

Petrochemistry

Introduction

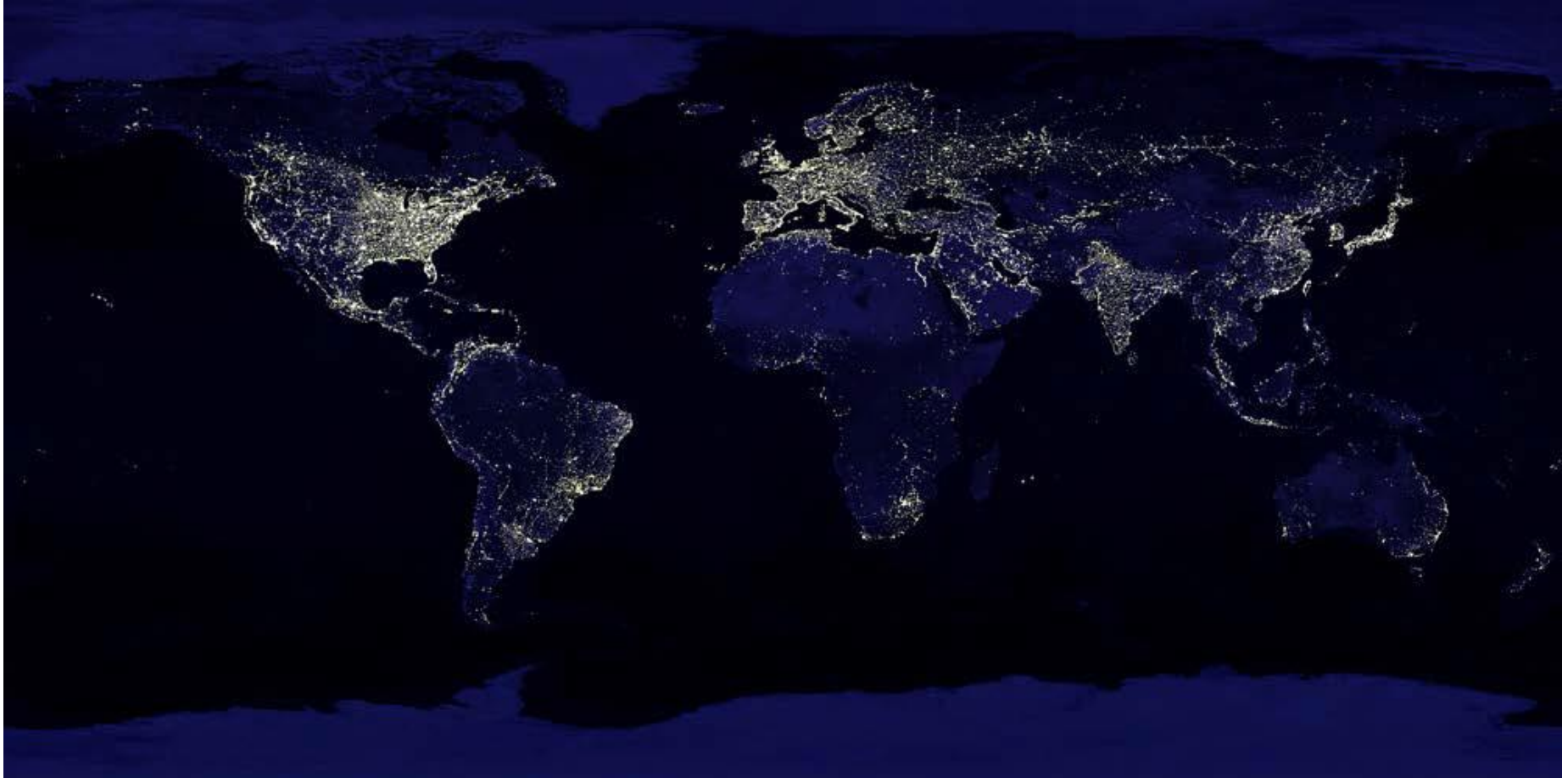
Dr. Ákos Fürcht



Energy

Demand – usage

