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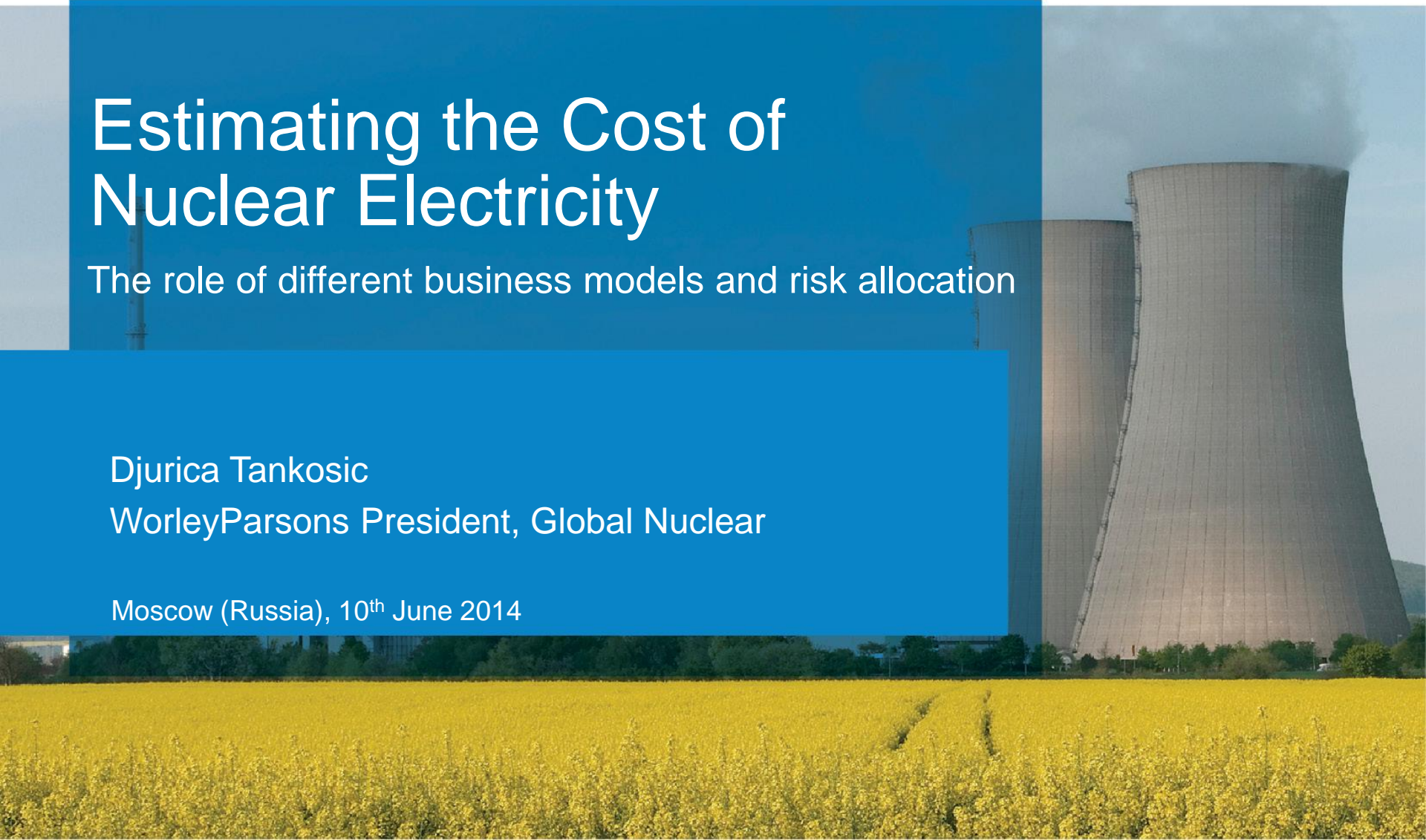
  
