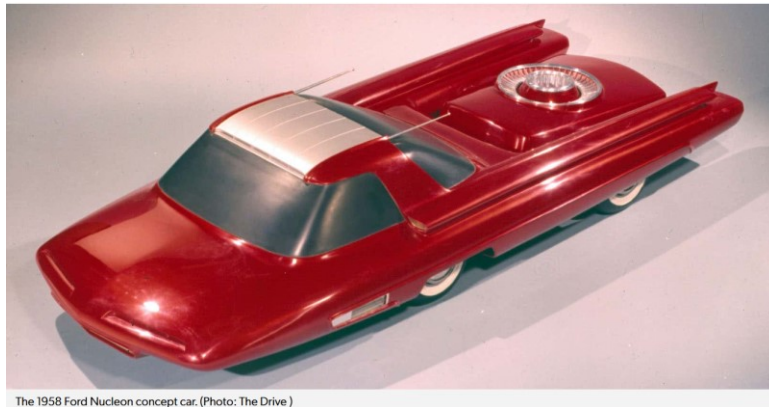


# Preparations for new nuclear power in Sweden

Seminar at the Royal Institute of Technology, Stockholm  
2025-05-12

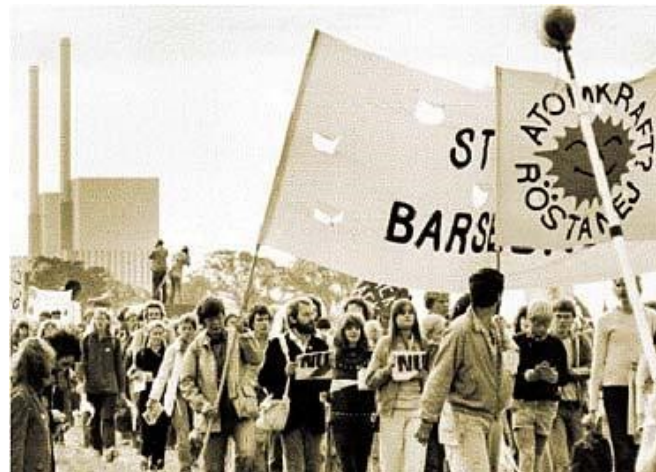
Carl Berglöf, National Nuclear New-build Coordinator  
Inquiry assigned by the Ministry of Climate and Enterprise

# The nuclear policy evolution



The 1958 Ford Nucleon concept car. (Photo: The Drive)

The atomic age begins



Set-back



Nuclear renaissance

# A Key Technology

- IEA: Nuclear power is one of seven “key technologies” for the transition
  - “Overcoming barriers to their deployment should be a priority worldwide”
  - +40 include nuclear power in their energy policies



