



*Combined Solar Power and Desalination Plants:
Techno-economic potential in Mediterranean Partner Countries*

Market Assessment

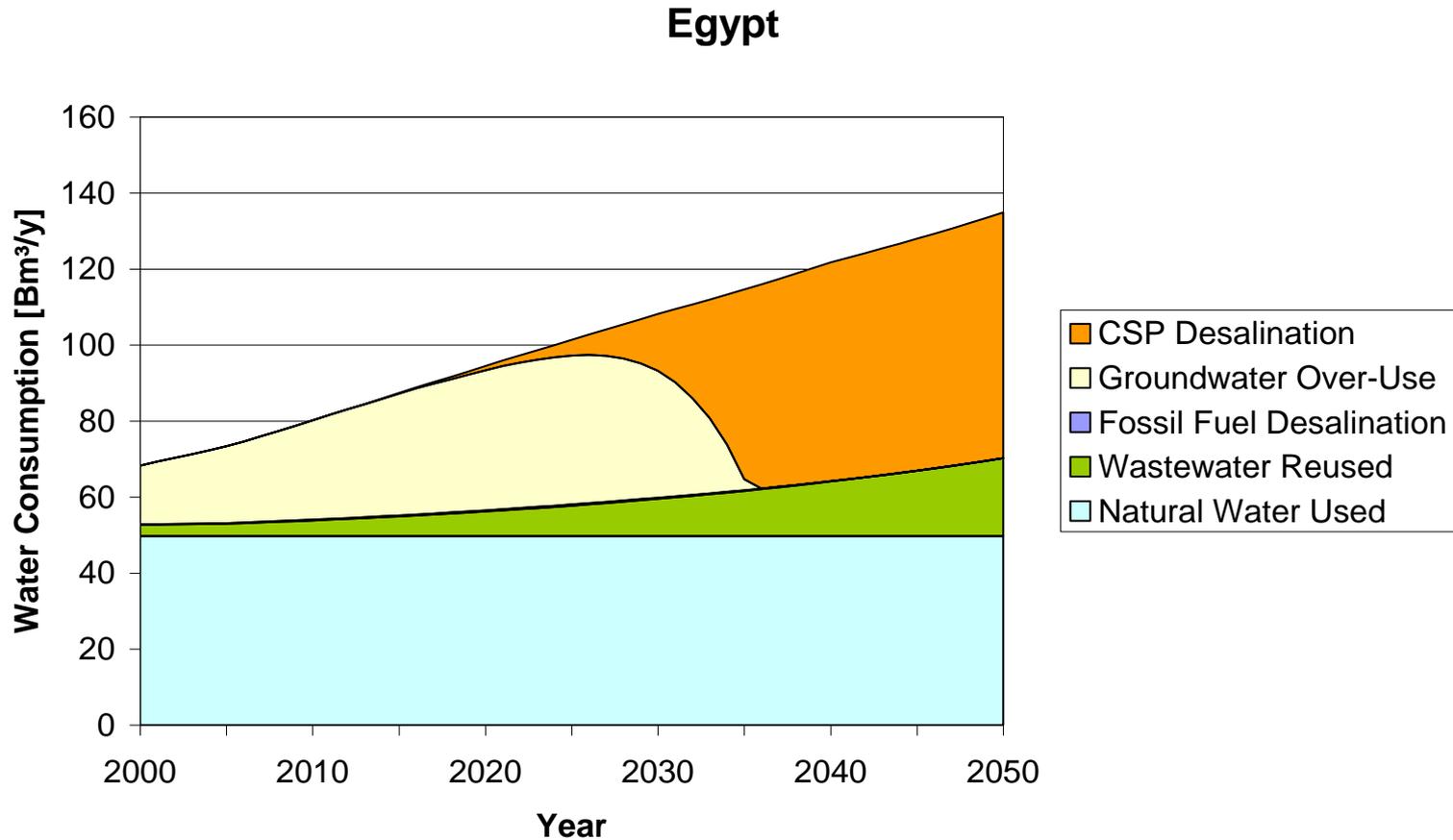
Dr. Franz Trieb



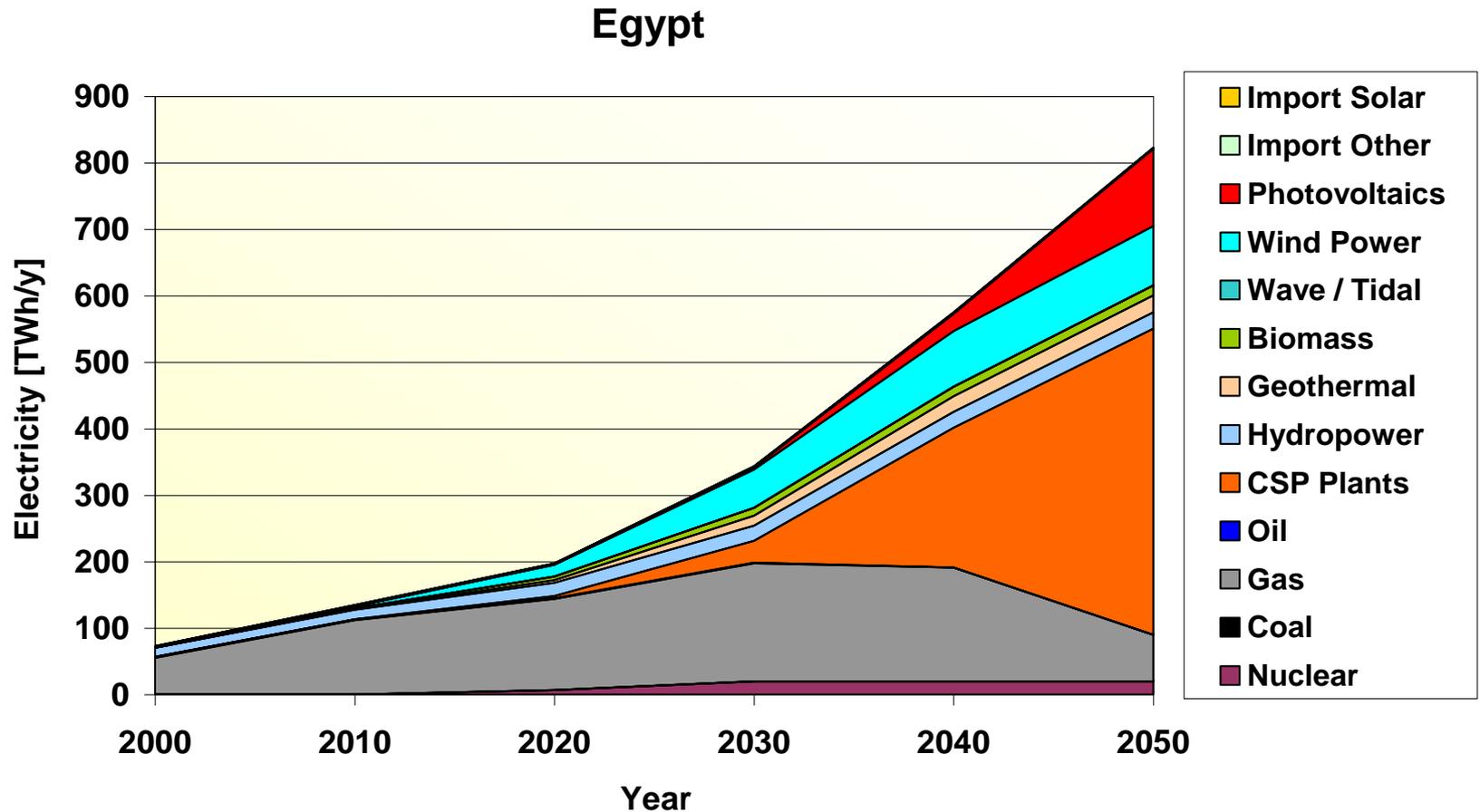
Deutsches Zentrum
für Luft- und Raumfahrt e.V.
in der Helmholtz-Gemeinschaft