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2014

# Estimating the Cost of Nuclear Electricity

The role of different business models and risk allocation

Djurica Tankosic  
WorleyParsons President, Global Nuclear

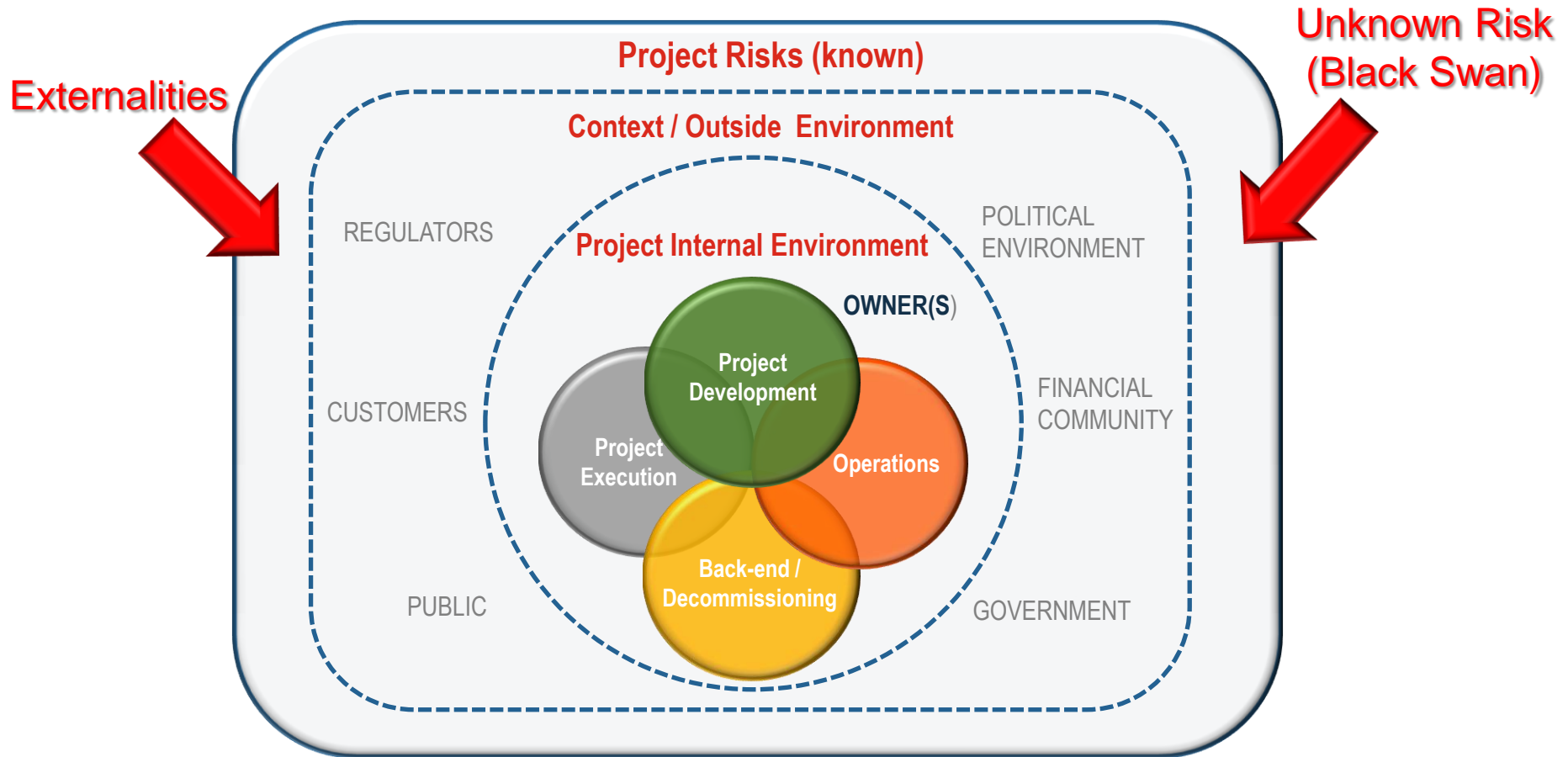
Moscow (Russia), 10<sup>th</sup> June 2014



# Setting the Context

- ▶ Business in moving from “West” to “East”
- ▶ New “government-to-government” agreement based model(s) is gaining attractiveness
- ▶ Traditional “Western” EPC delivery mode under strain – looking for a new “mouse trap”
- ▶ Modeling complexity is driven by need for better understanding and quantification of project risks

