

# Power System Interconnection and Energy Security

---

Dec. 17. 2015.

KERI

(J. YOON [jyyoon@keri.re.kr](mailto:jyyoon@keri.re.kr))

## <Keyword & Notice>

---

◆ Meaning of PSI in NEA Regions : Roadmap for Sustainable Peace

◆ Need to Feasibility Assessment on NEAREST-PSI

◆ Energy Security Issues & Requirements on NEAREST-PSI

◆ Energy Security & Sustainability & To be determined Topics

◆ What should do we for Sustainable Energy Network ?

◆ Suggestion for Sustainable Energy Network in NEA Region

## <Backgrounds>

---

### ◆ Most of NEA Countries

#### ■ have mutual complementary characteristics

- Natural resources, Power mix ratio, Electricity tariff ...
- Need to build more power plants & Resource Development

#### ■ PSI(Power System Interconnection) can be alternatives to ...

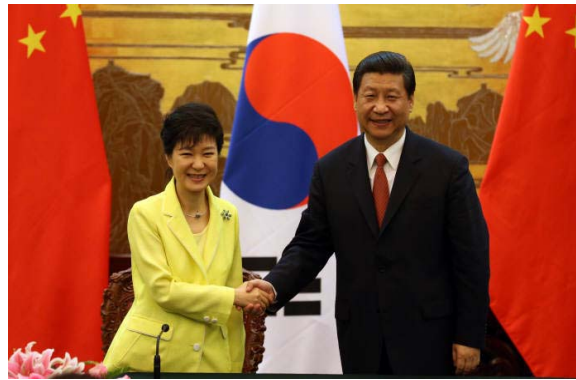
- Overcome these difficulties in NEA power sector
- Utilize the complementary characteristics between them

### ◆ But, PSI in NEA Region couldn't realize until now because of

- Differences of Technical, Business and Regulatory Regime
- Business Discredit and Political Points among NEA Countries
- DPRK Variants and Refusal caused by Past History Problems ...

## <Meaning of PSI & CBT in NEA Region>

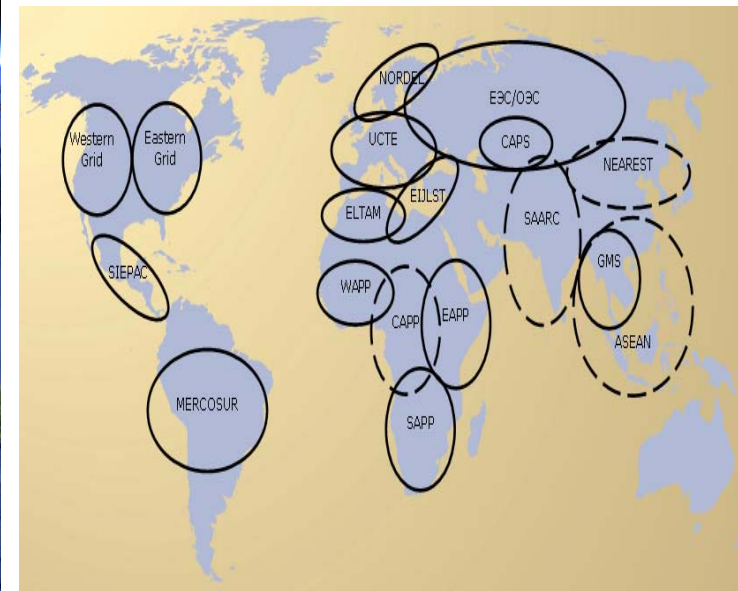
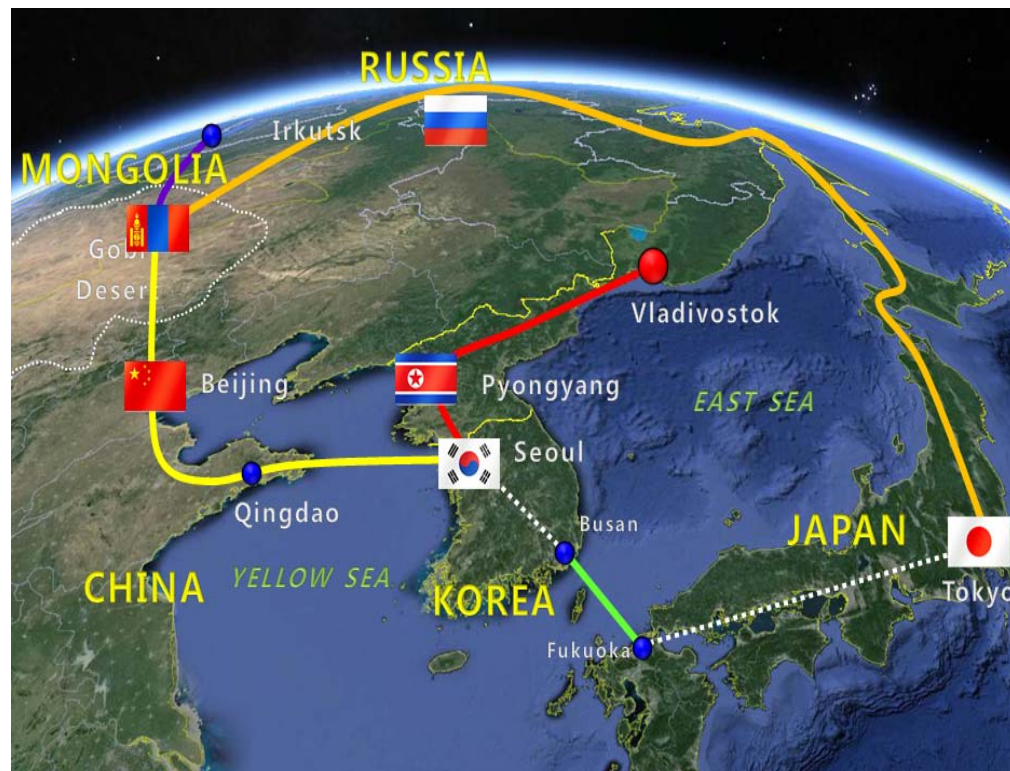
- ◆ “Power System Interconnection & Cross-Border Trade between ...”
  - Enhancement the sustainable Regional Peace parade
  - Economic Win-Win game & Technical Reserve Supporting System,  
But Positive & Negative Points in Energy Security (?)