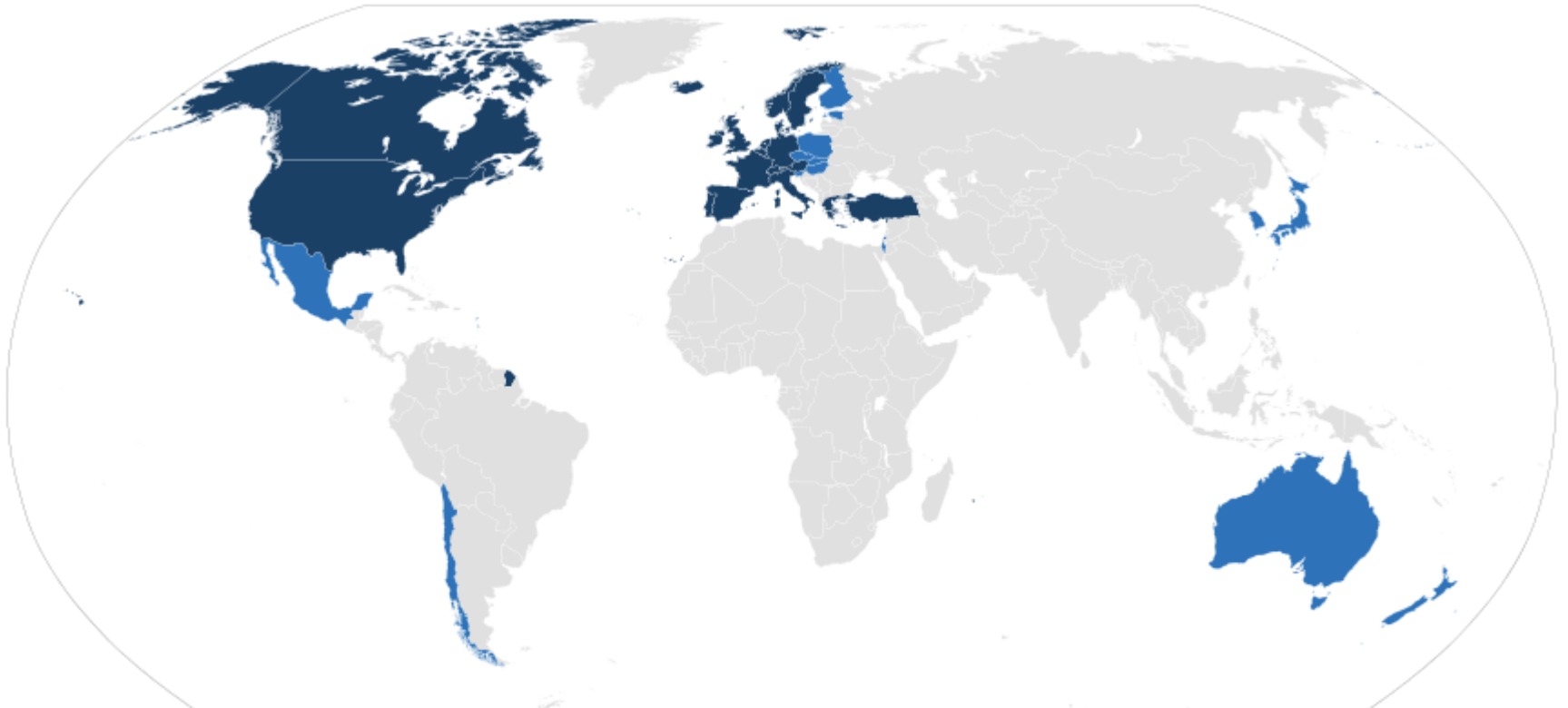
The **energy consumption** is unbalanced on the world



OECD member countries

Significant outsiders:

