

The Legal Conditions for Water Utilities Eco-innovation as Energy Smart Water Utilities

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Part of a Global Green New Deal

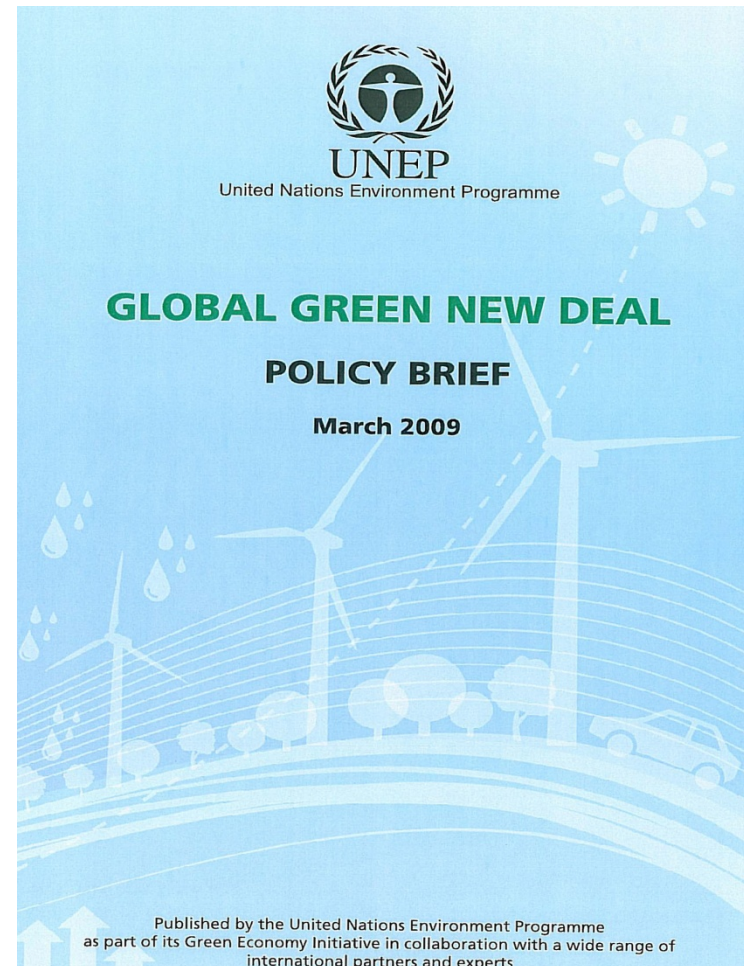
From a brown to a green economy

Renewable energy

and

Resource efficiency

are important elements



Interdependent and climate-sensible services with a high 'carbon footprint'

Sector-specific solutions versus need for multifunctional strategies

- **EU policy on resource efficiency and low carbon energy**
- **Environmental policy integration – cf. Article 11 TFEU**
- **Energy & Climate law: The Internal Energy Market; The Directive on Promotion of Renewable Energy, Energy Efficiency Directive, EU ETS and Energy Tax Directive**
- **Environmental law: Water Framework Directive/Drinking Water Directive & Urban Wastewater Directive; Waste Framework Directive/Sludge Directive; IE Directive**

Combining all needs?

Smart water utilities – combining the needs for:

Water & energy services as 'services of general interest'

Energy security by renewable energy production

Electricity and heating, balancing and storage of electricity in "smart grids" ,

Public-private partnerships – e.g. on investment

Smart Energy: A solution to the future energy challenges

The energy system of yesterday

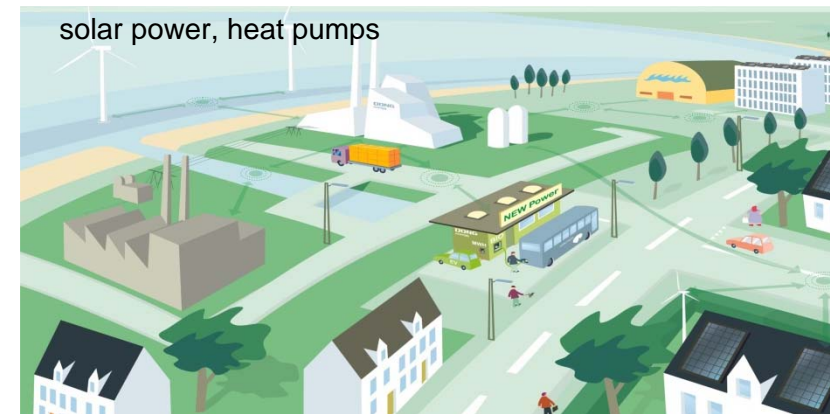
Characteristics: Uni-directional grid; Production followed demand; Predictability and stability; Little customer awareness around energy; Overcapacity in the grid



The energy system of tomorrow

The Challenge

- Integration of volatile wind power
- New customer demands: electric vehicles,



The EU “Climate and Energy Package” combines

- **market-based instruments** (such as cap-and-trade systems, tradable permits, green certificates, and environmental agreements), supporting the market and correcting market failures
- **environmental performance instruments** (such as standards/certification, and sustainability criteria/recognition or certification)
- **fiscal instruments** (such as green-taxes, charges, feed-in tariffs and other subsidies) that shift tax burden from labour to environmental impact and energy,
- **traditional command-and-control regulatory instruments** (establishing rights and duties that can be enforced)

EU's promotion of RES

- Mandatory national overall targets and measures for the use of RES
- The principle of integration
- Regulating all RES-sectors
- Solidarity mechanisms to promote sustainable development
- Interplay with other directives
 - Part of the "Climate and Energy Package"
 - Connected to the "Third Legislative Package"
 - Interaction with the Energy Efficiency Directive & the Waste Directive



Nationality or EU harmonization?

With focus on:

- **40 years old acts – amended several times each year**
- **three state authorities (Ministry for the Environment; Ministry for Climate, Energy and Buildings; and Ministry of Business and Growth),**
- **98 municipalities restricted by unwritten principles and by statutory rules – for example on loans and investments**
- **publicly owned water utilities as system operators (Water Sector Act)**
- **Public-private partnerships**

Administrative specialization and protection of the private business interests against competition from publicly owned water utilities