- Wind
- Solar PV
- Nuclear
- Electric vehicles
- Hydrogen
- Heat pumps
- CCUS

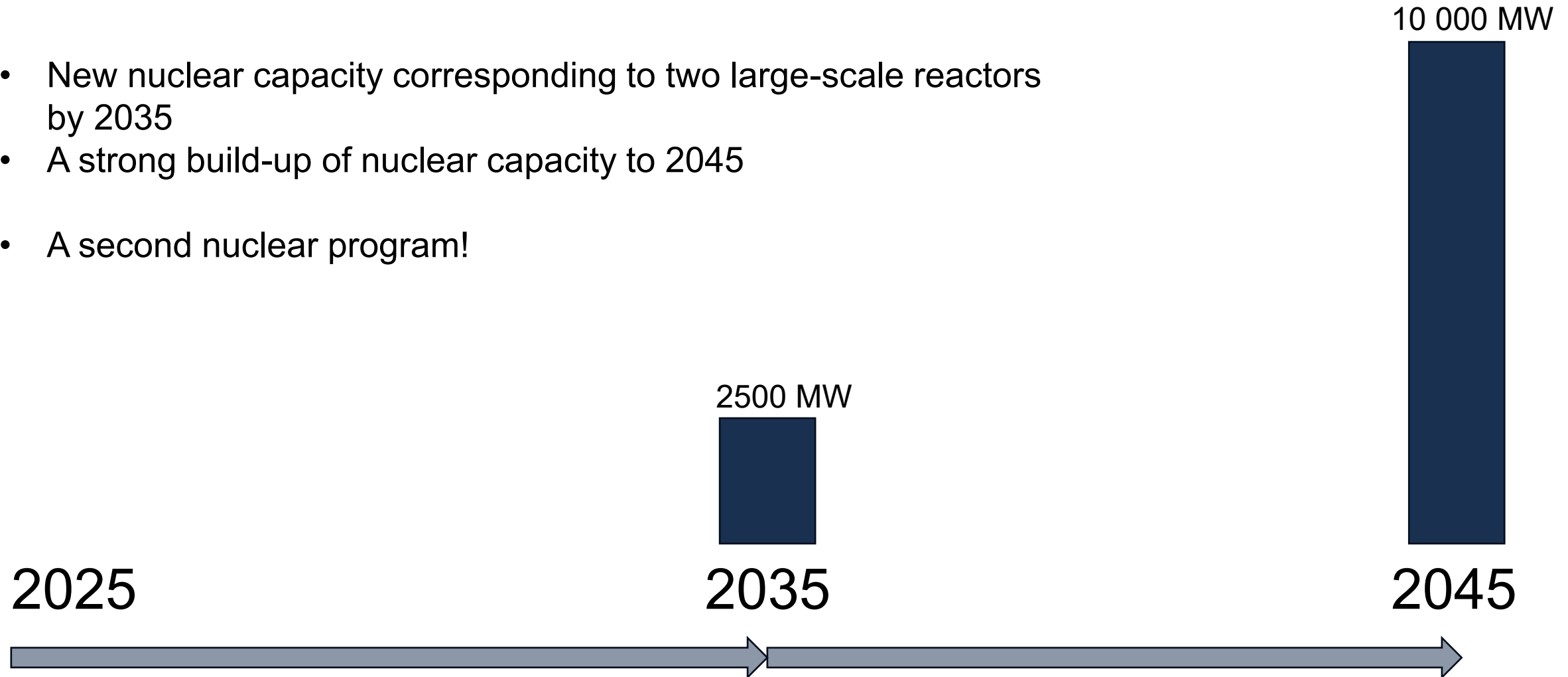
# A new course for energy policy in Sweden

- New policies driven by:
  - Climate
  - Energy security & system challenges
  - Competitiveness
- “100% fossil free” electricity production
- Removed nuclear cap
- Targets for system planning
- New policy approved by Parliament
  - Includes Nuclear Roadmap