**FINAL CONFERENCE
RABAT, 18-19 MAY 2010**

Water Supply Scenario for Egypt



Power Supply Scenario for Egypt

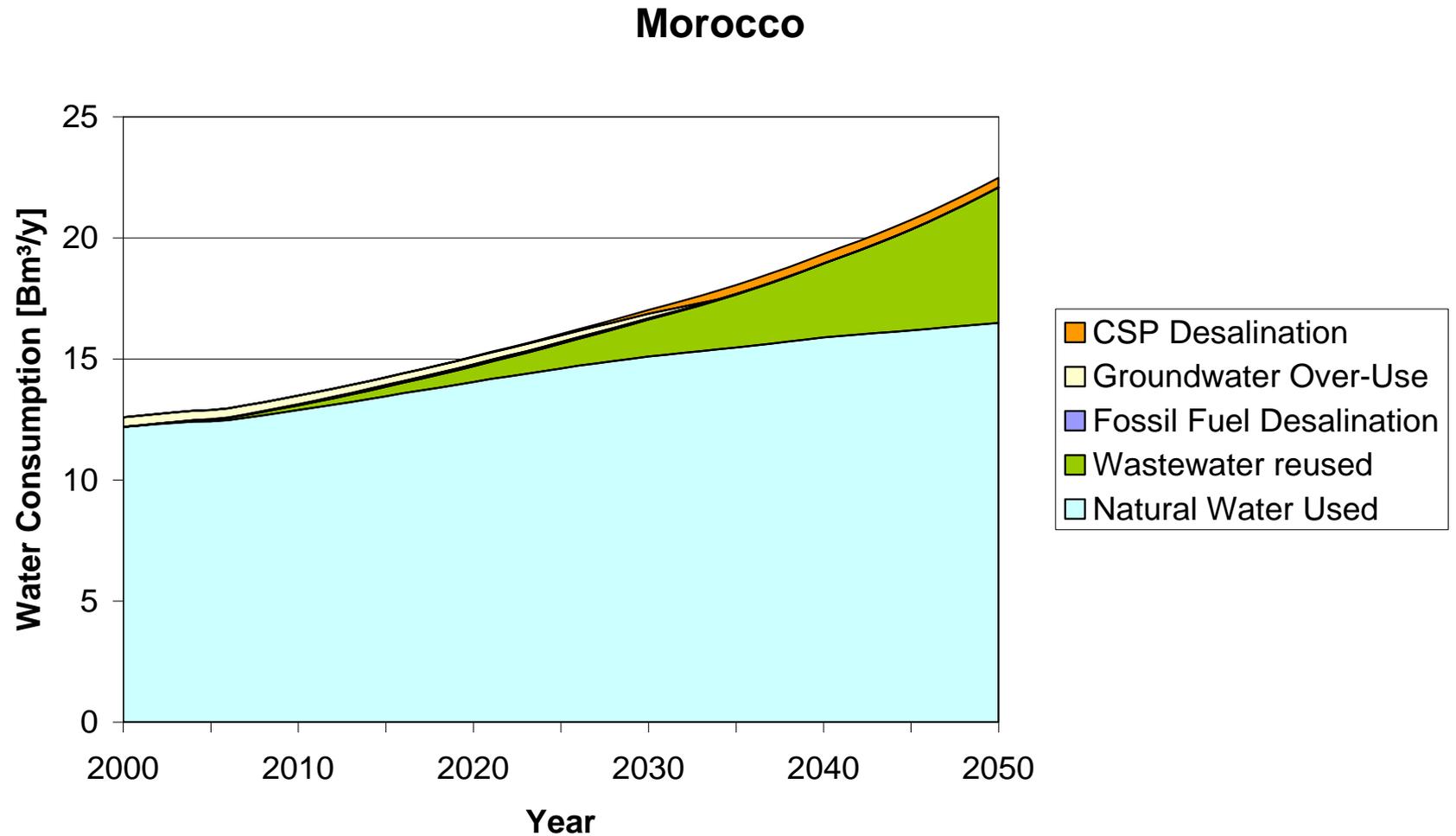


Egypt

