



EUROPEAN RIVERS SUMMIT

The rise of alternatives

alternatives to hydropower: keep rivers free

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Baixo Sabor: before and after



Major impacts from large dams

- Destruction of ecosystems
- Sediment retention -> coastal erosion
- Destruction of best agricultural land
- Profound change of landscape and identity
- Loss of ecotourism
- Loss of livelihood and income for local inhabitants
- Higher electricity price, loss of resilience

Costs of electricity production

Source	Cost (€/MWh)
Energy efficiency LCOE	<0 to 40
Average market price in the EU last decade (all sources)	50 to 60
Renewables LCOE (sun, wind, geothermal)	40 to 150
New dams LCOE	100 to 300

Alternatives: energy for the XXI Century

1. Energy efficiency
 - Reduce immediately energy intensity by 30%
 - Manage power and storage
2. Source substitution
 - Sun, wind, biomass, geothermal
3. New energies, new concepts
 - Smart cities, zero energy buildings, microgeneration, prosumers, energy communities, shared mobility
4. Last but not least: ecologic conversion
 - Change of habits: the most difficult task