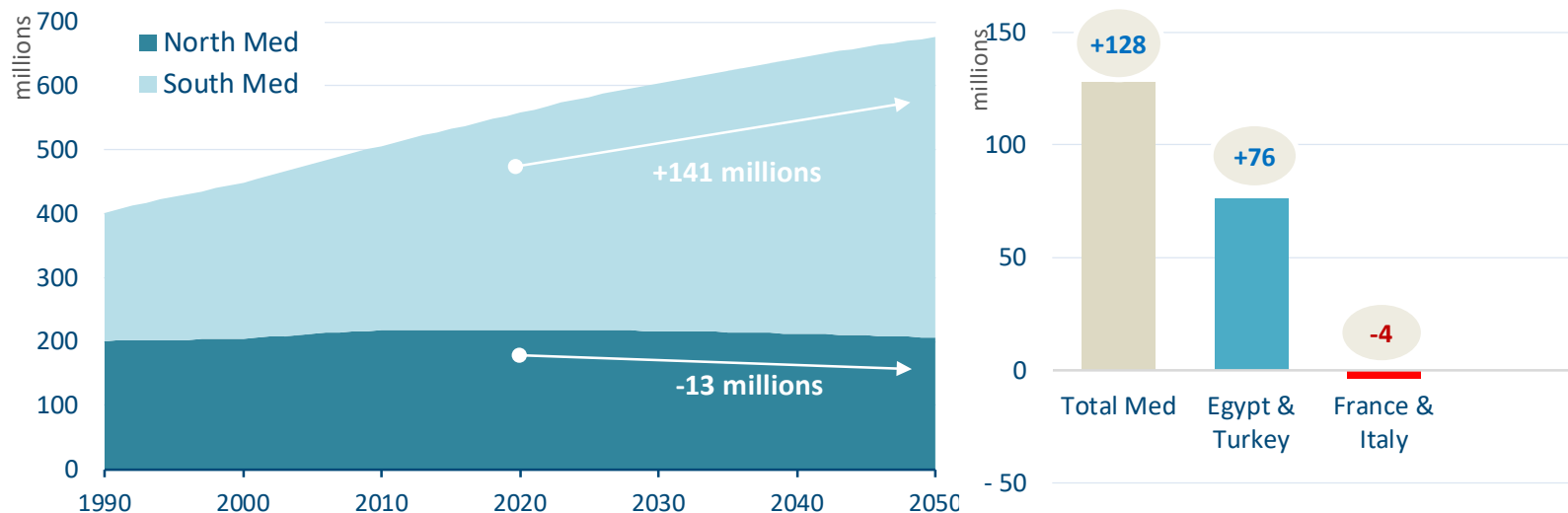
Incremental Energy Demand 2019-2020



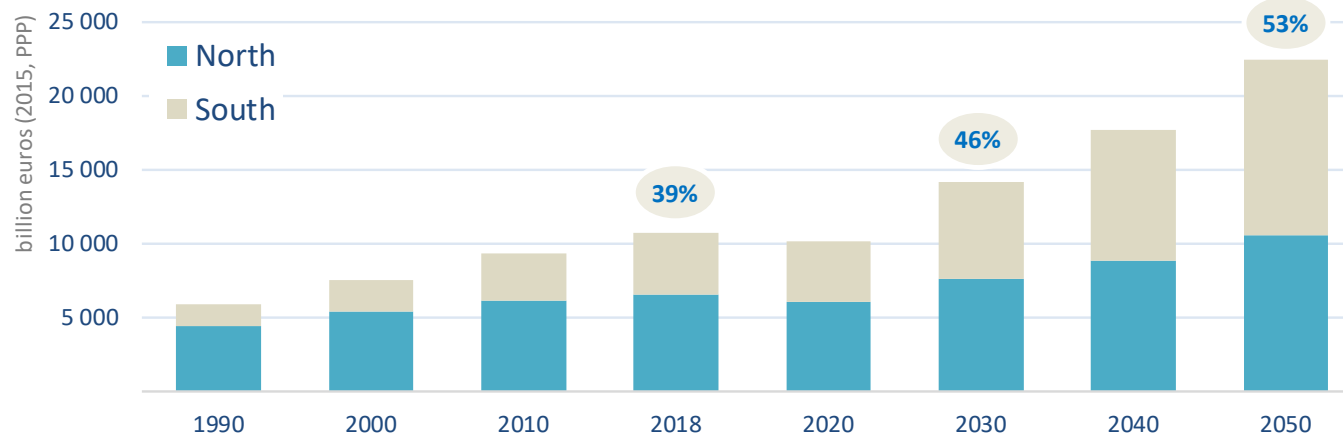
Significant reduction in demand for energy in industry, closed commercial spaces and offices & drastically reduced commuting and travel.

North countries, and especially EU countries, have been hit the hardest with a 10% fall in energy demand in 2020.

