

ENERGY LITE WEEK

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Energy

the essential principles and fundamental concepts

ORGANIZED BY



CONSENSUS I➔



IN COOPERATION WITH



REPUBLIKA SLOVENIJA
MINISTRSTVO ZA INFRASTRUKTURO IN PROSTOR



SPONSORS



Introduction:

What is Energy System Perspective?

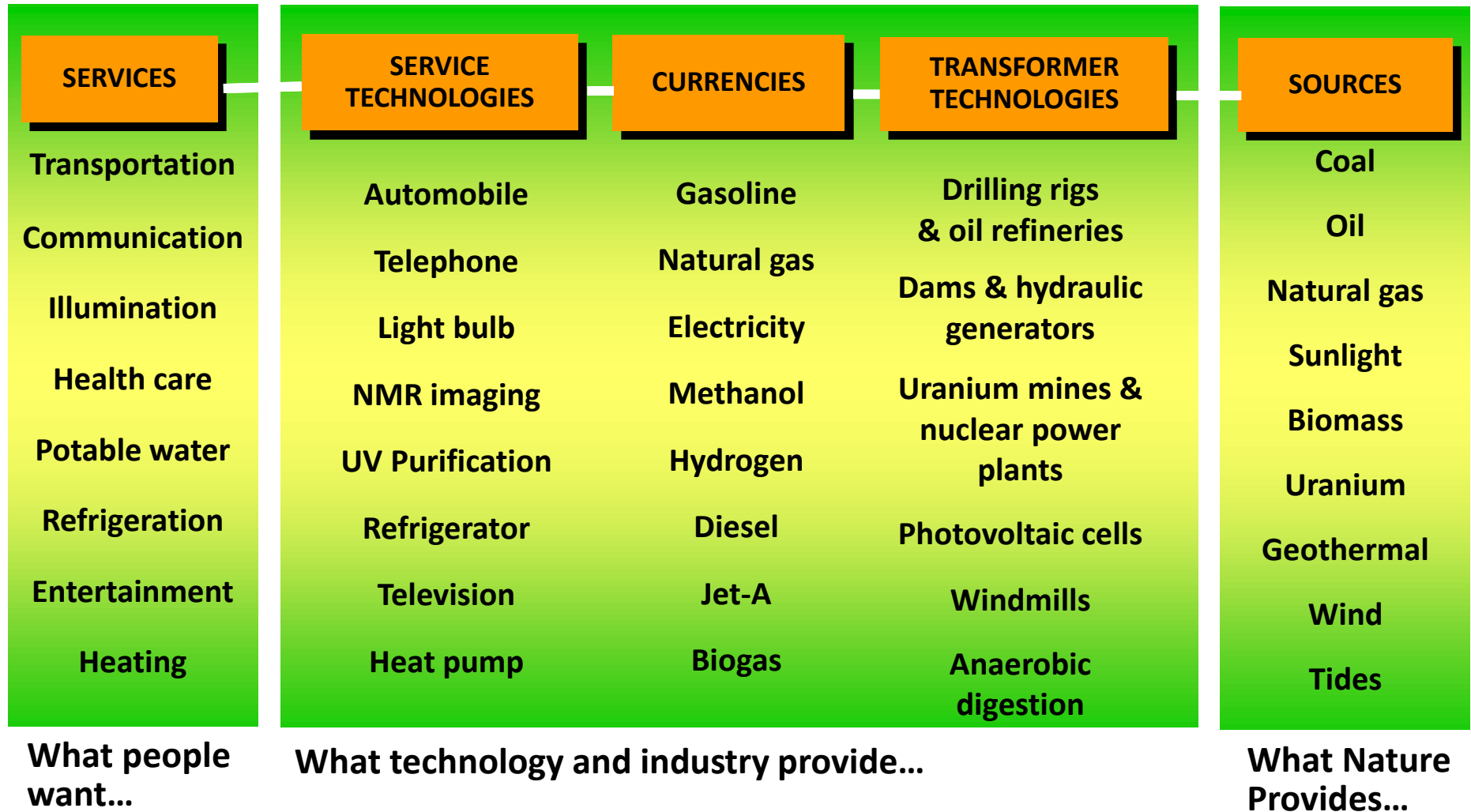
- Energy Literacy: „Alphabet“
 - Units, physical quantities
 - Energy sources, energy technologies
- Energy Literacy: „Literature“
 - Energy system architecture
 - Energy system decisions
 - System interaction, integration and management