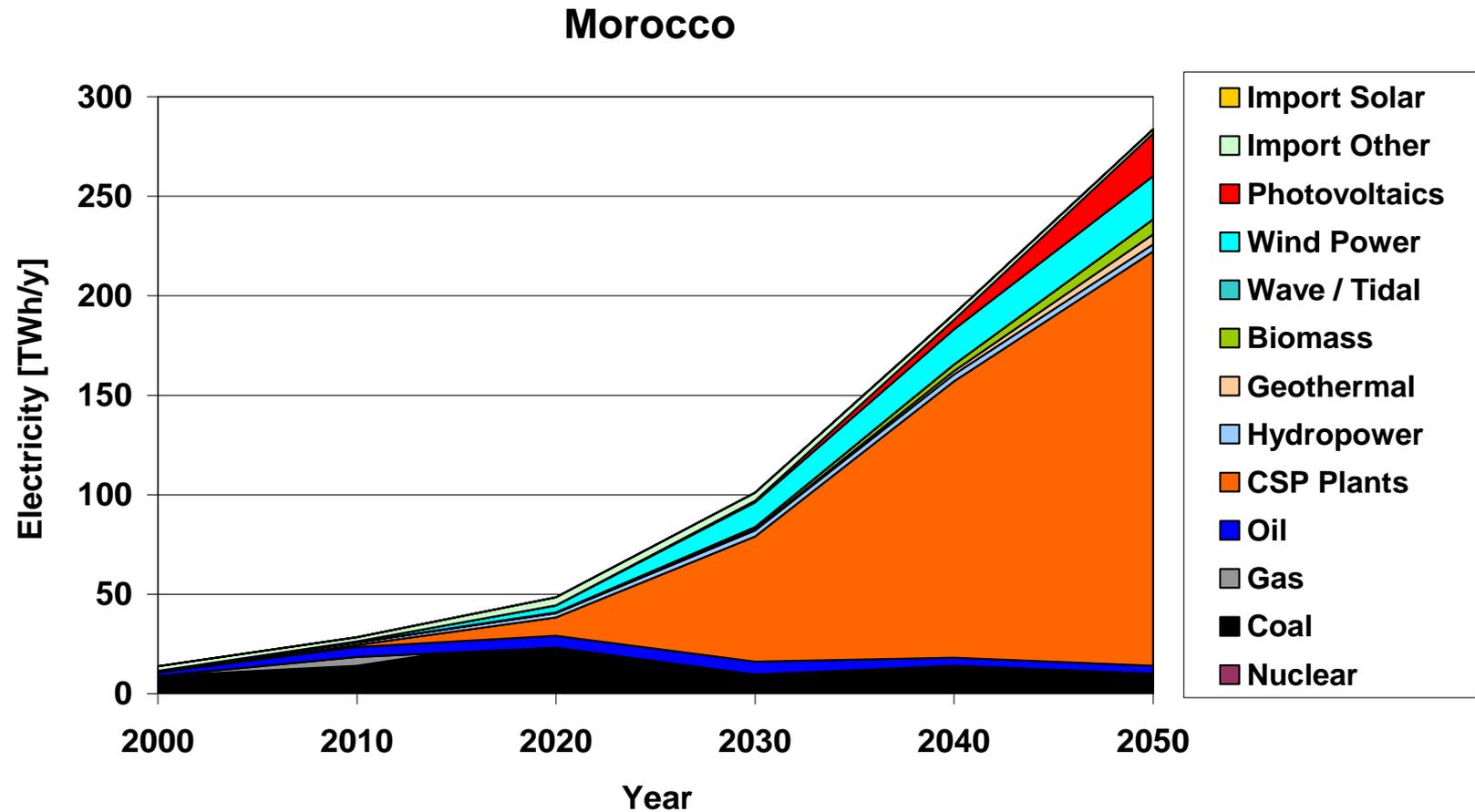
- Water demand and deficit are increasing quickly
- Efficiency, RE-use and CSP very important to avoid shortages
- Very critical to start a.s.a.p

