FINANCING NUCLEAR

18 April 2024

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Membership

nucleareurope represents national nuclear associations

Corporate Members:

CEZ (Czech Republic)
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Nuvia (France)
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Rolls-Royce SMR (UK)
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What does nuclear contribute to the EU's economy?

100

Nuclear reactors in operation in the EU

1 million jobs

€ 100

billion/year

25%

of the electricity production

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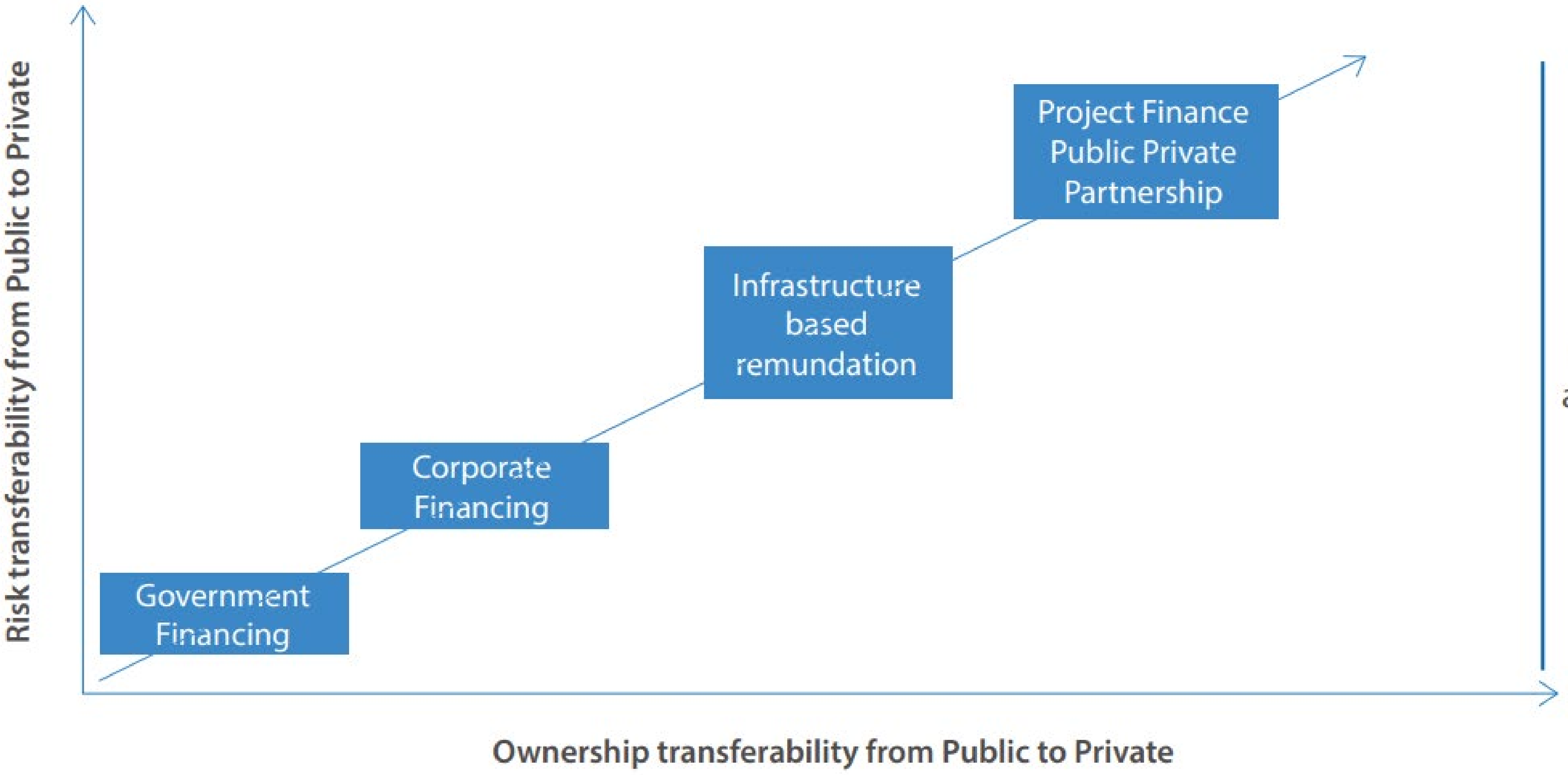
Cost of financing & new nuclear builds