128 million people more by 2050 in the Med: all in the South



South Med GDP to overtake North: 53% of total Med in 2050

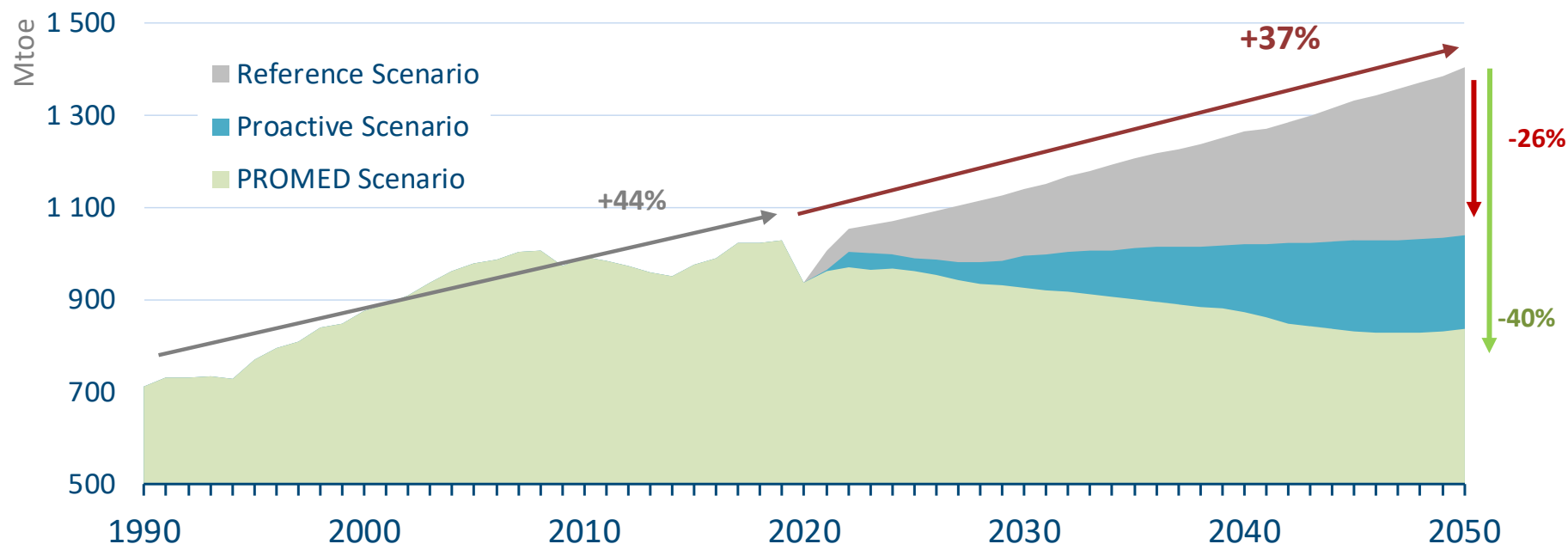


- Takes into account past trends, current policies and ongoing projects.
- Incorporates the Nationally Determined Contributions (NDCs)
- But it assumes that international financing and other aids will not be forthcoming. **Only unconditional NDC targets** are assumed to be met in this scenario.
- For EU countries we used the EU Reference Scenario of the European Commission – the Baseline Scenario.
- In the South, increased demand for electricity in this scenario will be met with the traditional primary energy sources and with others that will be available in the future.

The Proactive Scenario is based on the implementation of strong energy efficiency programmes and increased diversification in the energy mix based on the NDCs submitted by each country.

- **Assumes that international financing will be made readily available** and that all targets of the NDCs will be met in full.
- Assumes achievement of energy efficiency and renewables share targets set or envisaged by the Mediterranean countries in their NDCs.

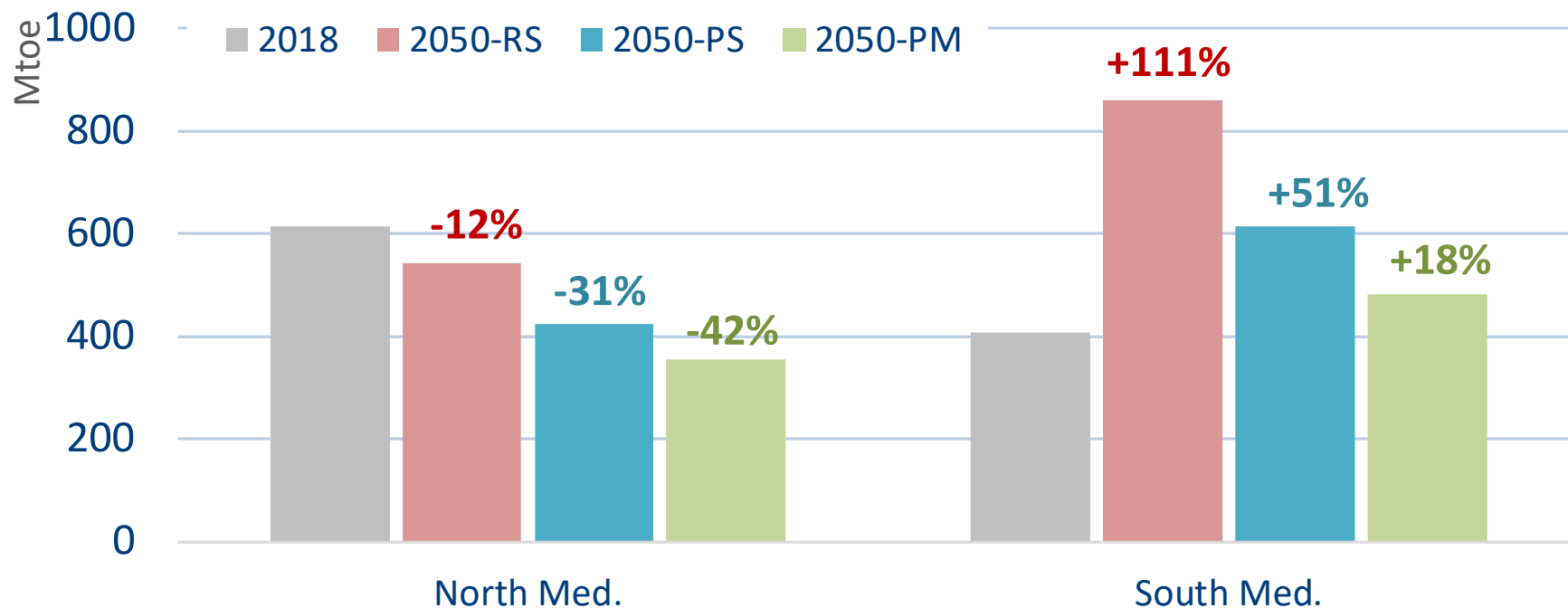
- **More ambitious measures** for energy efficiency but also technology development **to inflect favourably the current trends and curb CO₂ emissions significantly.**
- **Based on the EU Green Deal** to define **a Euro-Med Green Deal.**
The ProMed Near Zero Carbon Scenario includes:
 - A **RES increase** to full potential especially in Power Gen but also in end-usage with the increase of storage and the introduction of hydrogen
 - A **major shift towards electric vehicles** (and biofuels where possible) even for freight and air/maritime transport; including new generation batteries, hydrogen and power-to-X technologies
 - Sizeable increase in **Building efficiency** refurbishing but especially for new constructions
 - Increased CCS and CCU
- **Horizon:** neutrality reached **in 2050 for EU** countries and some non-Eu and **2060 for most South Med** countries.