- Electricity demand growing quickly
- Wind and solar obvious options to control gas consumption
- Nuclear policy does not really make a difference

Water Supply Scenario for Morocco



Power Supply Scenario for Morocco



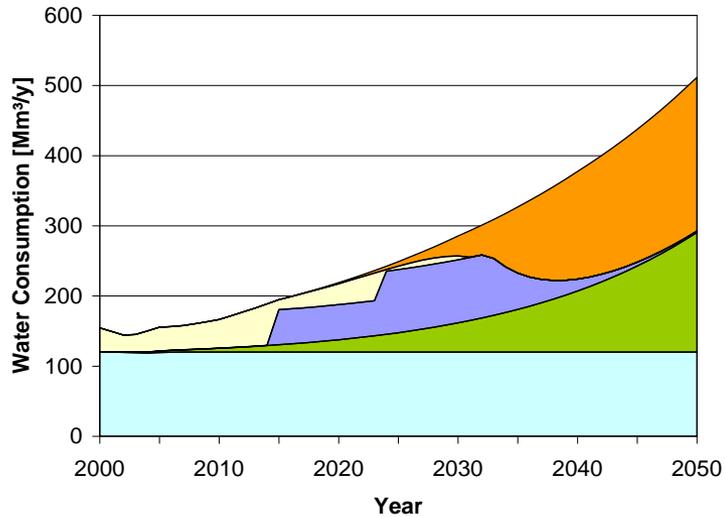
Morocco

- Water demand increasing quickly, but deficits only regional
- Efficiency and re-use are important to avoid shortages
- Limited regional potential for CSP desalination

- Electricity demand growing very fast
- Wind and solar obvious options to control fuel imports
- 2 GW CSP programme will lead to first mover advantage

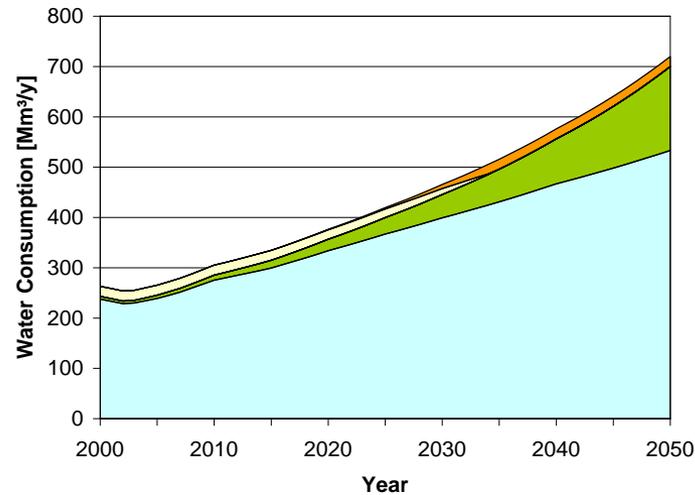
Water Supply Scenario for Palestine

Gaza



- CSP Desalination
- Groundwater Over-Use
- Fossil Fuel Desalination
- Wastewater Reused
- Natural Water Used