- Construction cost = high capital cost = large financing cost
- No single approach to nuclear financing – OECD NEA (2020) notes 3 models:
  - Government financing model (Sovereign model). Either State Aid (direct) or Public Borrowing (indirect). Countries with low sovereign risks (BBB-rating and above) can provide advantageous financing conditions
  - (Private) Corporate model. Utilities with strong balance sheet can finance large projects by raising equity and borrowing money (debt). Creditors can claim loan against company assets as a whole
  - (Private) Project finance model. Creation of a project company = legal separation between project and sponsors other assets. Lenders have limited recourse beyond revenues/assets of the project

Ownership & Financing Models

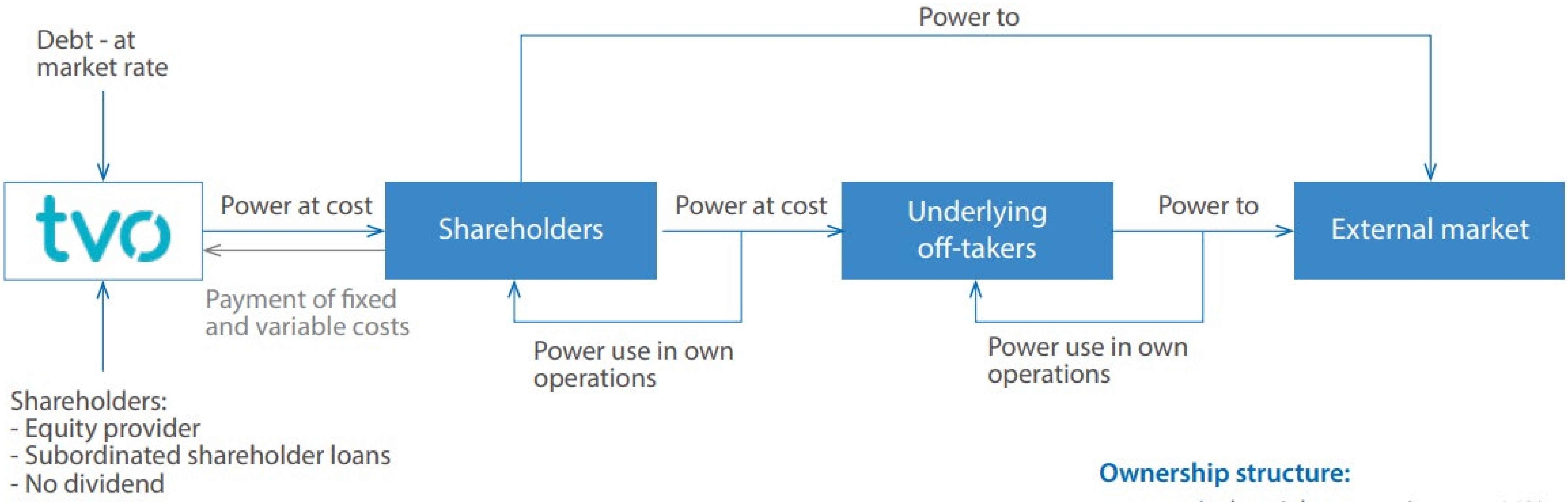
- No single approach to financing of nuclear project + ownership is no longer the single determinant of a financing model
- Ownership-wise two main model have been used in the past:
  - A government financing model (or sovereign model)
  - A corporate financing model.
    - In both of those models, governments play different roles either as 'investors' or as technology 'providers' to a state-owned company. Under corporate financing models, governments co-invest with corporates