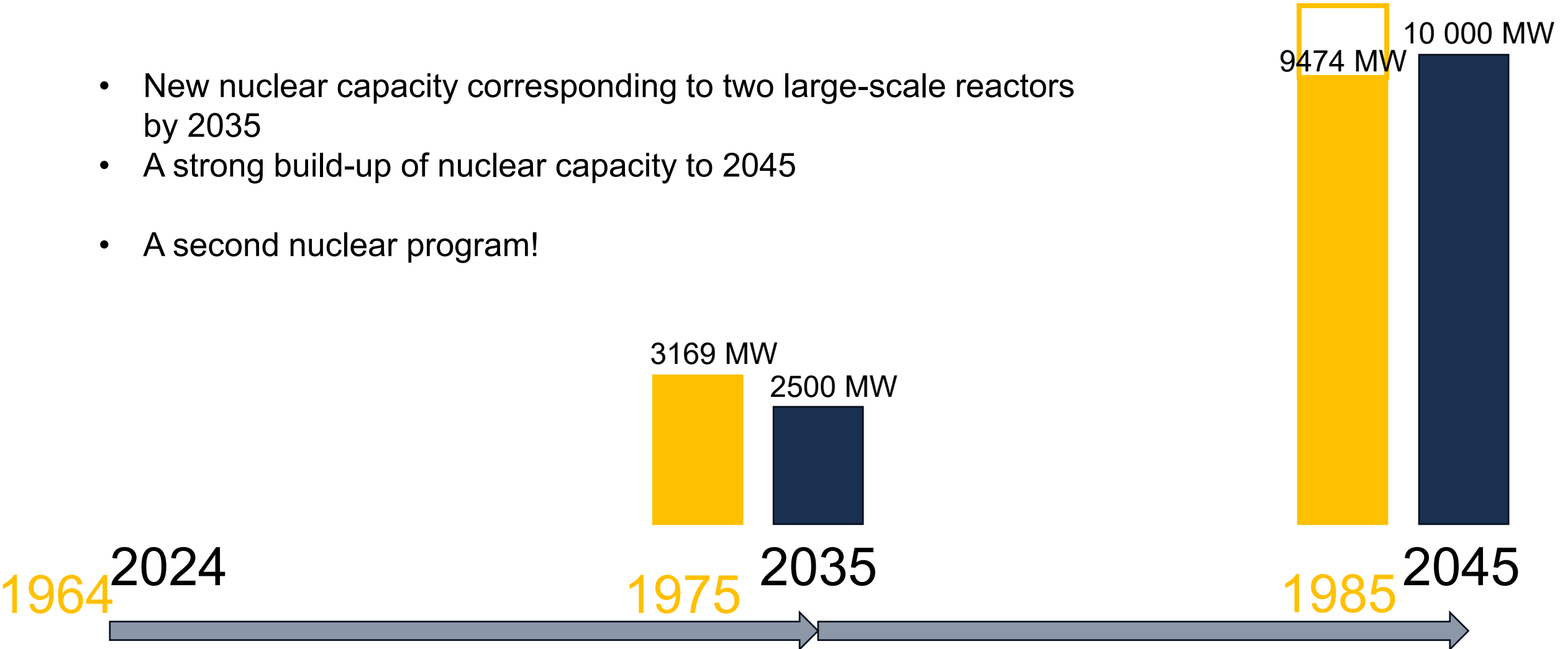
# Roadmap for New Nuclear Power

- New nuclear capacity corresponding to two large-scale reactors by 2035
- A strong build-up of nuclear capacity to 2045
- A second nuclear program!