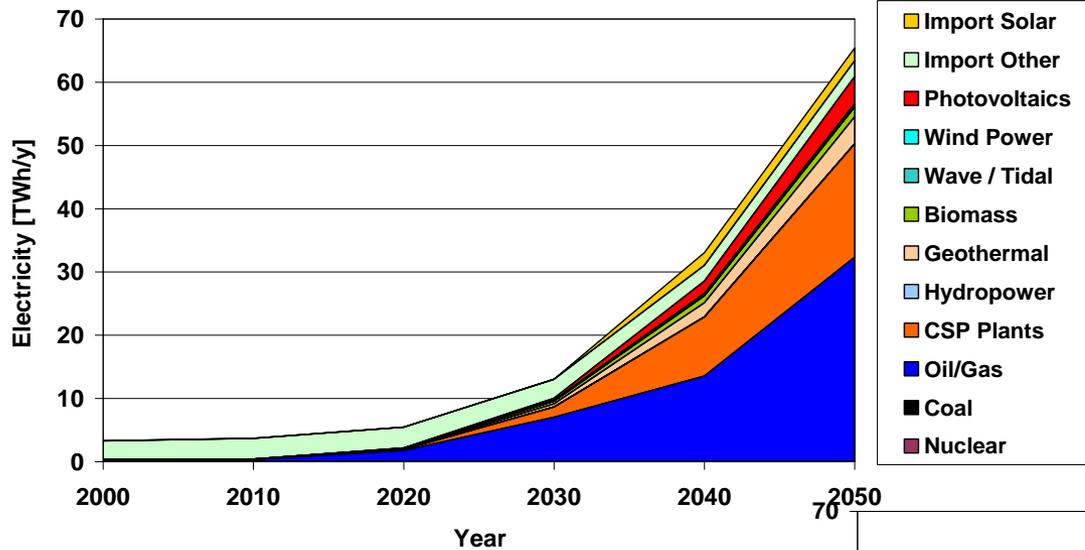
West Bank



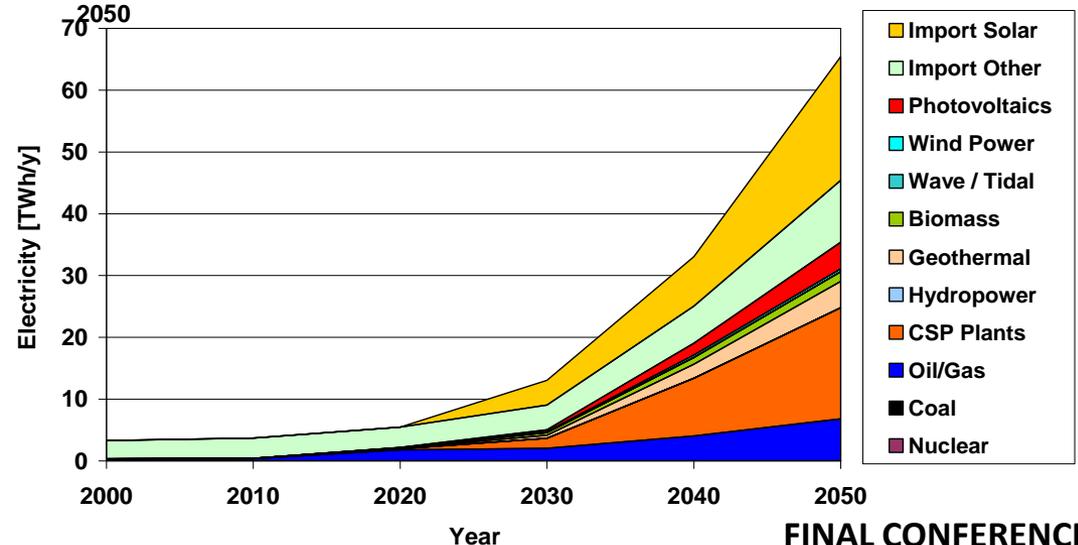
- CSP Desalination
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Power Supply Scenario for Palestine

