



The 17th INPRO Dialogue Forum
on Opportunities and Challenges in Small Modular Reactors

Opportunities and Challenges

Lotte Hotel, Ulsan, Republic of Korea
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Opportunities

1. **Climate Change**
2. **Safety**
3. **Simplicity**
4. **Flexible Application**
5. **Capital Cost**
6. **Flexible Deployment**

Challenges

1. **Policies**
2. **Licensing**
3. **Security & Safeguards**
4. **Implementation**
5. **LCOE**

Opportunities



Climate Change



Clean Energy



Decarbonization

Opportunities



Safety

Passive System

Small EPZ



Margin for Load Follow

Plug-and-Play



Opportunities



Simplicity

Integral Design



Fabrication in Shop

Smaller Supply Chain



Localization

Standardization

Opportunities



Flexible Application

Hybrid with Renewables

Non-electric User

Scalability

Adaptability

Opportunities



Capital Cost



Smaller Investment



Faster Construction



Flexible Deployment



Transportation

Small Grid



Siting (Smaller / Close to End User)

Challenges



Policies

Terms of Government

SMR / Nuclear as Clean Energy Source



Public Acceptance

Challenges



Licensing

Proof of New Technology

Demonstration & Tests



Multiple Unit in One Site

Differences between States

Challenges



Security & Safeguards



Physical Protects

New Accounting System



Remote Area or Marine

New Fuel Types

Challenges



Implementation

FOAK

Complex Engineering

Time Window Shortening



Protect Management

Reference Plant

Challenges



LCOE

Slow market

Embarking State with Low LCOE



Decreasing Gas Price

How to Attract Private Funding