African, South-American and Arab countries, China, India, Russia

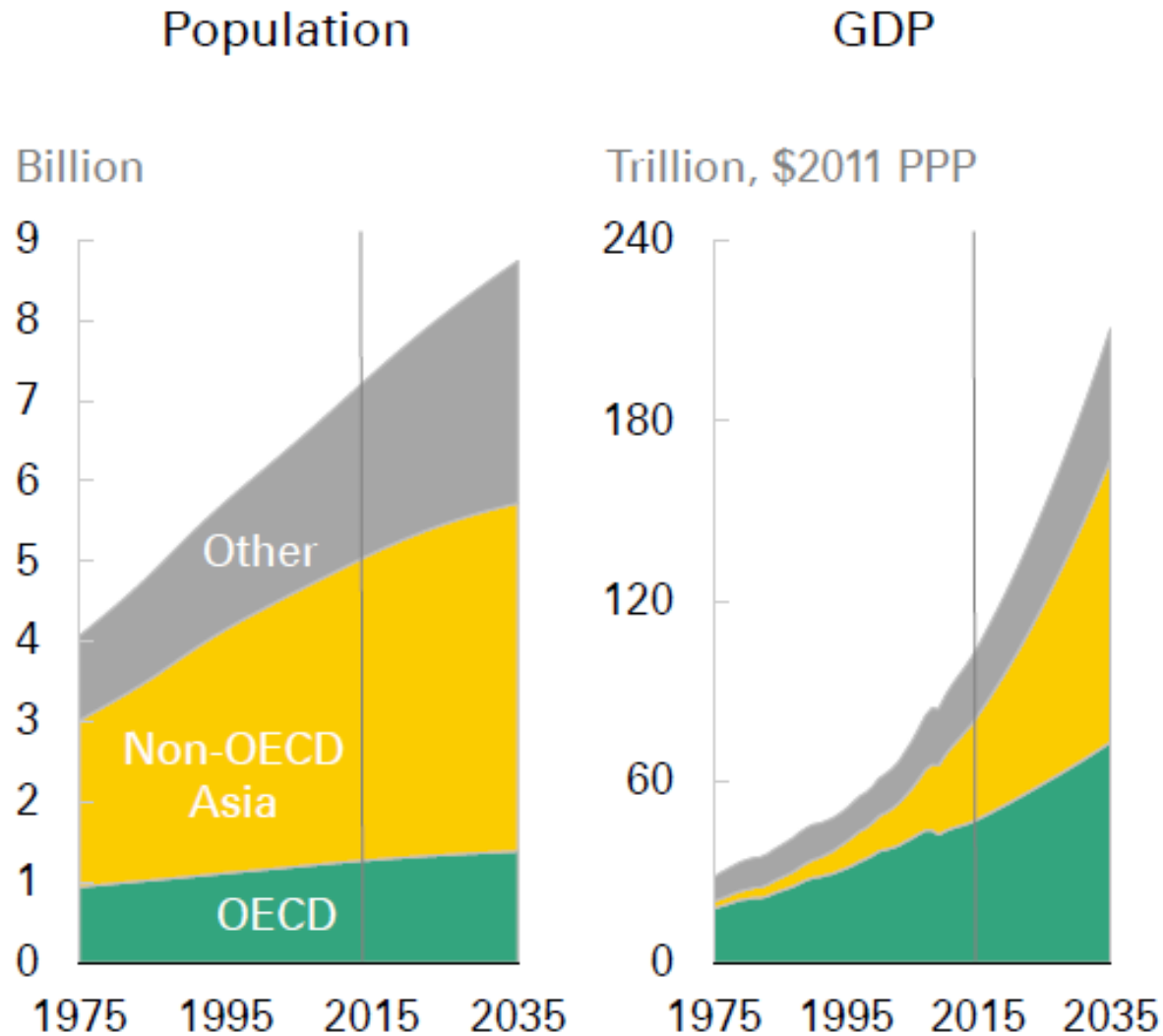


Organisation for Economic Co-operation and Development⁸

The **energy industry** changes continuously

- The used **energy types** are changing¹
 - Banning conventional cars (Norway/Holland 2025, France/Great Britain 2040)
 - Volvo to produce only electric/hybrid cars 2019 onward, PSA to meet 80% electric cars by 2023
- The **balance of demand** is changing
- **New sources** do appear on the scene, e.g.
 - shale gas
 - tight oil, shale oil
 - ultra-deepwater oil
 - new forms of renewable energy (solar energy – Chile²)
- **Countries** do expand and contract (India vs. Venezuela)
- Energy production and consumption are affected by **disruptions**, like outrageous events (Niger delta riot, ISIS) or extreme weather (forest fire: Canada, Alberta 2016/05³, 1,1mbpd, Hurricane Harvey 2017/08)
- **New policies** are created to address climate change or bolster energy security