Palestine



Palestine

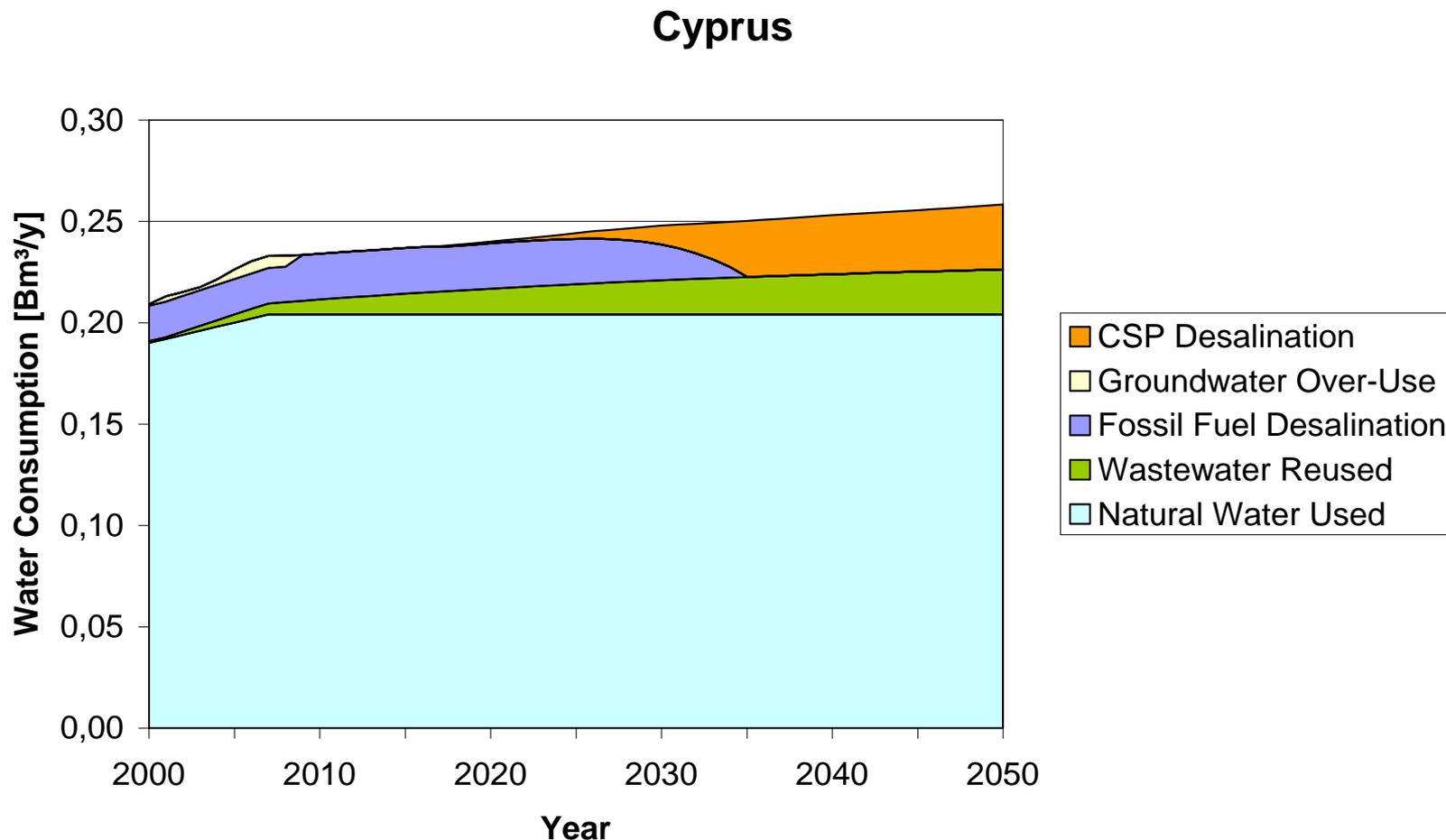


Palestine

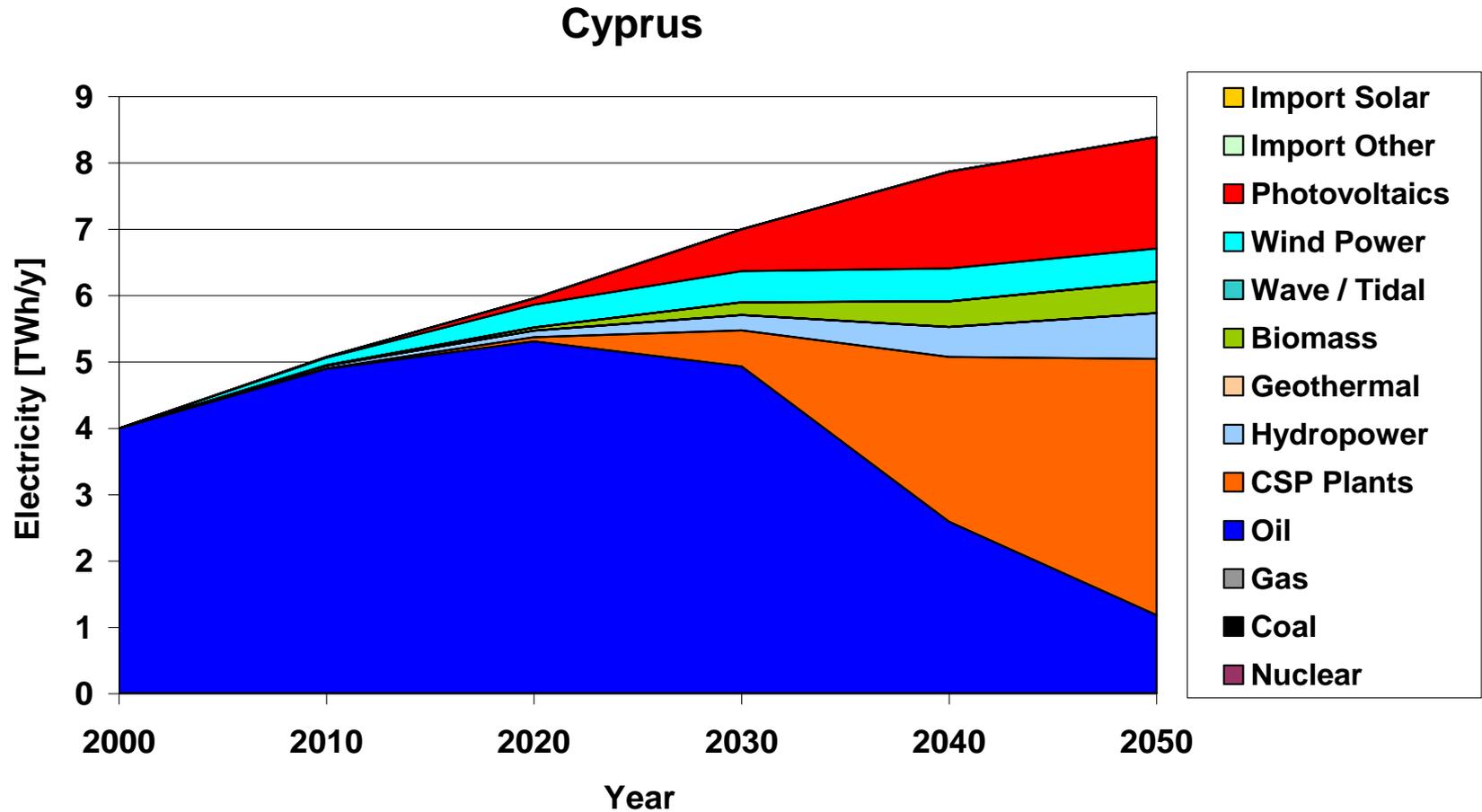
- Water demand increasing quickly, deficits mainly in Gaza
- Efficiency, re-use and CSP are important to avoid shortages
- Limited domestic potential for CSP

