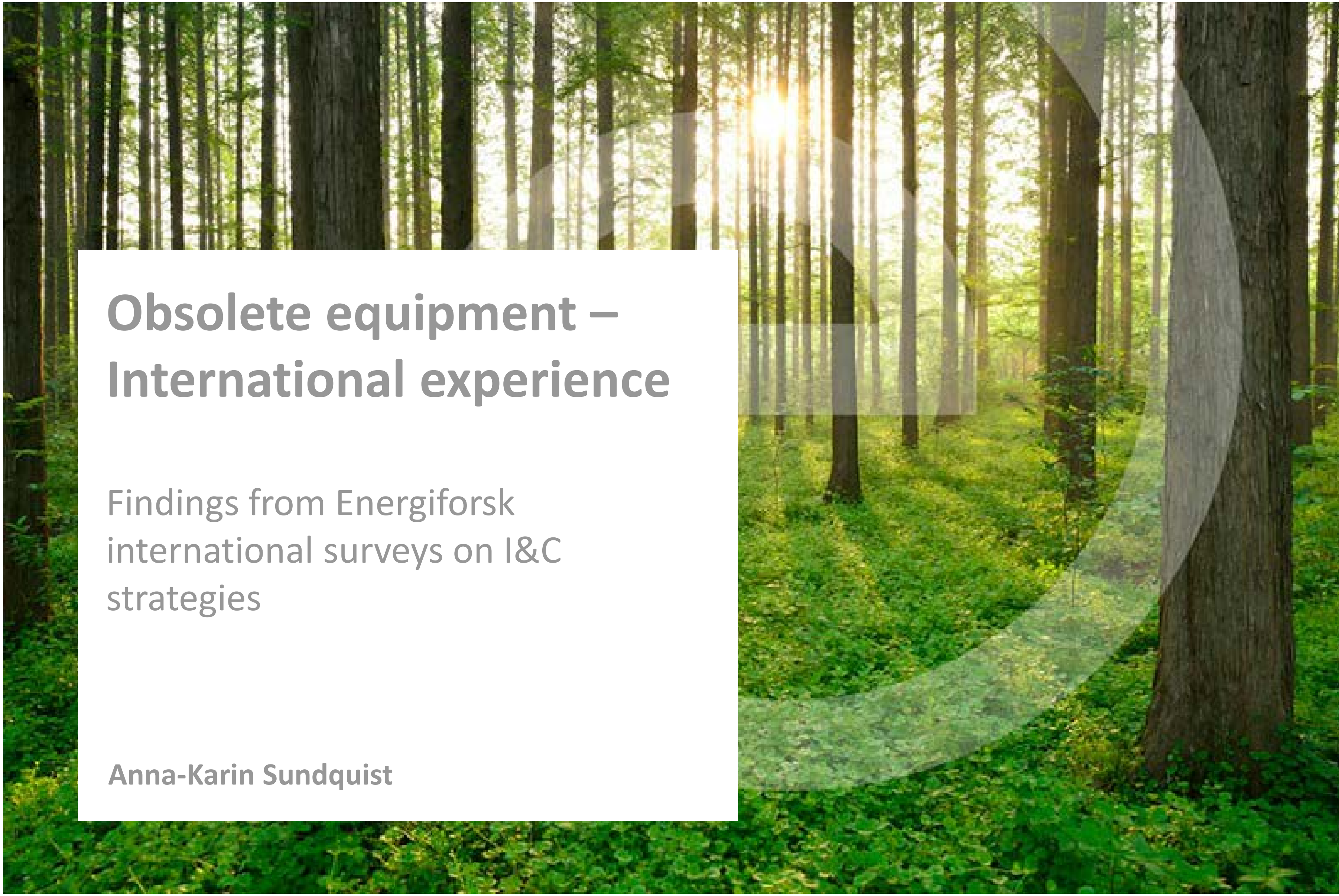

Obsolete equipment – International experience

Findings from Energiforsk international surveys on I&C strategies

Anna-Karin Sundquist

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International experience

- The US market and the OEM obsolete programs
- Europe, except France and UK
- France and UK

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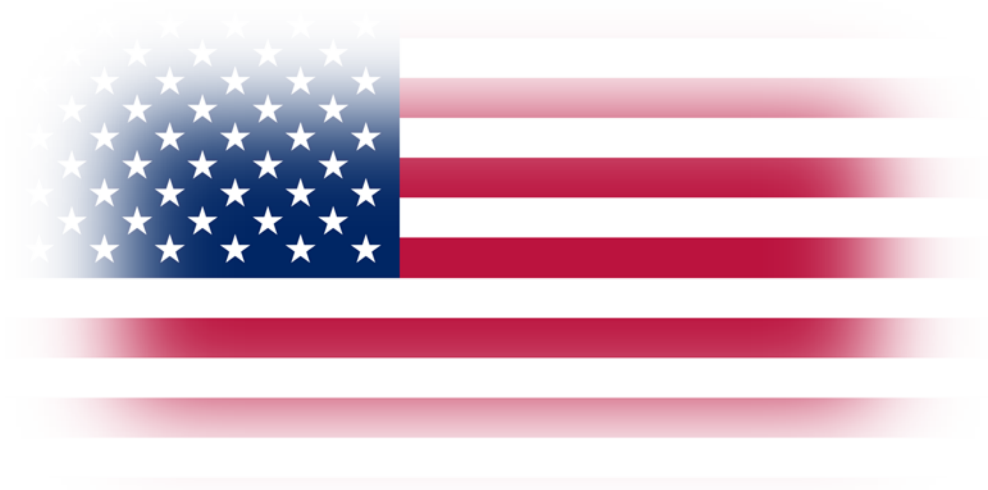
US

- The original equipment manufacturer (OEM)
- Third party suppliers
- The licensing model
- EPRI equivalence
- Large scale suppliers



Eastern Europe

- Another licensing strategy
- In large connected to the Russian market and brands
- Difficult to connect and understand each others needs
  - With one exception: the Westinghouse subsidiary Westron

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Germany

- Nuclear fleet near end of life, small fleet
- Small amount of systems to maintain
- Rather strict view on documentation

Belgium

- Nuclear fleet near end of life – short payback on investments
- More effort on safety equipment, less on non-safety equipment
- Obsolescence group
- Good enough

UK

- EdF Energy single owner of commercial nuclear
- Fleet obsolescence organisation
- Solutions should last the utility lifetime
- Member of E-NUOG

France

- EdF single owner of commercial nuclear
- Fleet obsolescence group
- Solutions should be general and be done in all a like utilities
- Several suppliers
- Industry network

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Final remarks

- The industry is in many aspects adapted to the regulatory requirements in their country
  - But many have international experiences
  - For safety related issues the nuclear experience is the most important

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