

Renewable and non-renewable sources of energy

Wojciech Regulski

What does „renewable” mean?

- ◎ A non-renewable resource is a natural resource that cannot be re-made or re-grown at a scale comparable to its consumption.
- ◎ Renewable resources are natural resources that can be replenished in a short period of time.

Renewable sources - examples

- ◉ Solar
- ◉ Wind
- ◉ Water
- ◉ Geothermal
- ◉ Biomass



Non-renewable sources - examples

- ◉ Coal
- ◉ Oil
- ◉ Gas
- ◉ Nuclear



Non-renewable sources - advantages

- ◉ Independence from the weather
 - reliability
- ◉ Cost-effective
- ◉ Easy to produce and use

Non-renewable sources - disadvantages

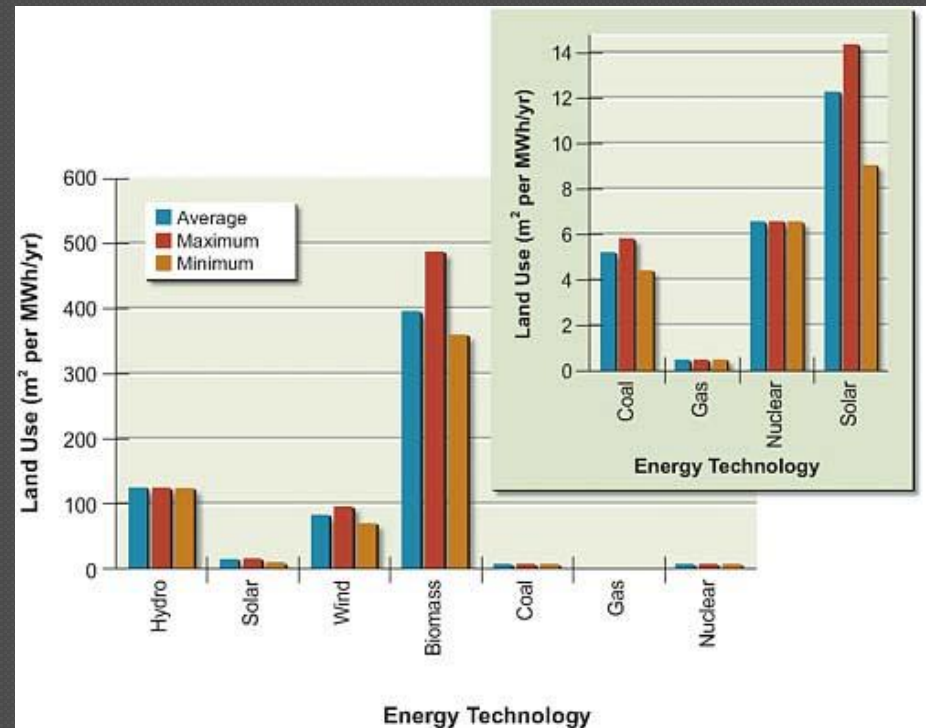
- ◉ Can be depleted
- ◉ Air pollution which causes health and environmental problems
- ◉ Vast amount of greenhouse gases
- ◉ May be the cause of war

Renewable sources - advantages

- ◉ Can't be depleted
- ◉ Everyone can have a small energy plant
- ◉ Near-zero waste products – less impact on the environment and our health
- ◉ Can easily provide electricity even on a desert island
- ◉ Stabilization of global energy prices

Renewable sources - disadvantages

- High land use
- Dependence on the weather
 - unreliability
- High initial cost



Summary

- ◎ Non-renewable sources are cost-effective but destroy environment
- ◎ Renewable sources are costly, cause many problems in stable production and distribution but don't harm our health or the environment
- ◎ Should we stop using non-renewable sources of energy?