Example: Energy conservation

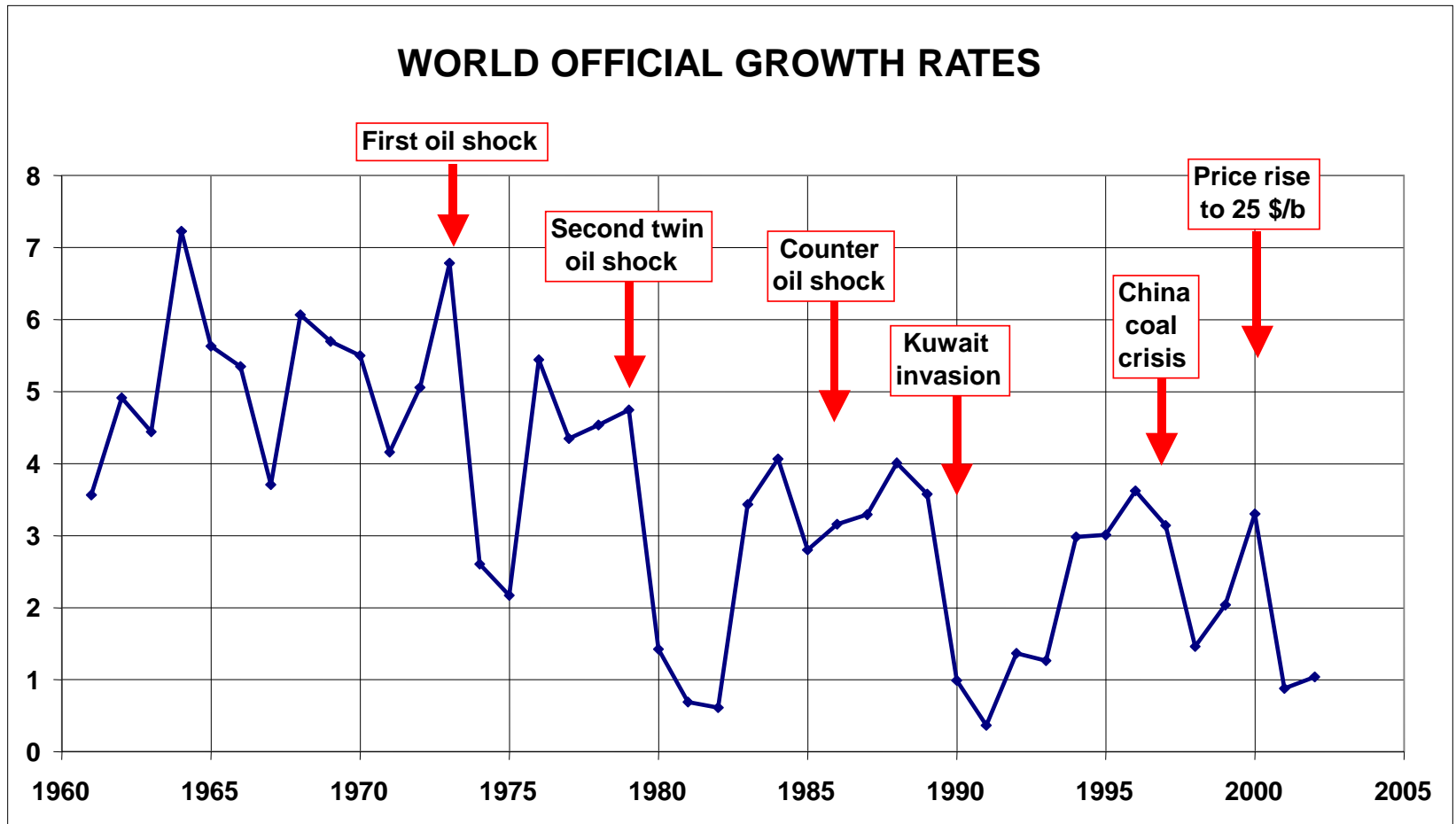
- Change ten light bulbs
 - Power: 100W -> 10 W, 10 bulbs
 - Time: 4 h/day, 365 days
 - Energy = 1314 kWh
- **Save 85 € each year**