# NPP Project Risk Space





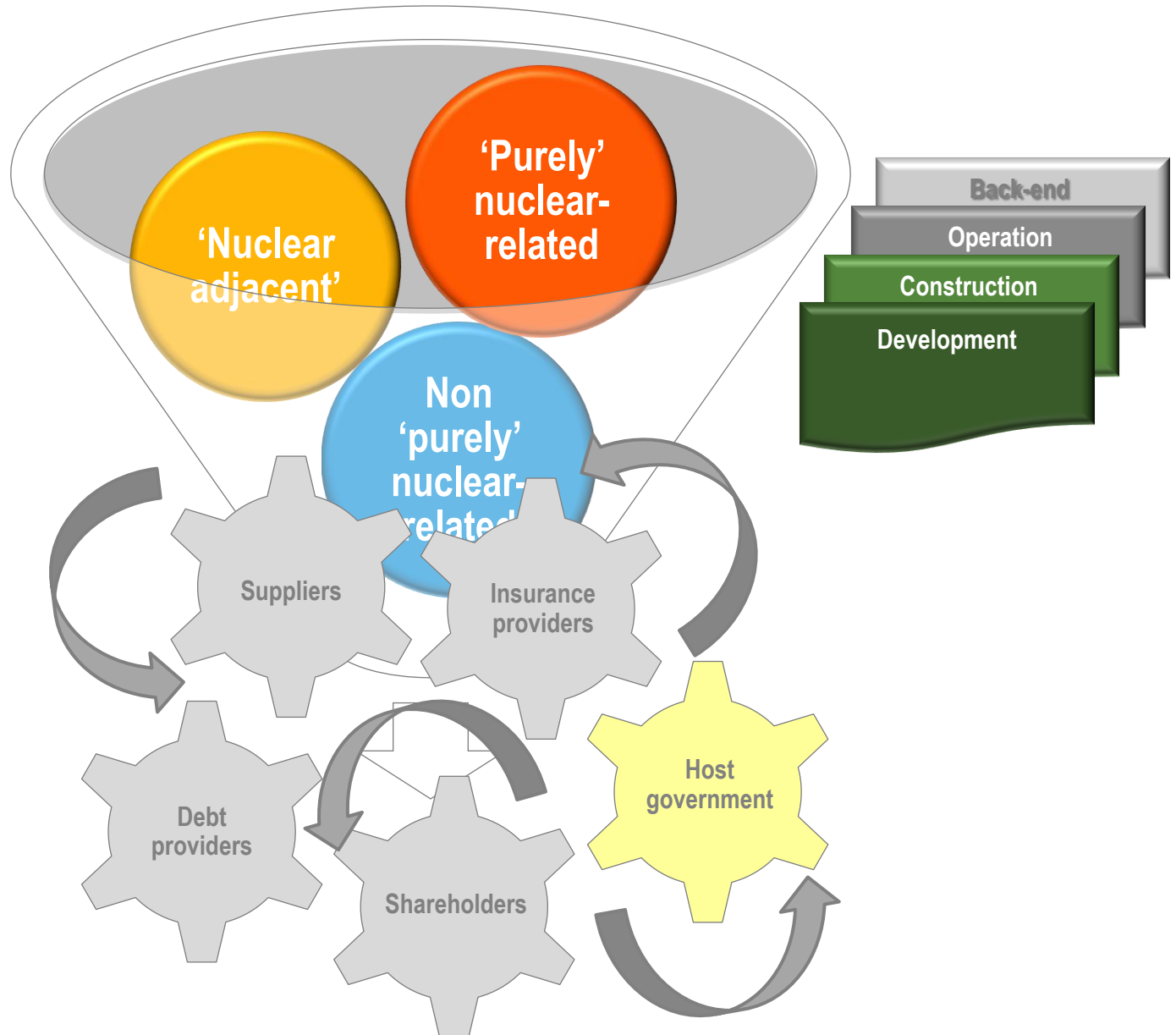
# Risk Allocation Arrangements

The heart of any plan...