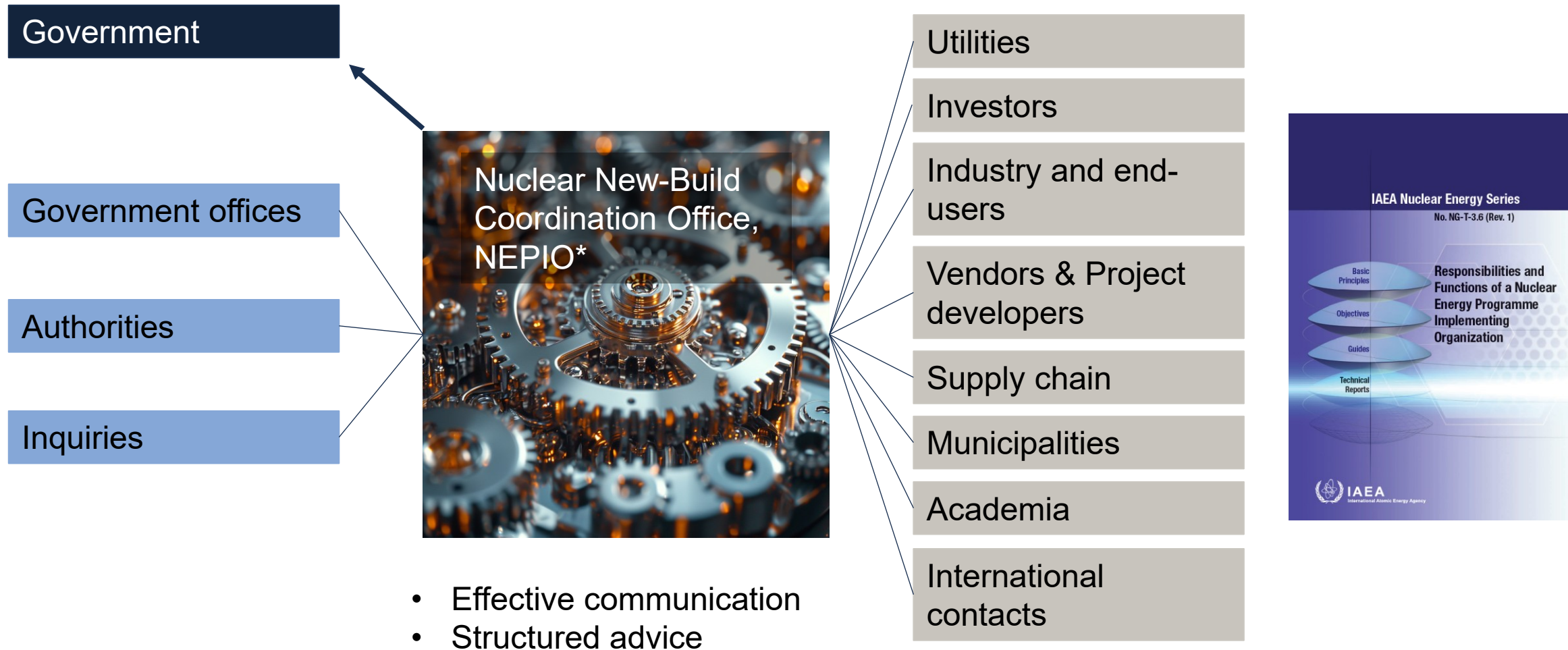
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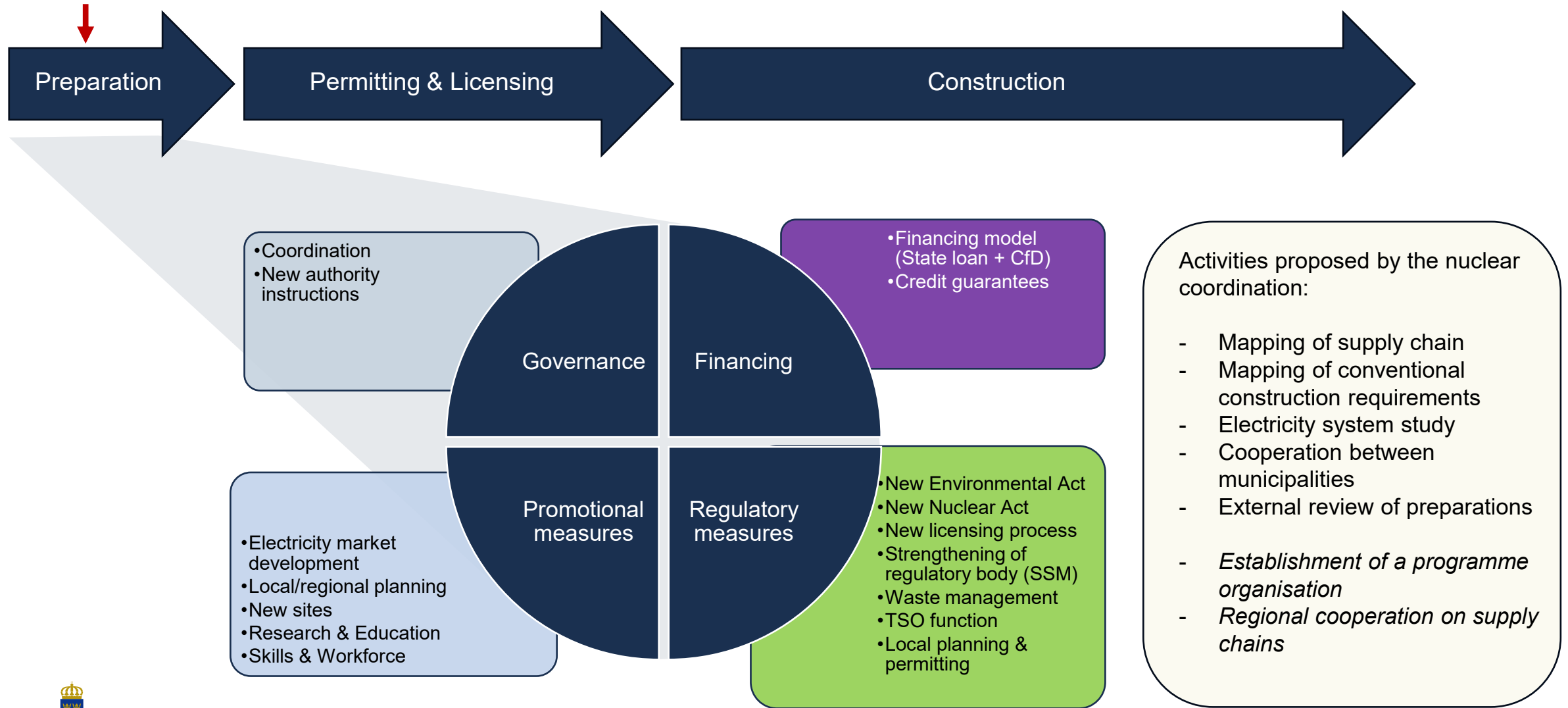




