ENERGY TURNAROUND –
CHANCES AND RISKS FOR THE RAW MATERIAL INDUSTRY IN BAVARIA

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Energy turnaround

• Target 2021:
  more than 50 % electricity should be generated through renewable energy
• energy turnaround will take place mainly in rural areas (biomass, wind power, solar or geothermal energy)
Areas of Mineral Resources and Competing Uses

- Residential and Industrial Areas
- Agriculture
- Wind Power
- Transport Routes
- Landscape
- Recreation
- Drinking Water Production
- Forestry
- Nature and Habitat Protection
- Archaeology
Land development program (LEP)

One main goal: secure the supply of the raw materials

→ a shortage of the resources leads to extensive rising prices in the building sector

→ production of mineral resources is of public interest

→ coordination by the dint of regional planning
Problem:
Reduced priority area for raw material extraction through the reserved area for wind power.
• Overlap planning as a solution?
• Limited durability of wind power plants (~25 years) is a chance?

**NO:**
There is no legislation!
Repowering of wind turbines is possible
Priority area raw materials

Solar park

Dr. Gillhuber, BIV + Dr. Poschlod, LfU, Geologischer Dienst, 06/2012
• No areas in regional development planning for solar panel surface
Chances

• (Filled) gravel pits are ideal location for solar panels (and for on-shore wind power)
  → since 10 years in Southern Bavaria (Allgäu)
Solar park after gravel mining in Southern Bavaria

Dr. Gillhuber, BIV + Dr. Poschlod, LfU, Geologischer Dienst, 06/2012
**Chances**

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  → since 10 years in Southern Bavaria (Allgäu)

• Dredging lakes can also be used for solar platforms (East Germany)
  
  Area of 12 football fields (86,000m² = 8,6 ha)
  → 6,500,000 kWh p.a.
  → Energy for 6000 people
Floating solar platforms

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• Abandoned quarries as a new location for solar panels
  → projected in Switzerland
Floating solar platforms

Chances

- Another important fact is that big solar panel surface areas also secure raw material areas for the future and other land usages:

  The economic useful life is limited to 25 years!
The energy turnaround involves risks, but we have to work together to use the chances for both sides: The energy turnaround and the raw material industry.
THANK YOU FOR YOUR ATTENTION!