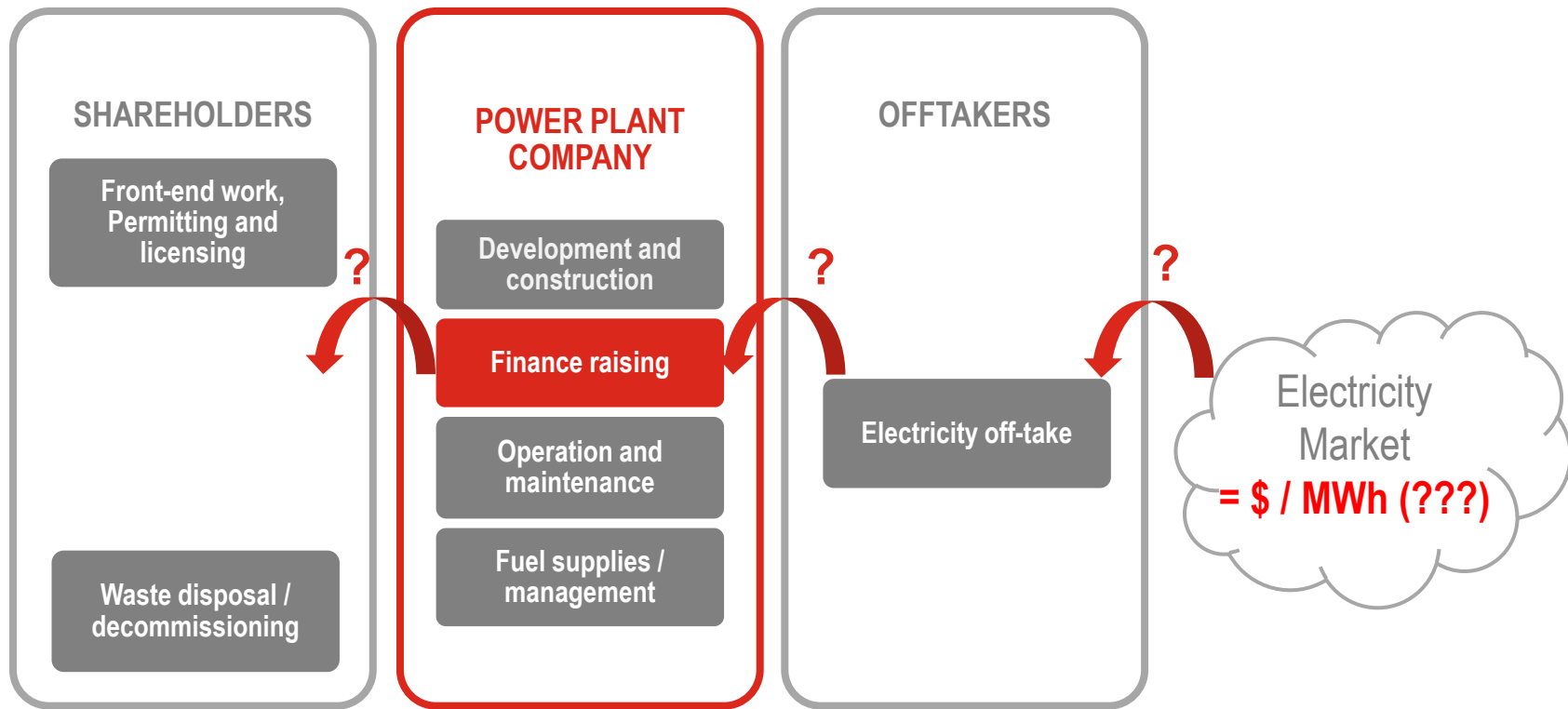
But it is all about the money...