In 2050 demand would be 37% higher than in 2018.

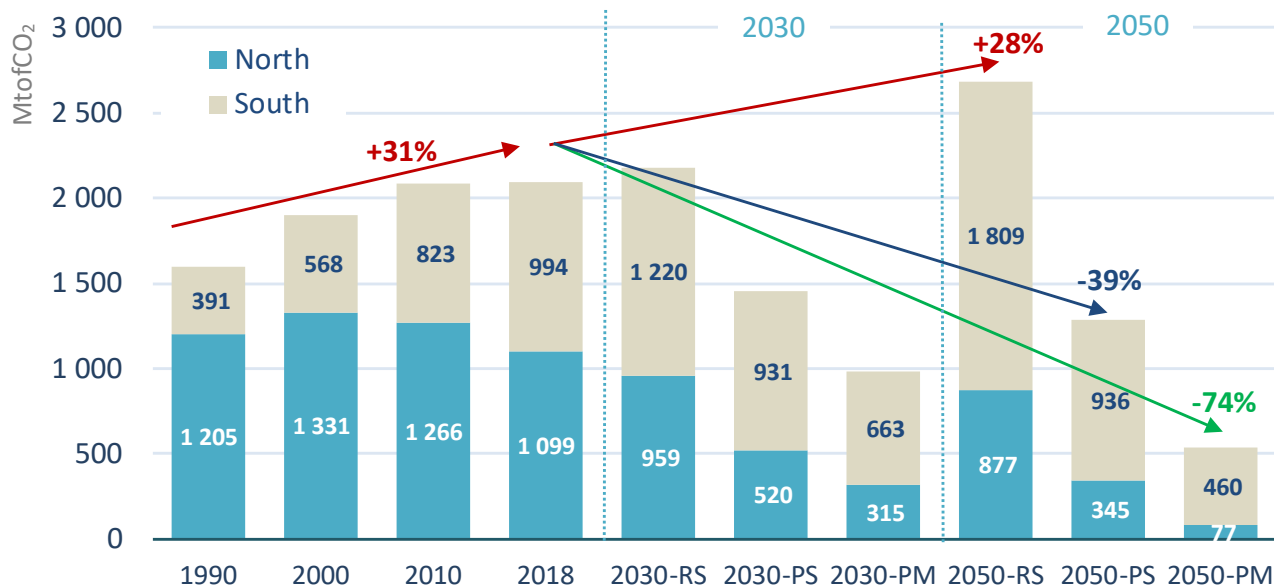
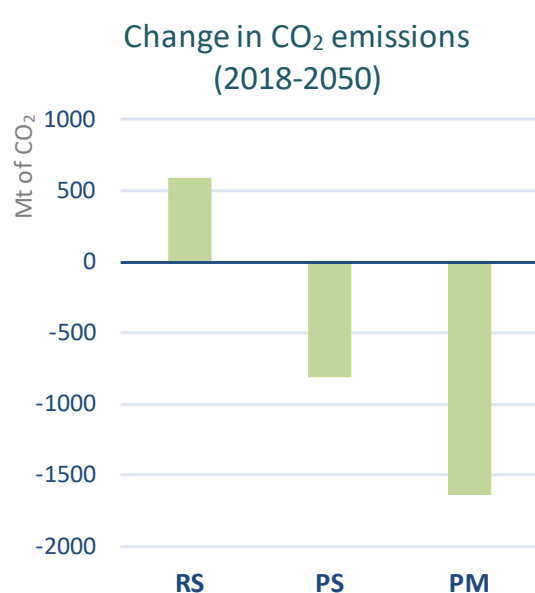
A Proactive Scenario would lead to substantial savings(26%) and only 2% demand increase as a result.

The ProMED would allow for 40% decrease of energy demand in 2050vs the RS and -17% compared to 2018 levels, down to 1998 levels.