- Electricity demand growing very fast
- Not enough domestic options to avoid imports
- CSP imports from neighbours could be an option

Water Supply Scenario for Cyprus



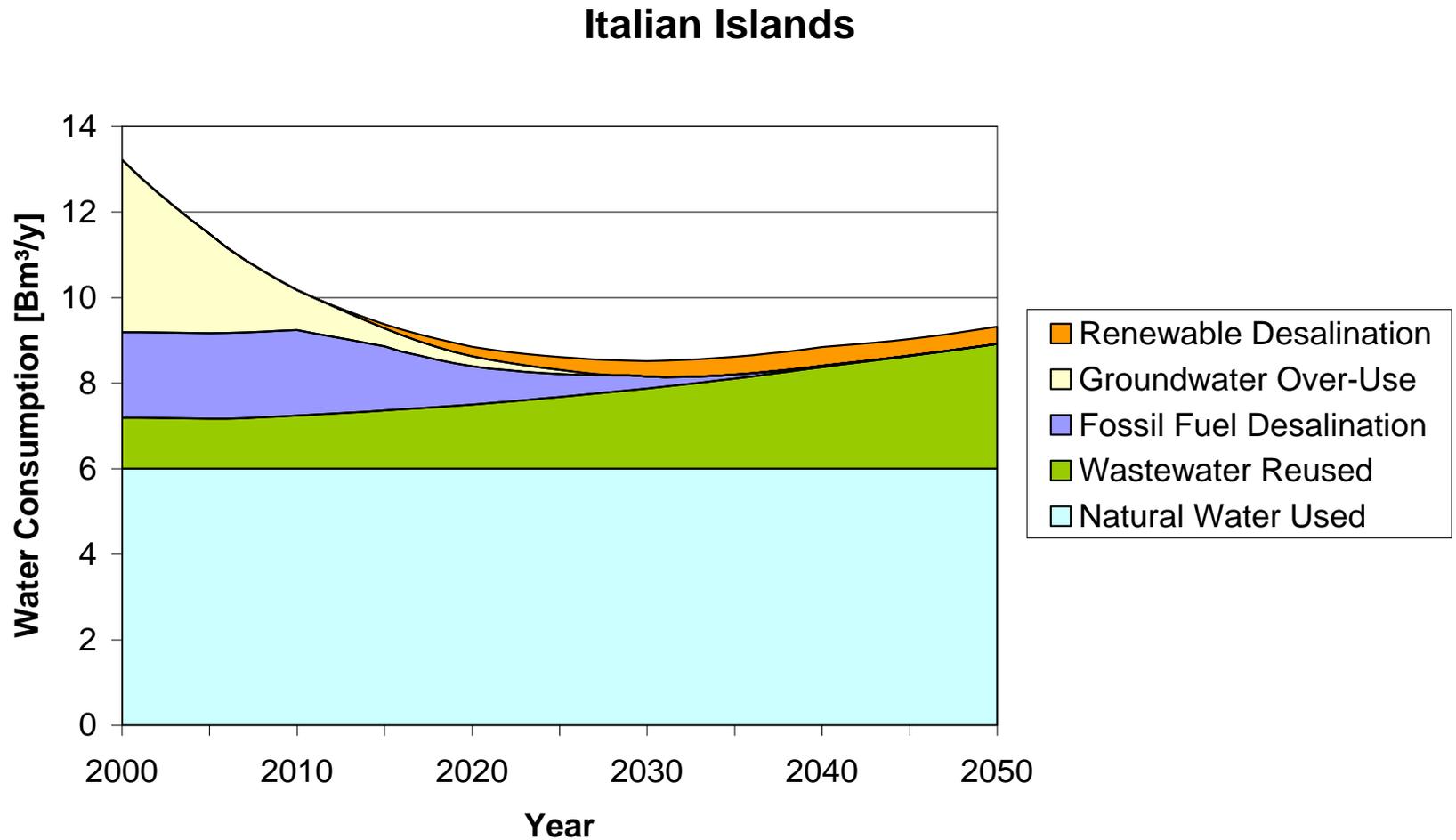
Power Supply Scenario for Cyprus



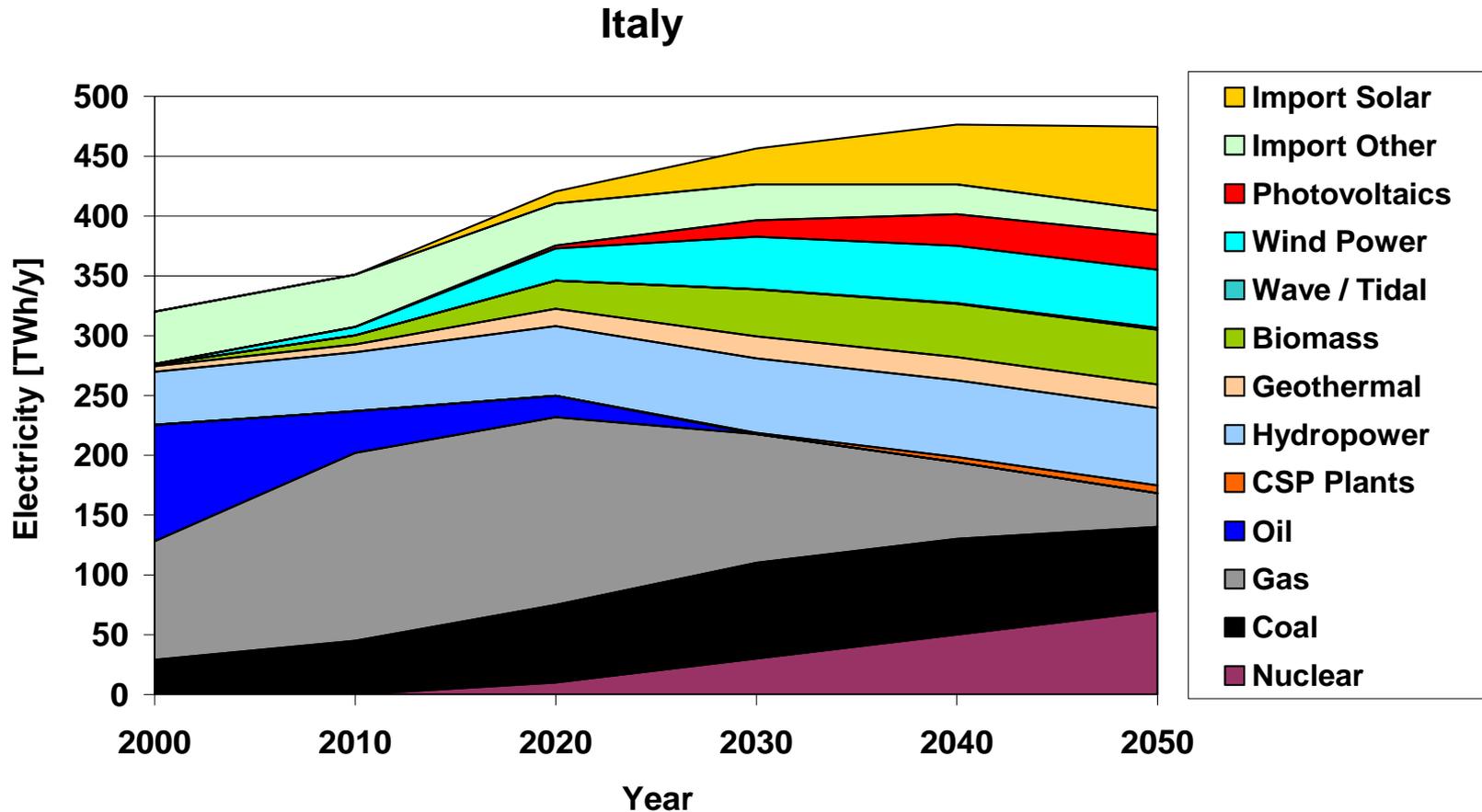
Cyprus

- Water demand increasing moderately, only regional deficits
- Efficiency, re-use and desalination can avoid shortages
- Electricity demand growing quickly
- Solar and wind energy main options to control fuel oil demand
- Specific CSP technology for islands under development

Water Supply Scenario for Italian Islands



Power Supply Scenario for Italy



Italy

- Present water deficit of islands may shrink
- Efficiency, re-use and desalination can avoid shortages

- Italian electricity demand growing moderately
- Oil substituted by gas, coal and eventual nuclear power
- CSP potential limited, other renewables rather important
- CSP imports from North Africa are an obvious option

Thank you

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