Key drivers behind growing demand for energy

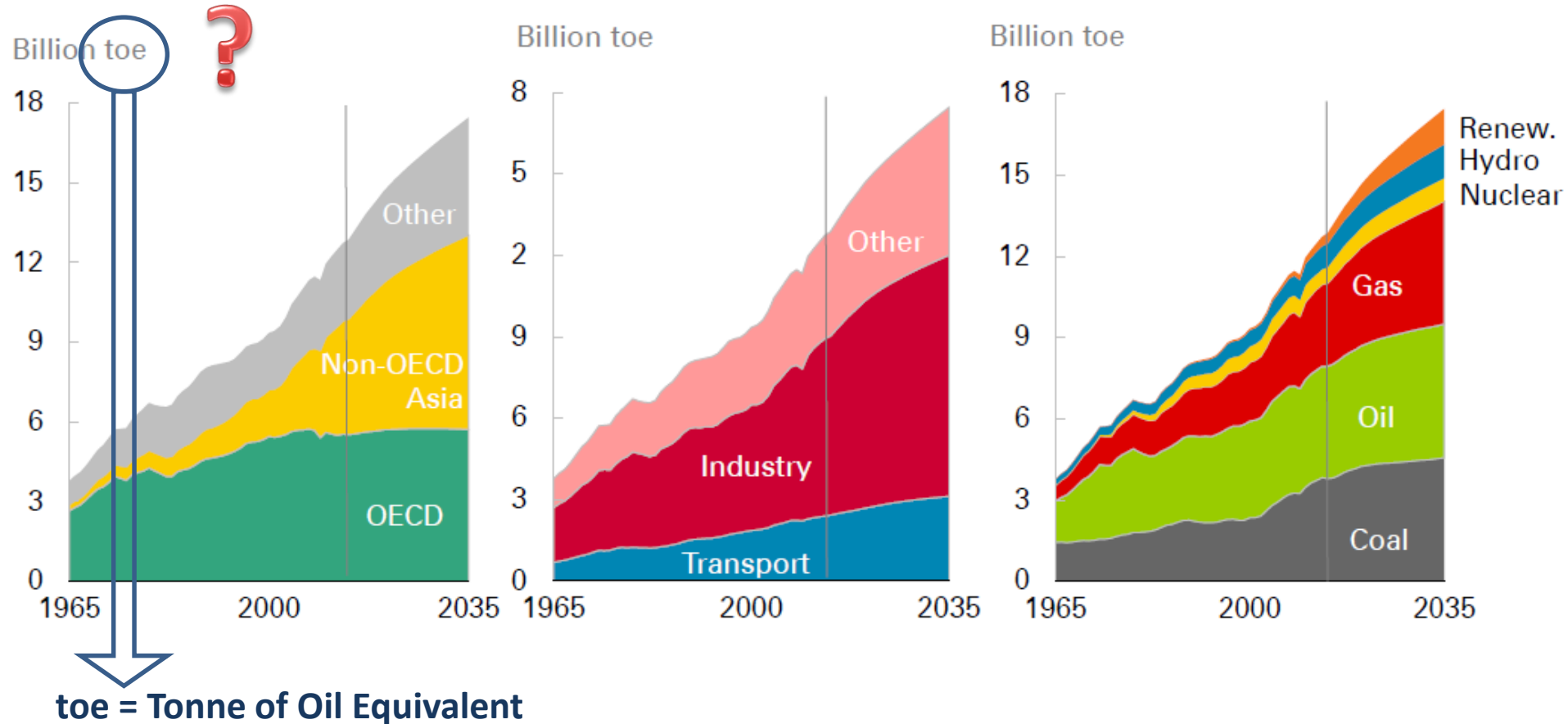


Energy consumption – by

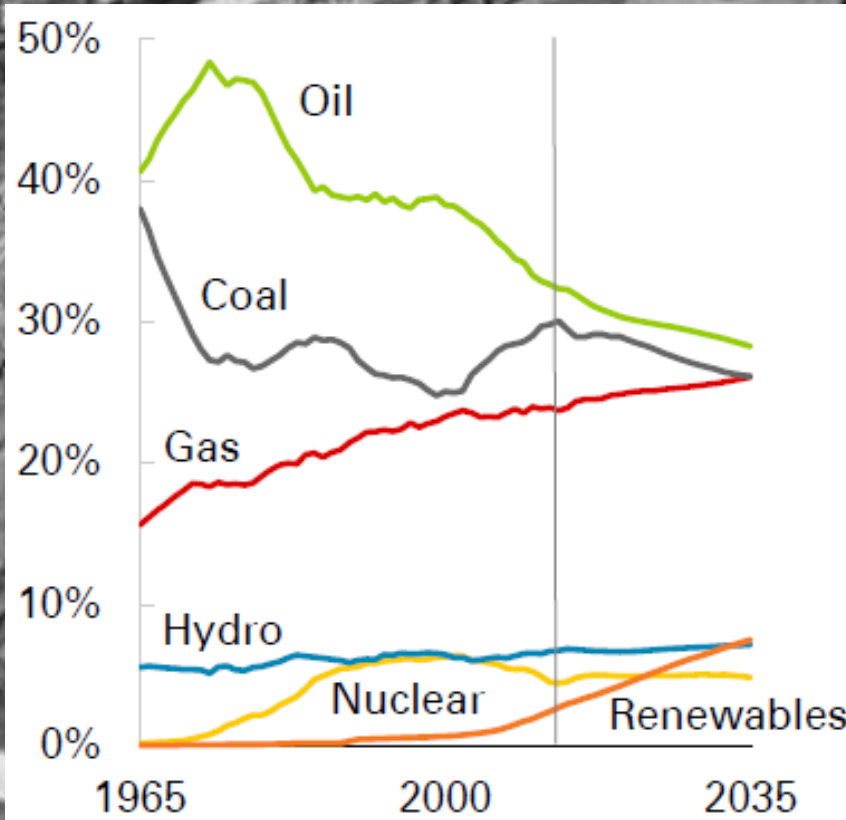
