WFEO – Energy Committee conference

A systems approach to infrastructure delivery

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A Systems Approach to Infrastructure Delivery
A study into the delivery performance of complex projects

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01 THINK OUTCOMES, NOT EDIFICES

THINK OUTCOMES
- Protect ecosystem
- Reduce pollution
- Improve local area
- Employment opportunities

NOT EDIFICES
- Construction of tunnels

A SEWER PROJECT

Owners must clearly define outcomes so engineers & technology developers can deliver for that use.

02 CLOSE THE GAP

INFRASTRUCTURE

SECTORS ADAPTING BETTER TO TECHNOLOGICAL CHANGE

CLOSE THE GAP

CHERRY PICK BEST PRACTICES TO IMPROVE DELIVERY EFFICIENCY

TESTING

PROTOTYPES
03 OWNERS MUST OWN PROJECTS

Give clear direction

OWNERS MUST OWN PROJECTS

- Functional requirements
- Technology & innovation risks
- Data requirements

04 FUTURE-PROOF PROJECTS

Use the V cycle process

Define systems & parts
Test & integrate
Implement
Verify & validate

Establish systems architecture
Manage technology developments
Upgrade with minimal disruption
05 THINK SHOVEL WORTHY, NOT SHOVEL READY

06 BAKE IN SYSTEMS THINKING

BAKE SYSTEMS THINKING AND RISK MANAGEMENT INTO THE PROJECT DNA

DESIGN AN ORGANISATION AND STRUCTURE THAT MIRRORS HOW YOU'RE GOING TO MANAGE RISK
AGILE LEADERSHIP

Adapts to multiple risks in complex systems.

Spread authority through empowerment models.

Listen to the right voice at the critical moments.

Enable front line people to make decisions.

Baton handover.

DATA OILS YOUR PROJECT

Define vital data.

Appropriate collaboration model.

Share it through the supply chain.