## <Promotions on PSI & CBT in NEA Region>

### ◆ Beyond NEA, Toward Worldwide ...

#### ■ Trans Northeast Asian Network : “RU-MO-CH-NK-SK-JP”





## <Benefits of Electricity Market Integration>



- Diversity of Generation Plants
- Harmonize & Optimization of Power Mix



- Development of Renewable Energy, GOBITEC Solar & Wind
- CDM(Clean Development Mechanism) Project

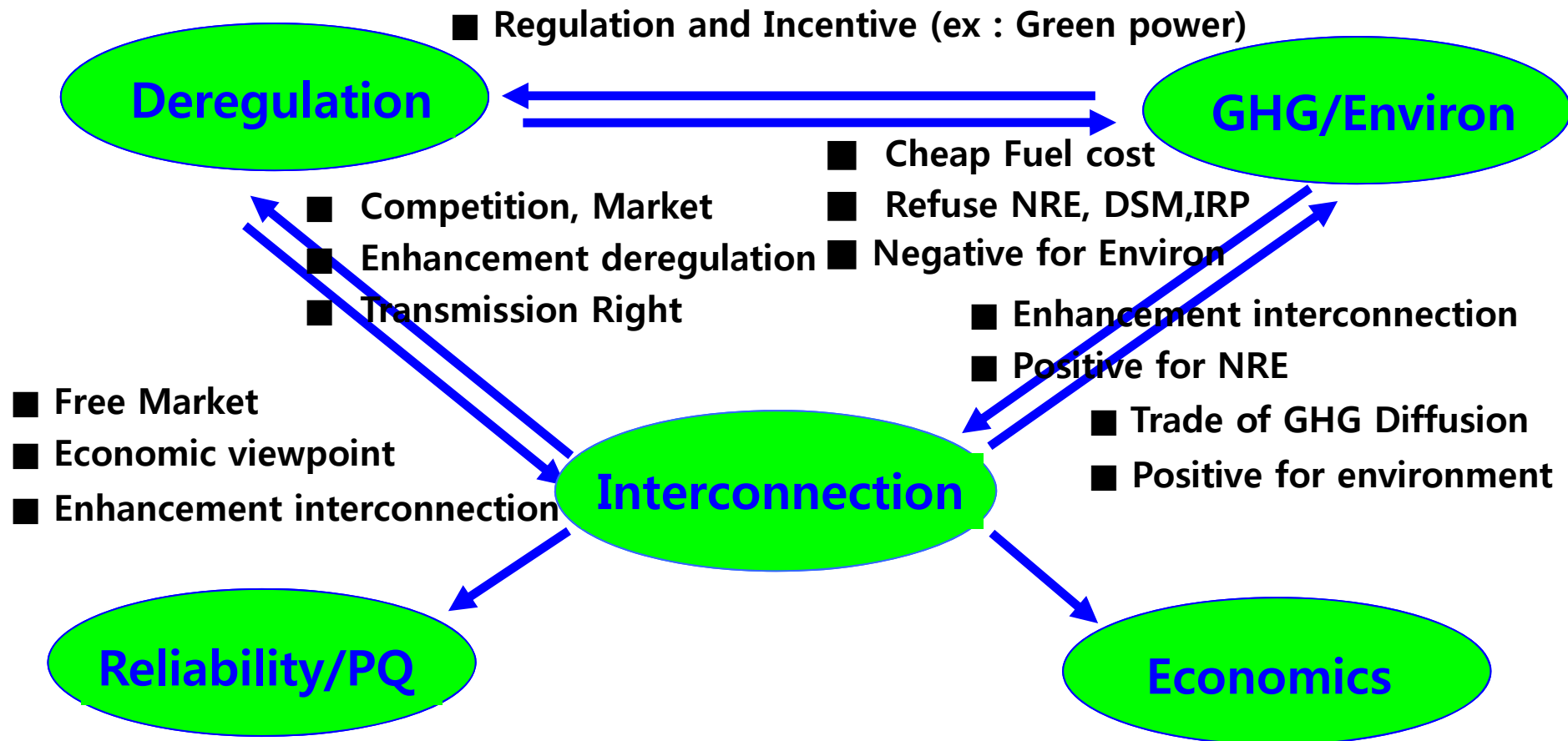


- Asian Super Grid, Transfer of Bulk Energy, Trunk Line
- Global Electricity Trade Market using Ultra-HVDC System



- Stimulate of Energy Resources Development, Coal & Gas ...
- Decrease of Middle-East Energy Dependency

## <PSI/CBT & Relation Factors>



## *of Deregulation & Interconnection>*

---

competition and economic efficiency  
nonopolies (both intra and inter-country)  
efficient markets without distortions  
e security of supply and the existence of infrastructures  
the quality of service  
e accomplishment of the public service obligations  
consumer interests  
e to a better environment  
e to the efficient and sustainable use of energy  
the peaceful cooperation between interconnected count

[https://www.yunbaogao.cn/report/index/report?reportId=5\\_3739](https://www.yunbaogao.cn/report/index/report?reportId=5_3739)

预览已结束，完整报告链接和二维码如下：

