National incentives for local water recycling
General Electric

Energy Infrastructure

Aviation

Healthcare

Transportation

GE Capital

Home & Business Solutions
Enabling the future with portfolio solutions

Desalination Solutions:
Drawing on the ocean's virtually limitless water resources, GE's desalination technologies are helping water scarce regions to create new freshwater sources that can quench growing demand.

Municipal Solutions:
Facing unprecedented growth and water demand, cities are turning to GE's advanced membrane and water quality measurement technologies to tackle increasingly stringent water and wastewater regulations and the threat of new, virulent pathogens in our lakes and rivers.

Industrial Wastewater:
Once considered a by-product, GE's water reuse technology is transforming industrial wastewater into a sustainable, new water source that can often be used many times over—dramatically reducing the strain on our precious water resources.

Utility Solutions:
GE is optimizing system efficiency & increasing uptime in cooling towers and boilers by reducing energy usage and greenhouse gas emissions. Advanced monitoring systems reduce the risk of pathogen growth, such as Legionella, in cooling systems.

Residential Products:
GE point-of-use and point-of-entry filtration systems are enabling homeowners to produce higher quality water from every tap in the home. This same technology is helping developing countries to leapfrog traditional, costly infrastructure and provide safe water to those who need it most.

Product Water:
Consumers use the products they trust—whether it is pharmaceuticals, food, or beverages. As brands expand globally, GE technologies ensure high quality ingredient water for manufacturing regardless of a plant's location or its water source.

Process Chemicals & Separations:
Silently working in pipes, tanks and process fluids, GE's advanced chemicals protect valuable production assets from corrosion and fouling faced in day-to-day operations, while improving overall manufacturing efficiency and quality.
Running order

Why recycle water in the UK?
Why is uptake so slow?
What is happening elsewhere?

Where do we stand in the UK?
Is the technology correct?
Two Examples
How can we incentivise?
Why recycle water in the UK?

- Efficient resource use
- Sustainable development
- Corporate governance
- Cost beneficial
- Climate change
Why is the uptake so slow?

Politics ?
Socio / Demographic ?
Economic ?

Environmental ?
Legal ?
The correct technology?
What is happening elsewhere?

1. Water pricing
2. Demand trading
3. Tax financing and public grants
4. Public-private partnership
Closer to home

- Privatised water industry
- Abstraction regulation
- Discharge consents
- Tax incentives
- Public private partnerships
CS1 Drinks manufacturer

Over all effluent flow : 65 m$^3$/hr
Solution : MBR + RO
Potential recovery : 80 %
Actual recovery taken forward : 0 %

- Business strategy ✔
- People ✔
- Technology ✔
- Opportunity Cost ✗
CS2 Pet food manufacturer

Over all effluent flow : 70 m$^3$/hr
Solution : MBR + RO
Potential recovery : 71 %
Actual recovery taken forward : 40 %

- Business strategy ✓
- People ✗
- Technology ✓
- Opportunity Cost ✓
National incentives for local water recycling

• Financial
• Policy guidance
• Regulatory bodies
• Corporate governance
• R&D
Successful Incentives for Local Water Recycling

Co-ordination

Co-operation

Communication
Thank you!