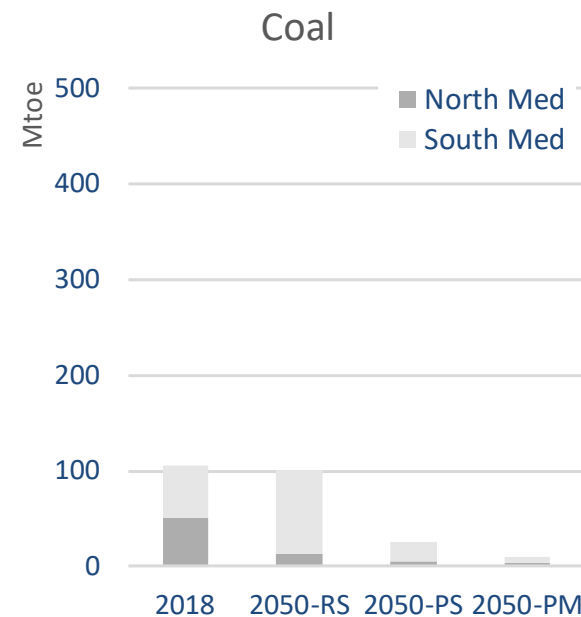
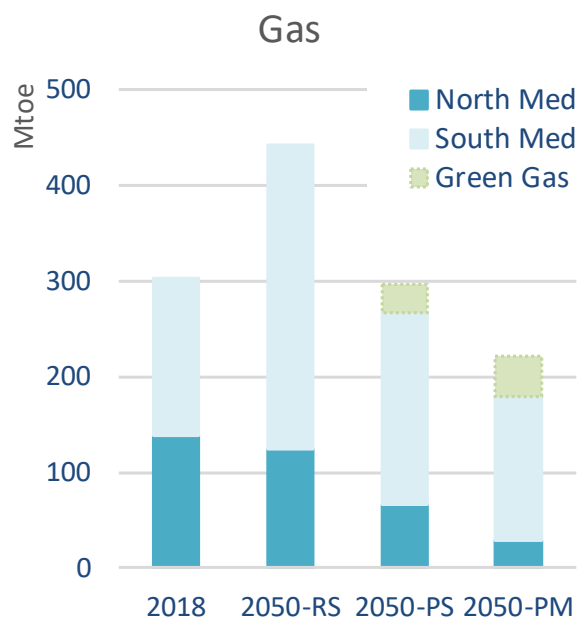
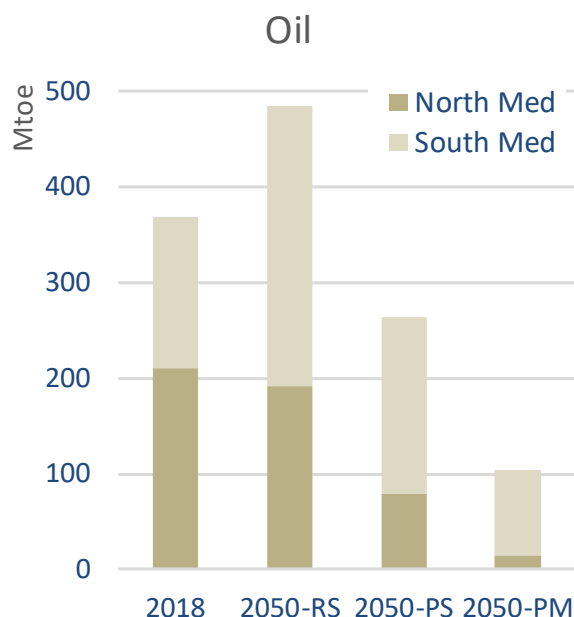
All energy demand increase to occur in the South, decreasing in the North.

Huge decrease in the North in the PM scenario and limited increase in the South. Regardless of the scenario, South energy demand will overtake that of the North by mid 30s. North demand has been decreasing since 2005.



Under RS, CO₂ emissions will increase at the same pace over the next 30 years than they have over the past 3 decades with a doubling of South Med emissions by 2050.

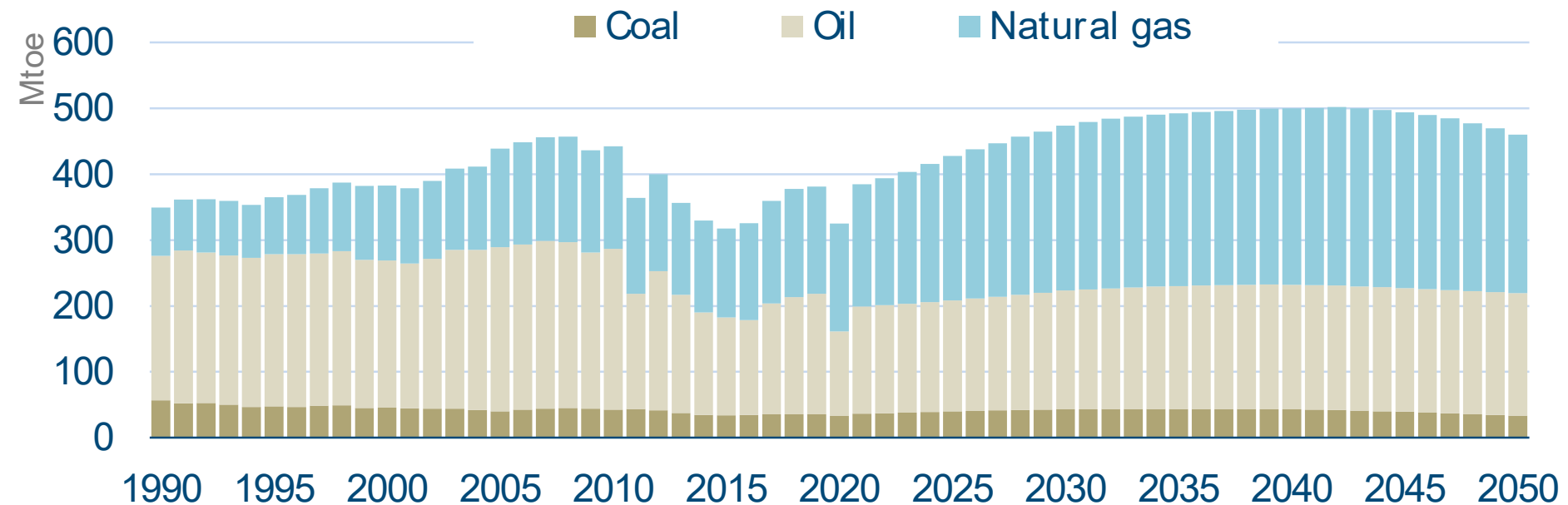
In a Proactive Scenario, emissions would be reduced by 39%; 74% decrease by 2050 in the ProMED.



Striking decrease in fossil fuels especially oil and coal.