Ownership model and risk transfer dynamic



Government support needed across all models

Financing Model - Example of Mankala in Finland

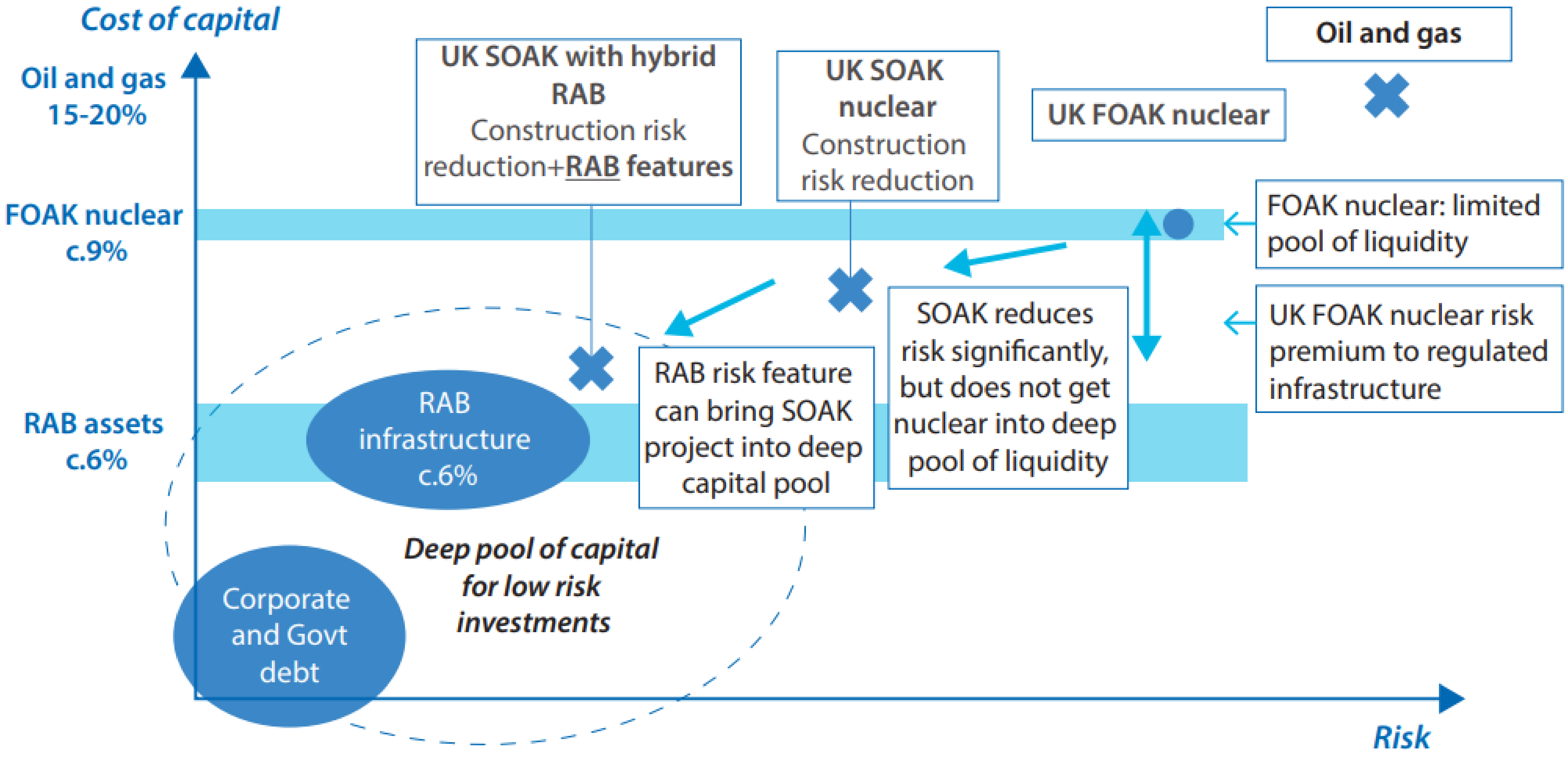


Ownership structure:

- Industrial companies 44%
- Energy companies 31%*
- Fortum 26%

*50 companies owned by 132 municipalities

RAB based Financing Model - Example of Sizewell , UK



Source: Sizewell C – EDF Energy

Recommendations

- Both the investment rating and the ability to attract debt for new projects have a central role to play in the financing of new nuclear projects.
- Multiple financing mechanisms are required to access a variety of sources of capital.
- A stable and long-term investment policy framework for nuclear optimizes the distribution and allocation of risks for the sake of the community of stakeholders with a view to ensure consumer value for money. Targeted actions may also need to be developed by policymakers so as to enable a comprehensive investment framework.
- An industrial management framework for nuclear new build projects at the level of project development and ownership level is a key success factor in managing risk.
- An investment policy planning for low-carbon technologies such as nuclear power is critical in driving investments and achieving the climate neutrality goals.

Full report available from here


Thank you!
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