Regions

Final sector

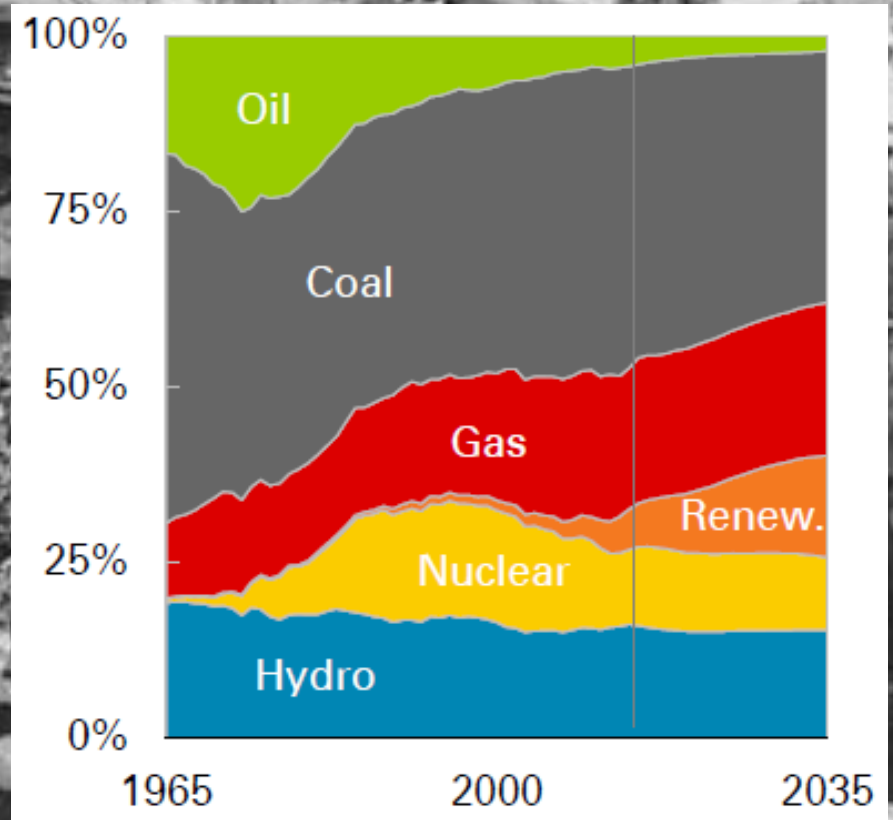
Source



Primary energy consumption



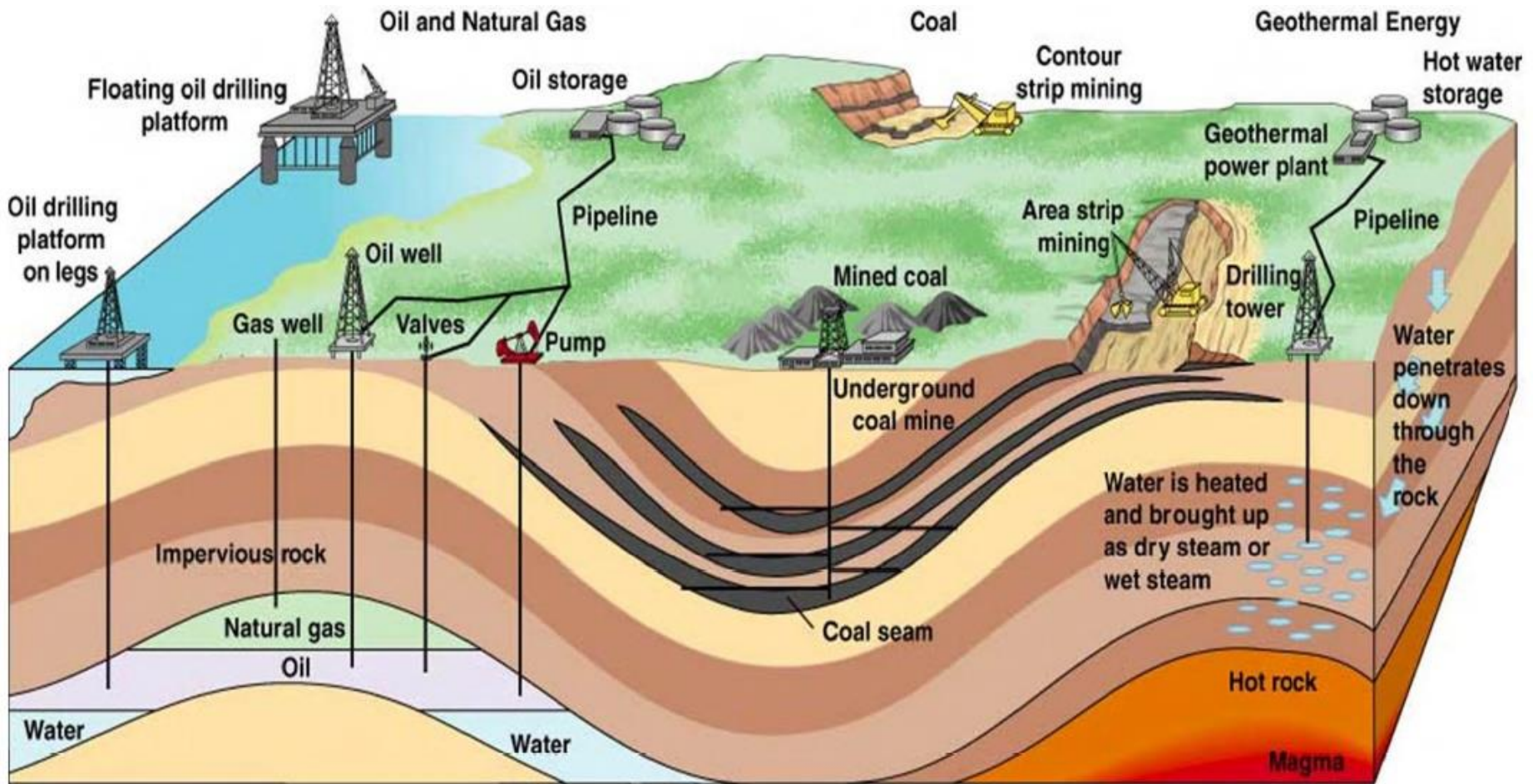
Shares of primary energy



Primary energy to power

Sources of energy

Possible energy sources **underground**



Other energy sources



The End