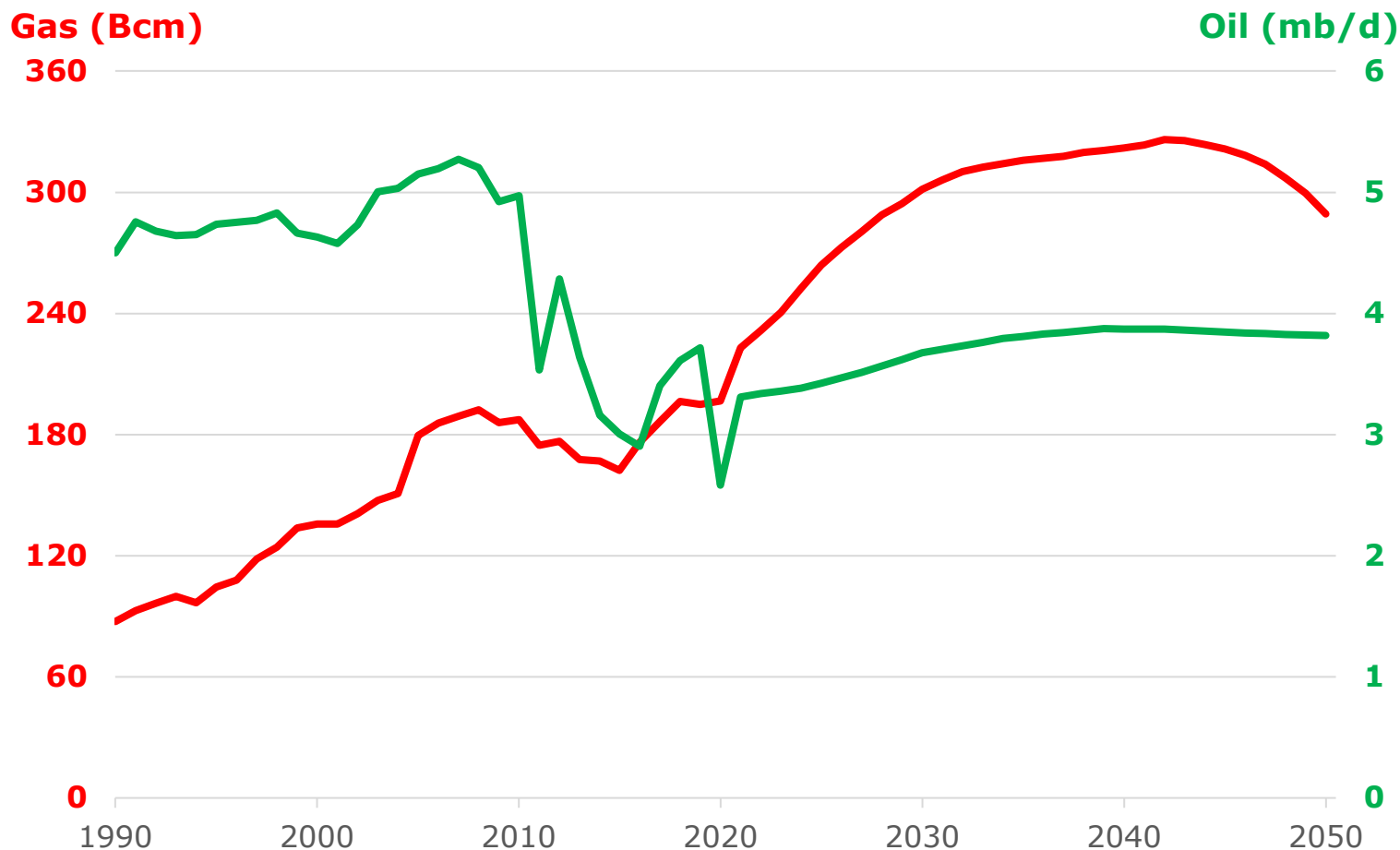
However, more than 70% fossils in the energy mix in 2050 in the RS and 56% even in the PS. Down to 43% in the PM with 20% FF in the North and 58% in the South med.

Green gas to account for 20% of gas demand in 2050 in ProMED.



Fossil fuel production is expected to increase until the early 2040s when it will reach its peak at 500 Mtoe before entering the terminal decline.

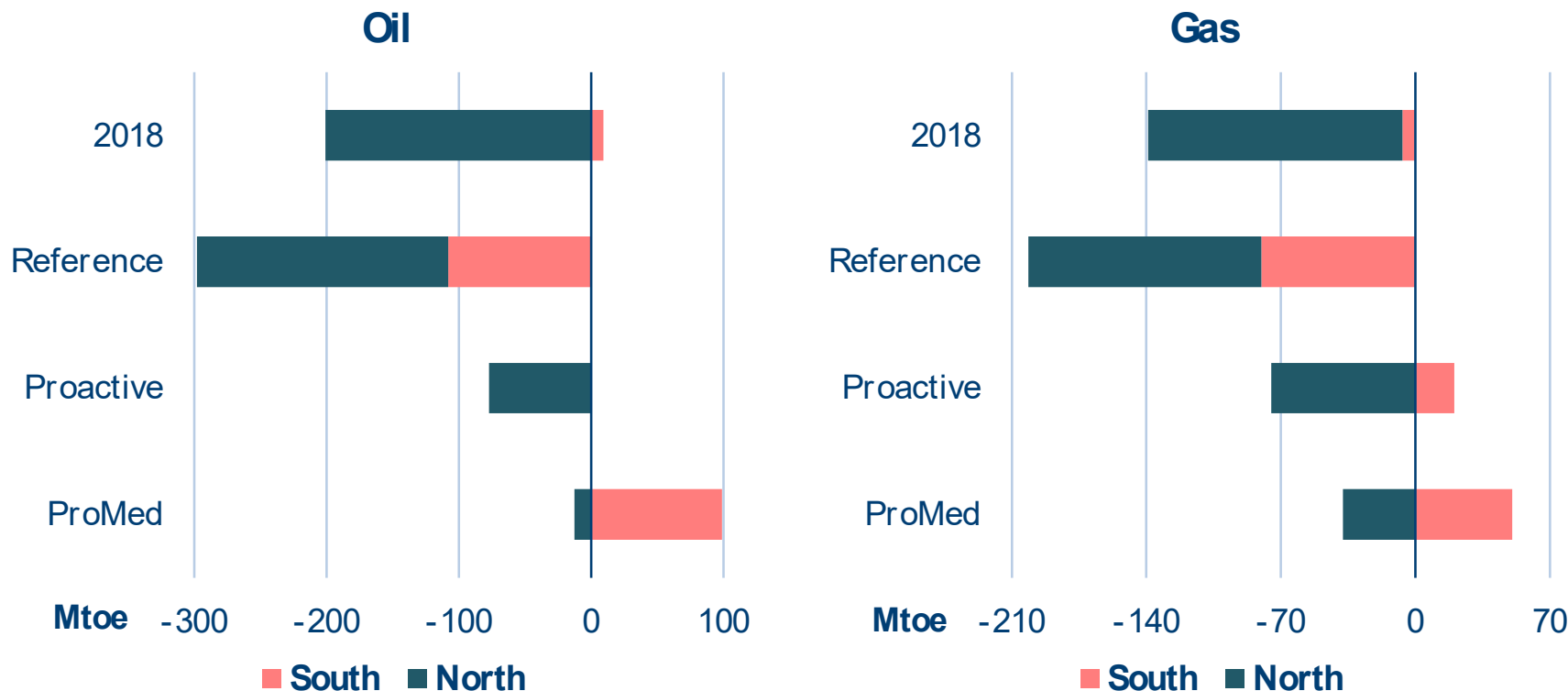
This is mainly due to large losses in production in Egypt and Algeria.