# Lifecycle Risk Matrix

  
Not only for  
financial risks

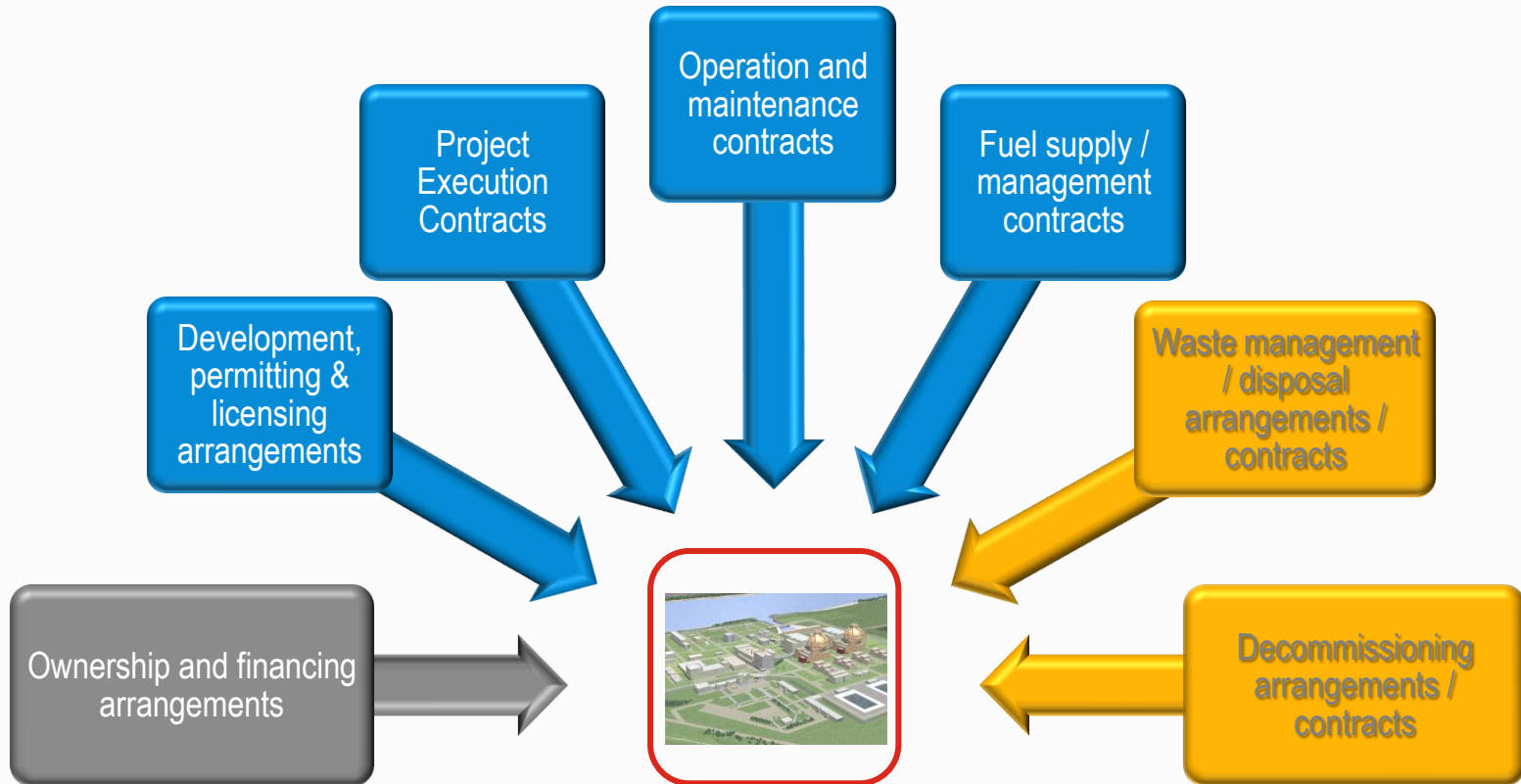


# Risk Allocation Rationale (Big Picture)



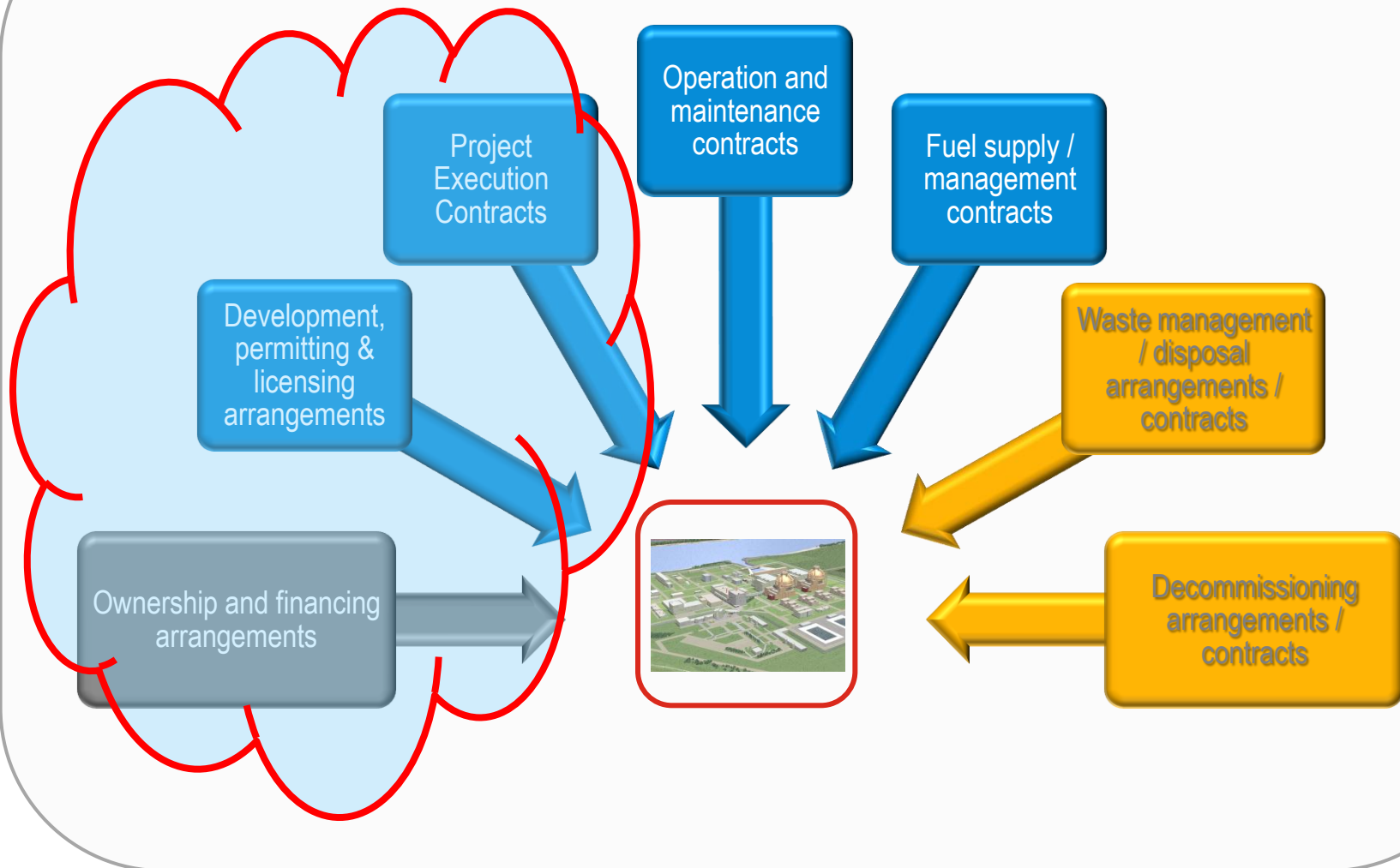
# Risk Management Arrangements

## PROJECT LIFECYCLE CONTRACTUAL STRUCTURE



# Risk Management Arrangements (our space)

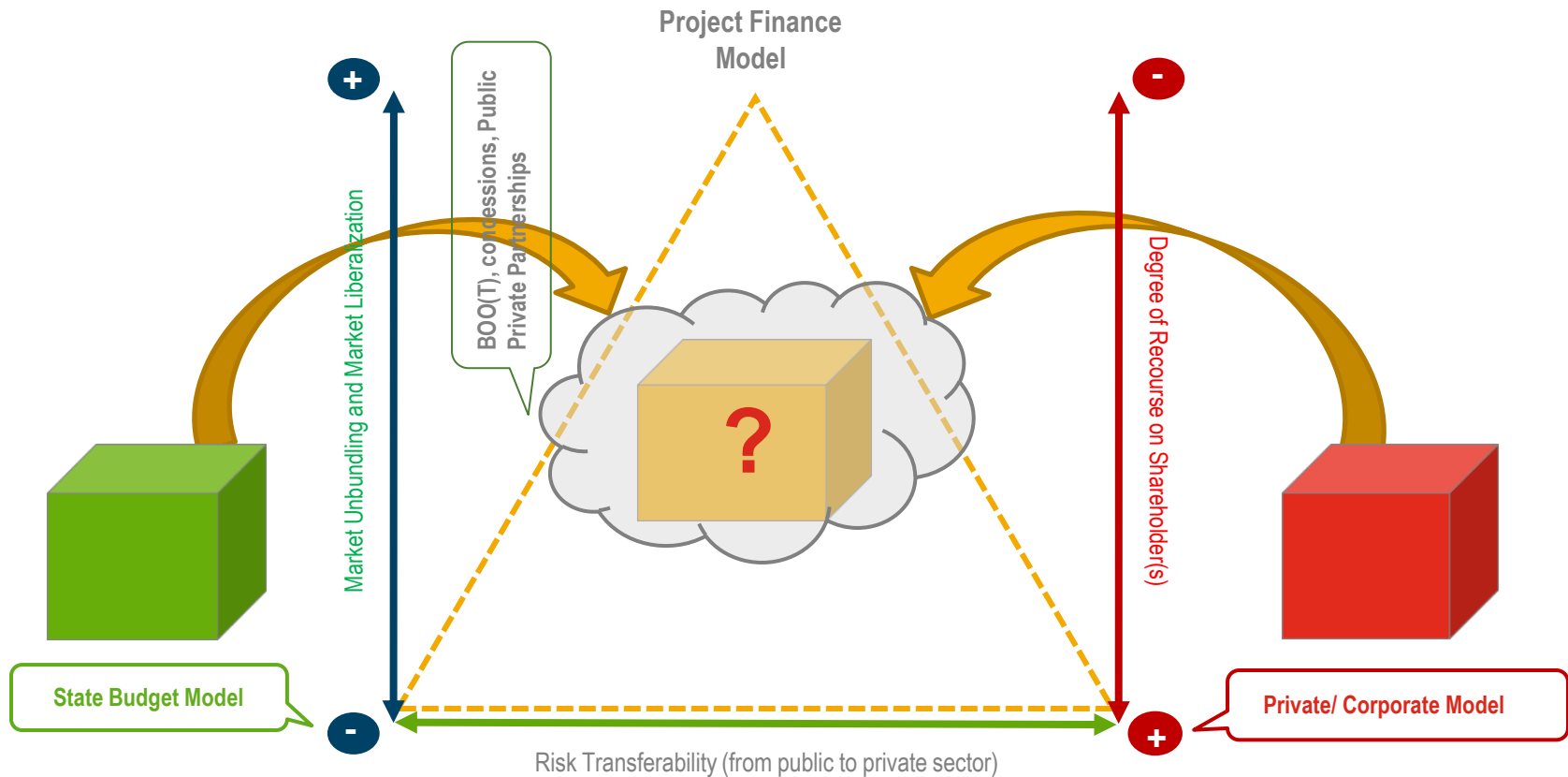
## PROJECT LIFECYCLE CONTRACTUAL STRUCTURE

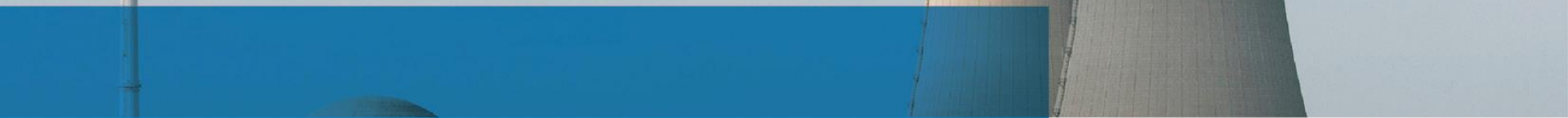




# Impact of ownership and commercial structures

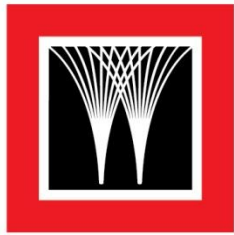
- ▶ There exist other variations in ownership and commercial structures, which may provide for flexibility and allow more innovative schemes to be envisaged
  - Economics, legal & regulatory environments, and particularly size and duration of nuclear projects put, however, a range of constraints



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- A photograph of a nuclear power plant with cooling towers, partially obscured by a blue horizontal bar at the top of the slide.
- ▶ **Licensing risk;** ... a menace from the past in no any more – technology has matured
  - ▶ **Licensing risk environment;** ... still a threat frequently driven by political agendas
  - ▶ **Political Risk;** ... probably a major risk facing nuclear power – is the democracy as we know it today “the solution”

## **AND**

- ▶ Unfortunately, the industry turned to be its worst enemy; ... still trying to build before the design is finalized to ensure precise quantity take-of and credible constructability planning



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