

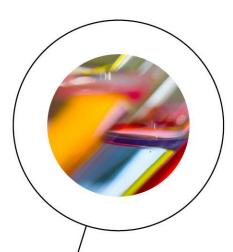
SUSTAINABLE PHOSPHORUS WORKSHOP

Barriers to Technology Deployment & Isle's TAG Forum

4th March 2015, Berlin Suzanne Faber, Isle Utilities







What is TAG?



- Isle is an innovation and cleantech consultancy
- Technology Approval Group (TAG)
- 100+ members worldwide Europe, US, Australia, New Zealand, Singapore, the Philippines
- At TAG Meetings tech companies present directly in front of innovation managers
- TAG Members collaborate on technology trials
- Isle sources and evaluates disruptive technologies; facilitate meetings and discussion; and support trials and other follow-up

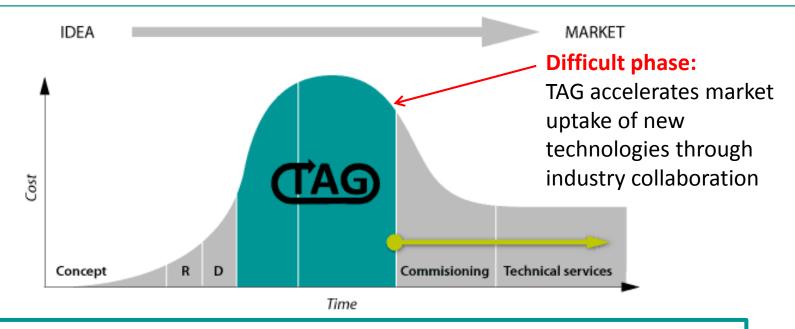




Our TAG members worldwide







Main Considerations in Technology Deployment

- Costs
- Level of development of technology company
- Procurement processes
- Regulation
- Marketing final product





1. Cost

- CAPEX
 - Public money; Justify costs
 - ROI
- OPEX
 - Chemicals: Chemical supply, fluctuating cost, supply chain vulnerability
 - Energy requirements
 - Maintenance: Training costs; Service agreements
- 2. Level of Development of Technology Company
- 3. Procurement Processes
- 4. Regulation
- **5. Marketing Final Product**





1. Cost

- 2. Level of Development of Technology Company
- Size of company
- Proven technology; Number of full scale installations
- International representation: Local support; Licence agreements
- 3. Procurement Processes
- 4. Regulation
- 5. Marketing Final Product



- 1. Cost
- 2. Level of Development of Technology Company

3. Procurement Processes

- ISO standards; National standards; Local standards
- Health and safety
- Utility design specifications
- Preferred contractors per country/company
- Cash flow
- 4. Regulation
- 5. Marketing Final Product



- 1. Cost
- 2. Level of Development of Technology Company
- 3. Procurement Processes

4. Regulation

- Environmental regulation, emission regulation
 - Environment bodies differ per country
- Economic regulation
 - Taxes for non-local companies

5. Marketing Final Product



- 1. Cost
- 2. Level of Development of Technology Company
- 3. Procurement Processes
- 4. Regulation

5. Marketing Final Product

- Storage
- Marketing activities against the core skills of water companies
 - Preferences differ per utility
 - End-product sales might preferably be undertaken by the technology provider

Thank you!

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