

INNOVATION AND GREEN JOBS



A CASE IN POINT

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INNOVATION AND GREEN JOBS

ABOUT VEOLIA ENVIRONNEMENT

- Four activity sectors
water, waste, transport, energy efficiency
- Operation of infrastructure in partnership with local authorities and industry
- Turnover : €35 billions, 76% in EU
- Employees: 335 000
1/3 France, 1/3 Europe, 1/3 RoW
- R&D budget : € 150 M
- Training budget: € 250 M

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WATER

■ ***FROM PUBLIC HEALTH TO ENVIRONMENTAL PROTECTION; FROM COUNTRYSIDE TO CITIES***

- ➔ Access to water and wastewater services for all
- ➔ fighting pollution, conserving the resource, return to good ecological status
- ➔ still a vital service to deliver at the right price

■ ***AN EVOLVING EXPERTISE***

- ➔ treatment of waste water to high standards
- ➔ networks management
- ➔ recycling, desalination, filtration
- ➔ assets management
- ➔ smart metering

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WASTE MANAGEMENT

■ *FROM A NUISANCE TO A RESSOURCE*

- waste prevention, reuse, recycling
- Recycling adds value via landfilling

■ *NEW TECHNOLOGIES AND COMPETENCIES*

- biogas recovery
- transformation of waste into raw materials
- ecoconception, e.g. lithium battery powered cars
- composting

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TRANSPORTATION

■ *FROM COMMUTING TO ABATING GHG*

- ➔ public transport, cycling to become increasingly substitutes to private transport
- ➔ intermodality is key to efficient mobility

■ *NEW SKILLS AND NEW JOBS*

- ➔ more drivers, more maintenance
- ➔ public bicycles
- ➔ better driving
- ➔ new information networks, new ticketing
- ➔ rethinking transport networks

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ENERGY EFFICIENCY

■ *THE MAIN SOURCE OF EMISSIONS ABATEMENTS*

→ an issue for companies, local government and citizens

■ *NEW APPROACHES*

→ cogeneration

→ control of individual consumption

→ a new role for district heating/cooling schemes

→ biomasse

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IN CONCLUSION

- ➔ Our four activities have evolved towards more complexity and sophistication
- ➔ That generates innovation in terms of
 - technologies
 - management of systems
- ➔ Which leads on to new jobs:
 - partly different jobs
 - partly additional jobs
- ➔ Further potential ahead:
 - Carbon capture and storage
 - managing decisions to optimize economy, environment and social constraints

INNOVATION AND GREEN JOBS

The annual investment in Research & Development related to our four activities is estimated at \$ 50-60 Billion

Economic recovery plans addressing the gestation towards a green economy add up to \$ 432 Billion

SOME OF THE MUD SHOULD STICK!