Architecture of the Energy System



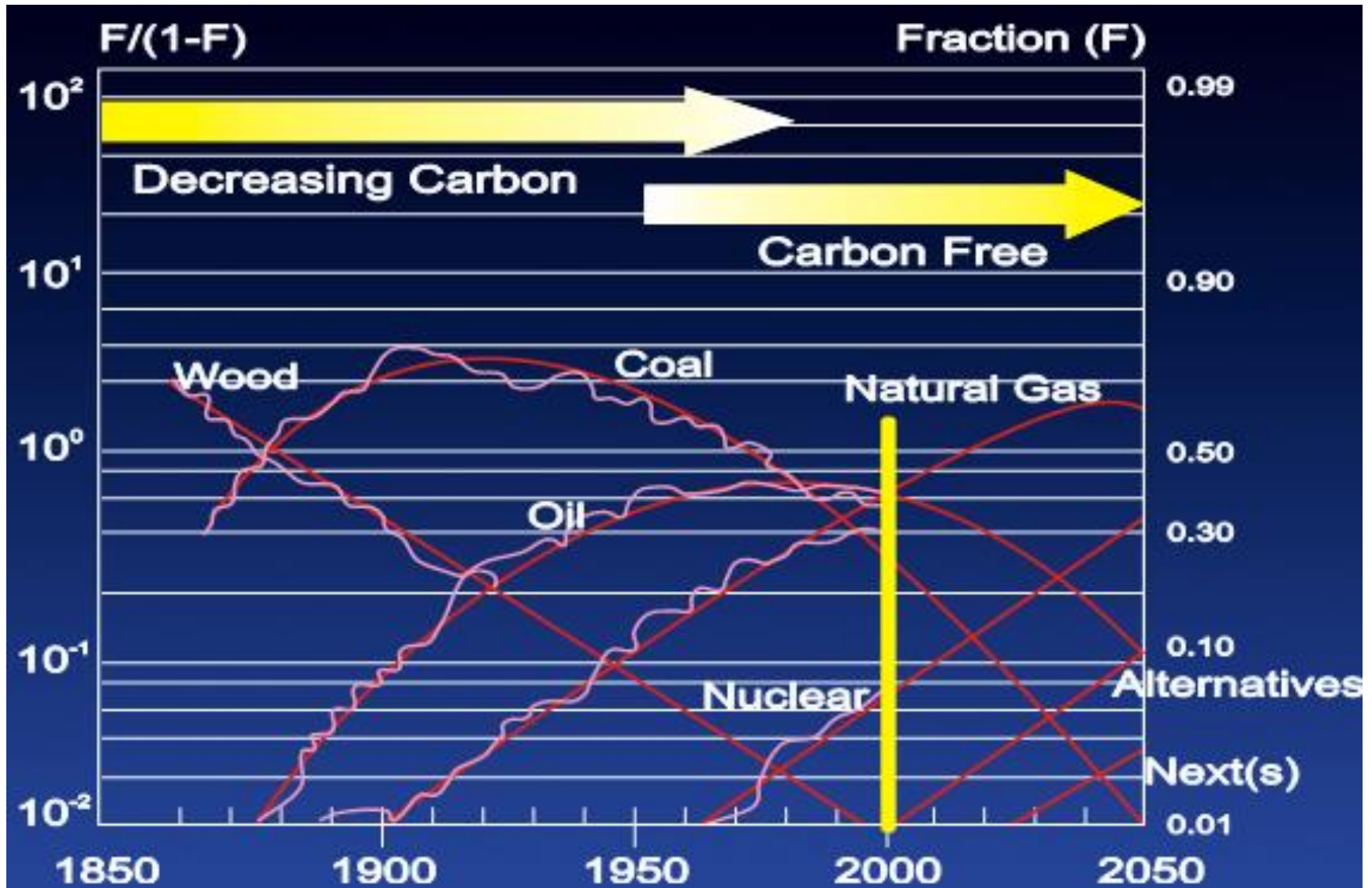
Energy „events“ Trigger Social and Economic Events