Natural gas production will increase by about two thirds until it peaks in early 2040s, then will fall sharply.

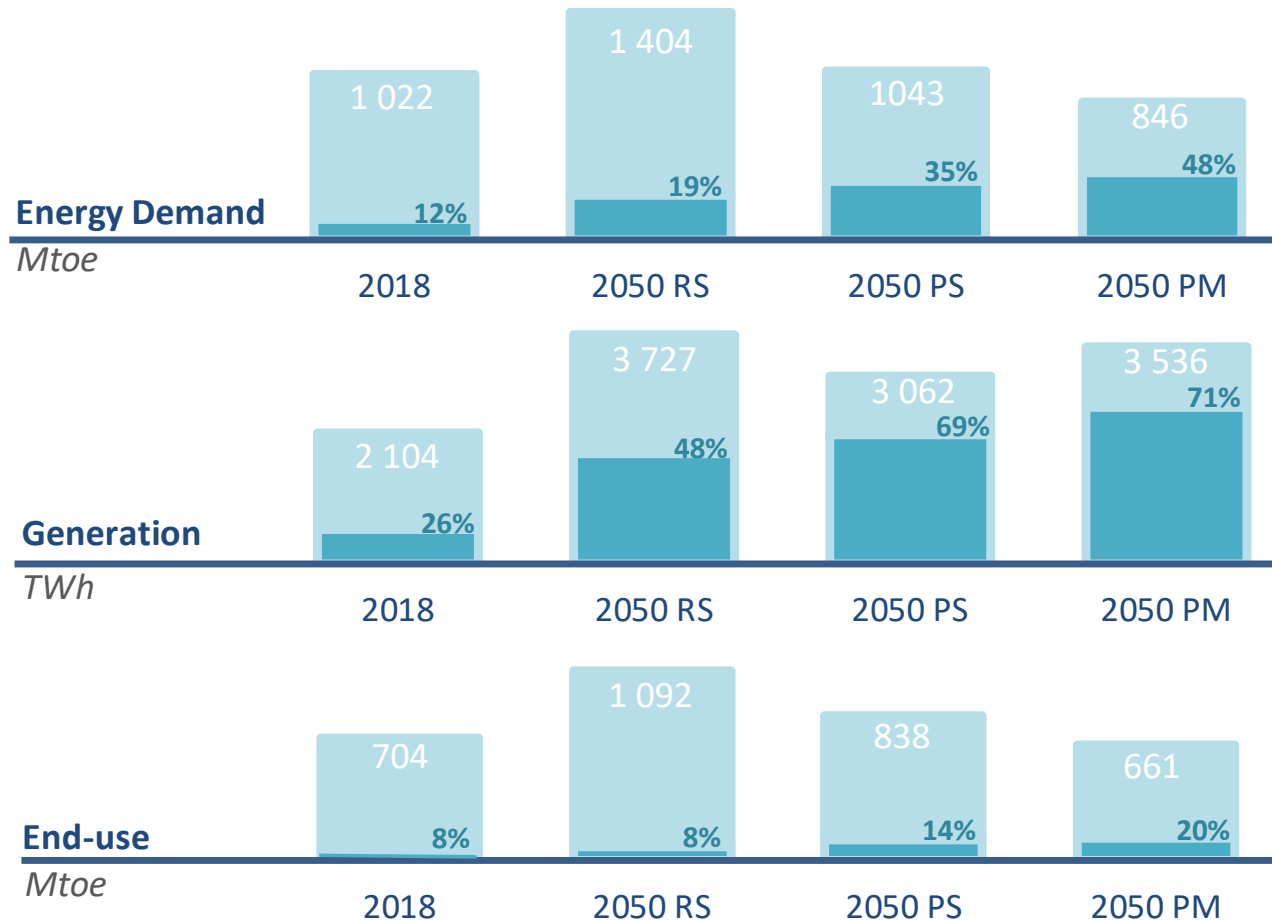
Oil production will increase slightly and remain stable