# A coordinated approach to programme development



# Critical path to first grid connection

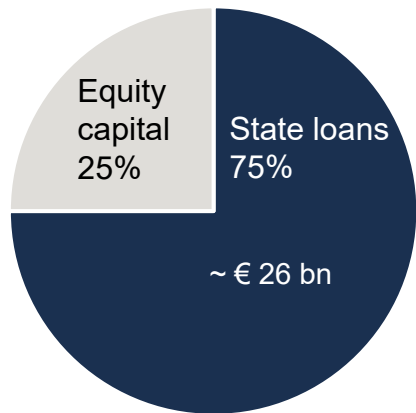


A national coordinator for the expansion of nuclear energy

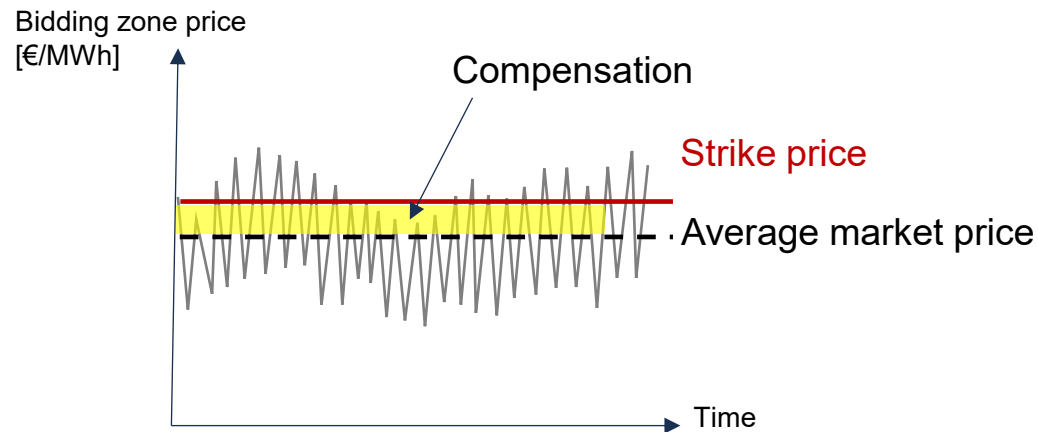


# Proposed Financing Model (4-6 GW)

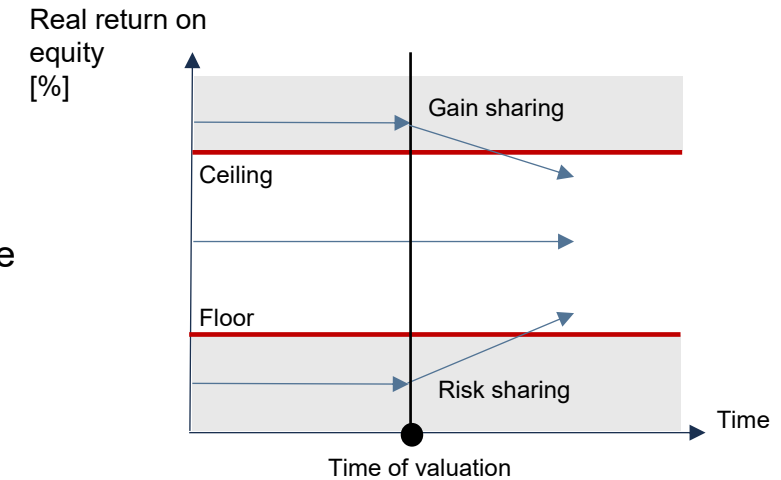