Society Shapes Energy Consumption



Evolution of Energy Systems



Case Study: Transport



The Energy System

What people want

What nature provides



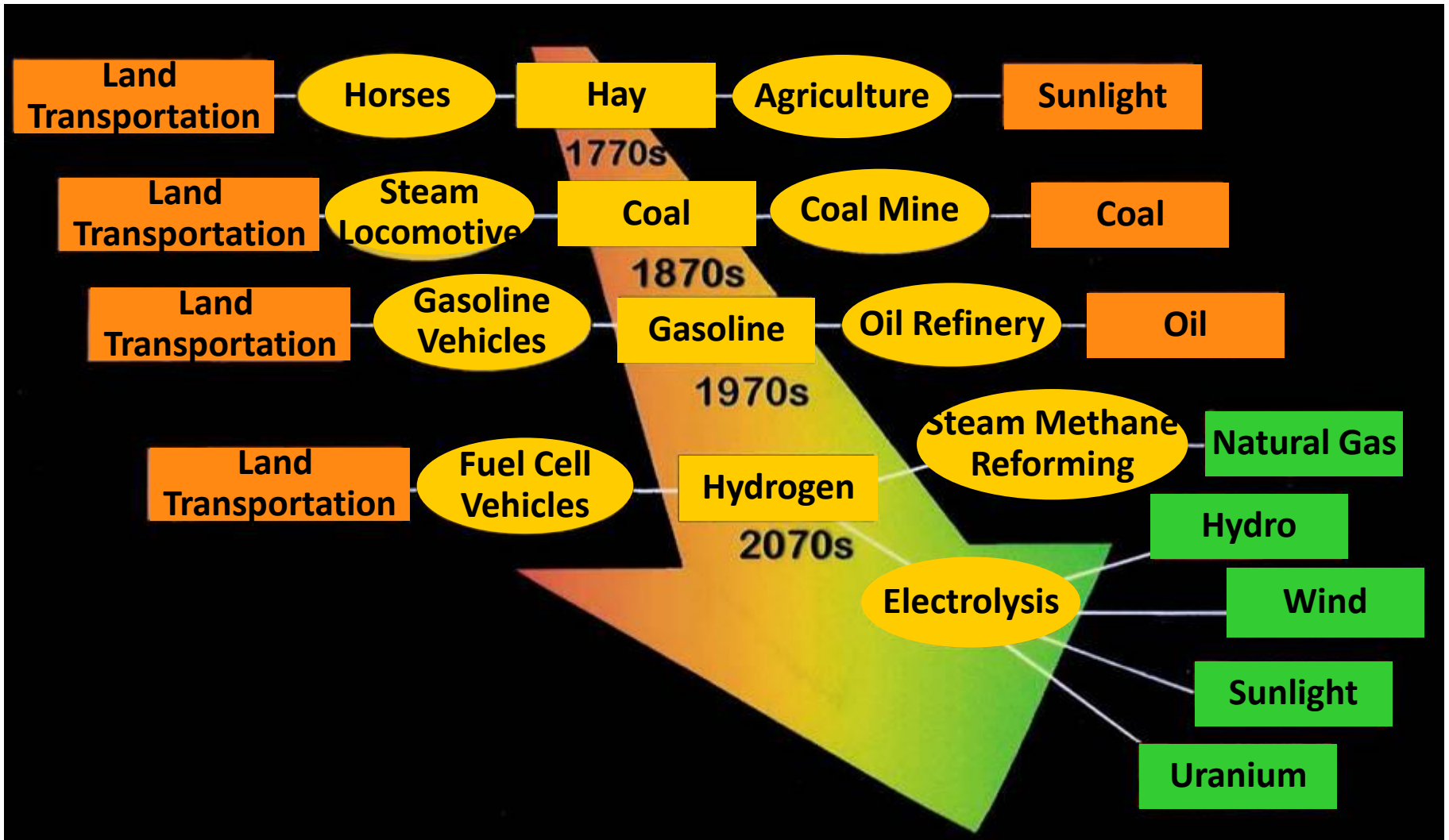
Demand

– examples –

Supply

<i>Transport</i>	<i>ICE Automobile</i>	<i>Gasoline</i>	<i>Oil Refineries</i>	<i>Crude Oil</i>
<i>Transport</i>	<i>Fuel Cell Vehicle</i>	<i>Hydrogen</i>	<i>Generators Electrolysers</i>	<i>Oil, Coal, Nuclear, Wind, Solar, Geothermal Ect.</i>
<i>Transport</i>	<i>Electric Vehicle</i>	<i>Electricity</i>	<i>Distribution Batteries</i>	<i>Oil, Coal, Nuclear, Wind, Solar, Geothermal Ect.</i>

Evolution of Land Transportation



Case Study: Electricity System





I have read and I forgot.
I have seen and I remembered.
I have done it and now I know it!