NET OIL AND GAS TRADE IN MED. BY SCENARIO, 2018-2050

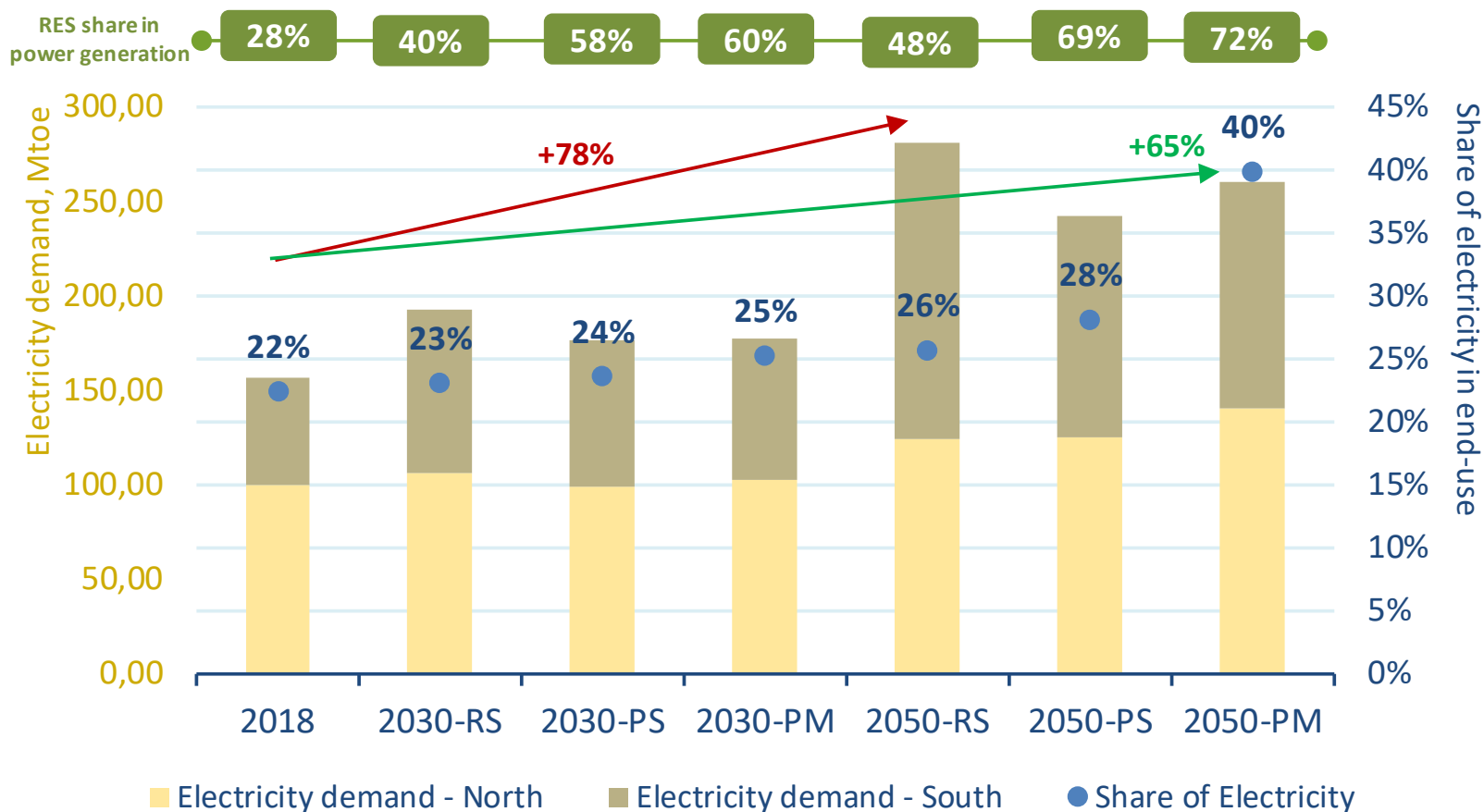


In the ProMed Scenario, the region would become net oil and gas exporter,

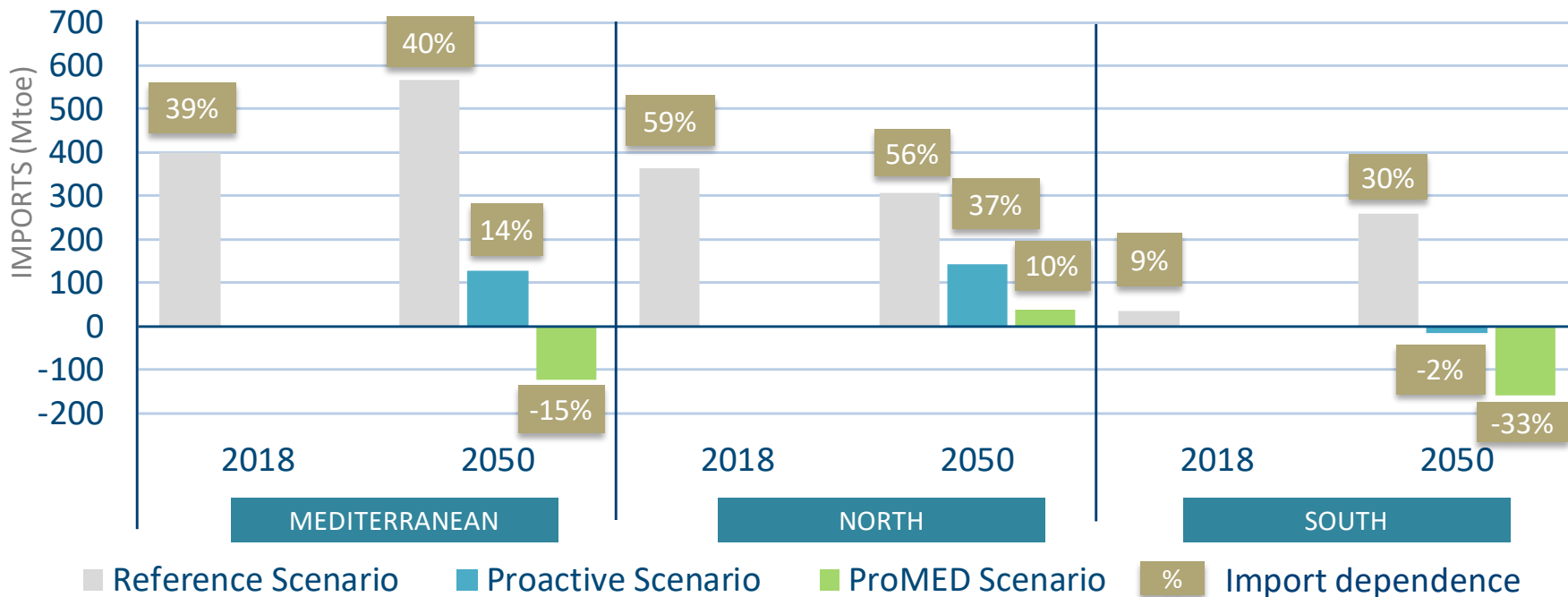
While it will remain a major net oil and gas importer in the Reference scenario