## 1. State loans



## 2. Contract for Difference (CfD)



## 3. Risk- and gain-share mechanism



Construction phase

Political risk

Construction risk

Operation phase

Political risk

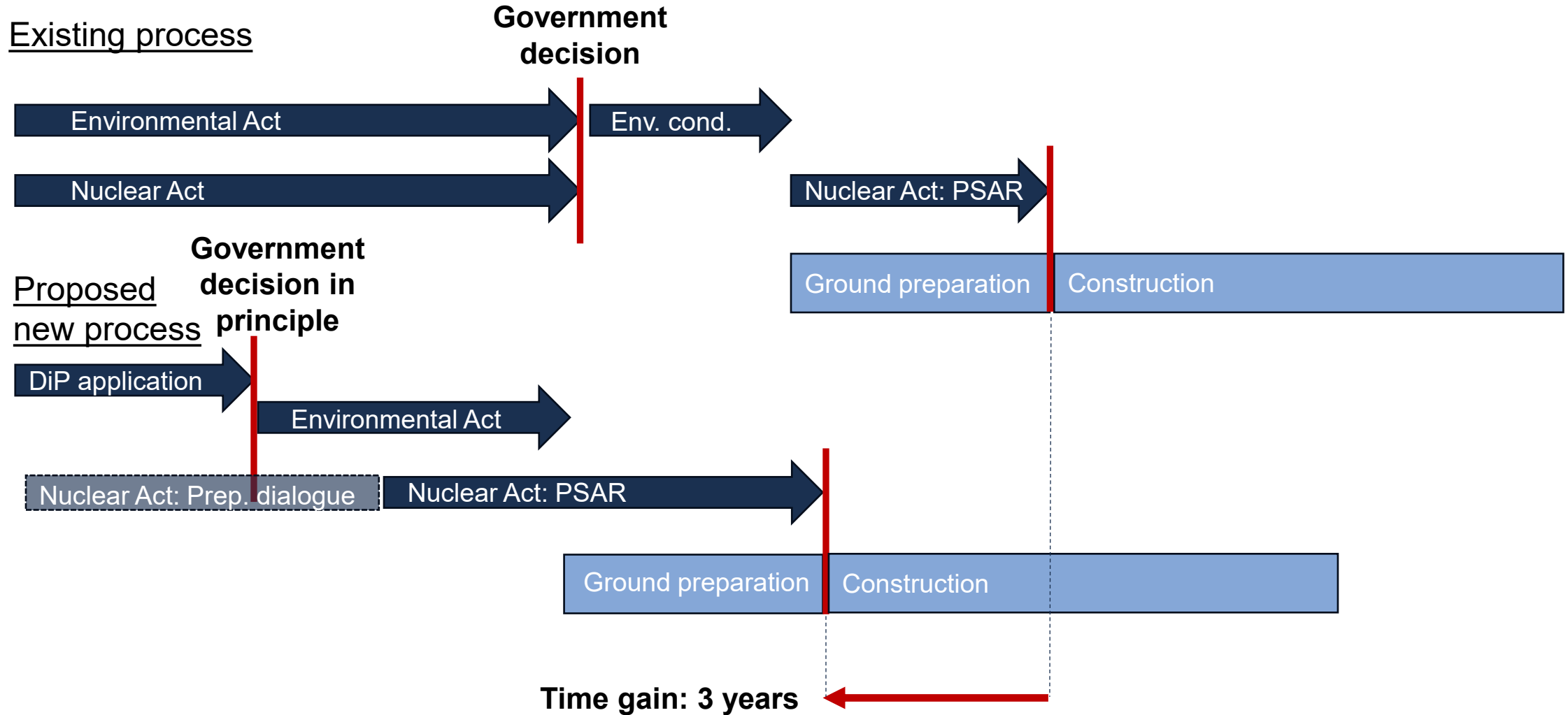
Market risk

After two years of operation

Regulatory risk

Construction risk

# Proposed new licensing process



# Two interim reports published



# A missing piece: Knowledge management