Renewables to account for nearly half the energy mix by 2050 in the PM and over two-thirds in generation with end-usage lagging behind at 20%.

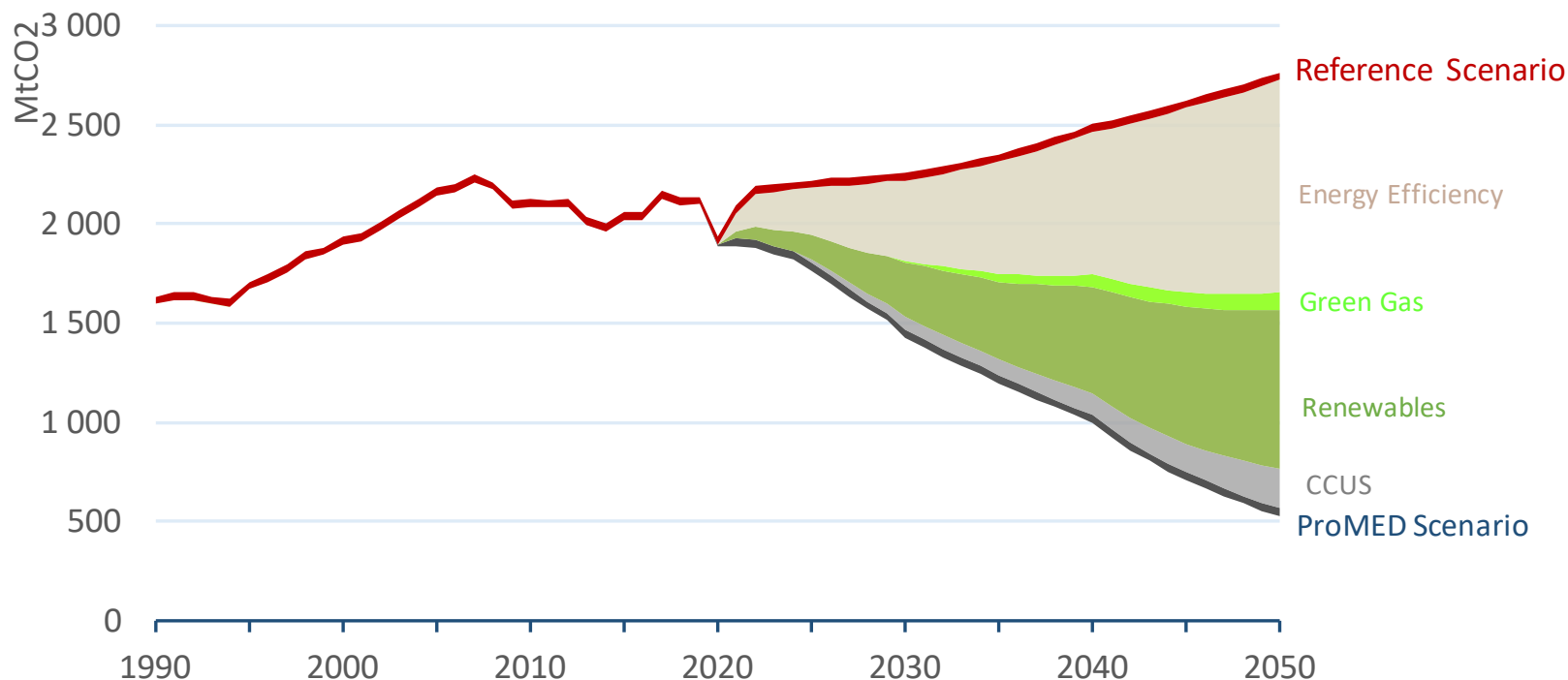


Electricity demand to increase 78% by 2050. Increase is >160% in the South. RES to reach 72% of generation in the ProMED Scenario. Strong electrification of the end-use consumption.



Energy security is paramount especially for South Med countries regardless of if they are fossil fuel importers or producers.

The implementation of the Near Zero Carbon Scenario would allow the region to become a net exporter as a whole and for importing countries to reduce drastically their dependence and producers to increase their revenues.



All technologies need to be developed in full gear to be able to reach decarbonisation. The greatest contribution to energy transition would come from energy efficiency

In 2050, CCUS could reduce CO₂ emissions by 25% in the ProMED.

- **Current policies will not be enough** for the Mediterranean to curb sizeably its energy demand and CO₂ emissions
- It is not only climate change that is at stake but the **energy dependence of the region** and the strains it already currently poses to the region
- The European Green Deal represents **a reference model for neighbouring countries but only a Euro-Mediterranean Green Deal** can instil the needed step change with **regional cooperation essential** to bolster the energy transition and exchange of best practise and know-how
- **All technologies and policies** will be needed to curb efficiently CO₂ emissions
- <https://www.ome.org/wp-content/uploads/2021/09/MEPto2050-2021-ed-Executive-Summary.pdf>



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Thank you.