
Energy Charter – IEEJ – JREF Joint Workshop

RES in JAPAN and electricity interconnection in Northeast Asia

20 November 2014, Tokyo, Japan



Zafar Samadov, Ernesto Bonafé
Energy Charter Secretariat

Gobitec and Asian Super Grid for Renewable Energies in Northeast Asia



Outline

- Regional study Gobitec and Asian Super Grid (ASG)
- Energy Charter Treaty
- Recommendations for a long term vision
- Next steps to support Gobitec and Asian Super Grid

Gobitec and ASG for RES in Northeast Asia



Energy Charter Secretariat



Korean Energy Economics Institute



Energy Systems Institute of the Russian Federation



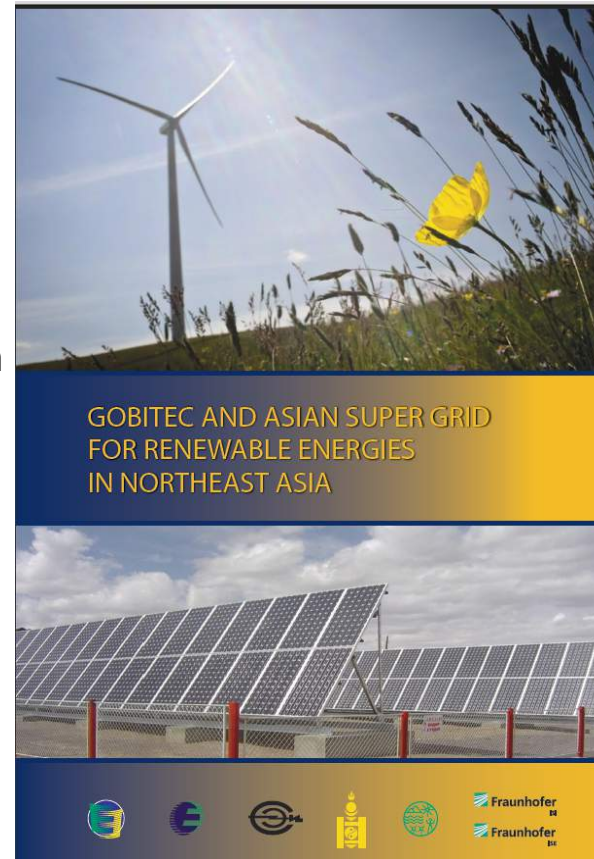
Ministry of Energy of Mongolia



Japan Renewable Energy Foundation

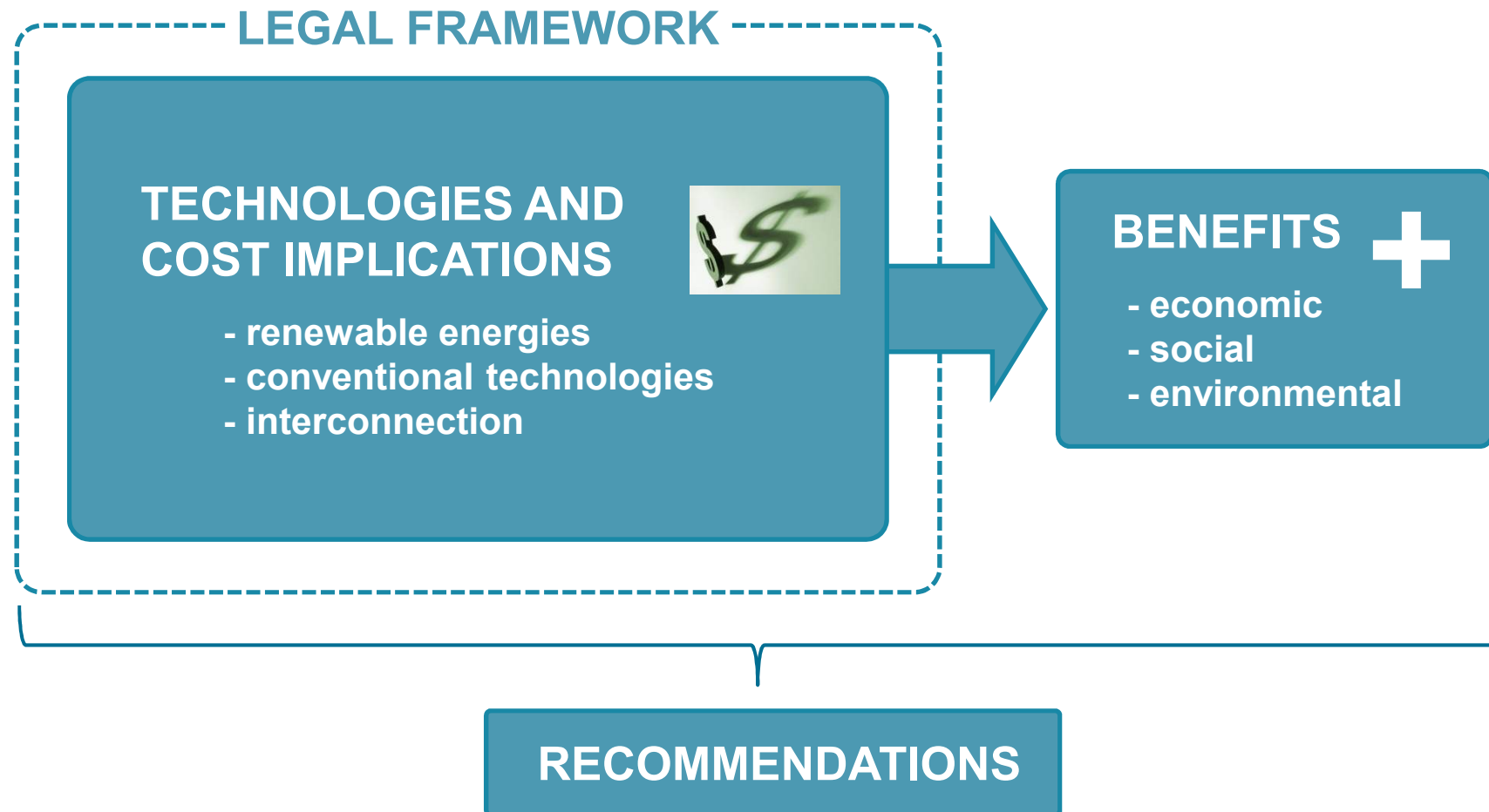


Fraunhofer ISI and Fraunhofer ISE

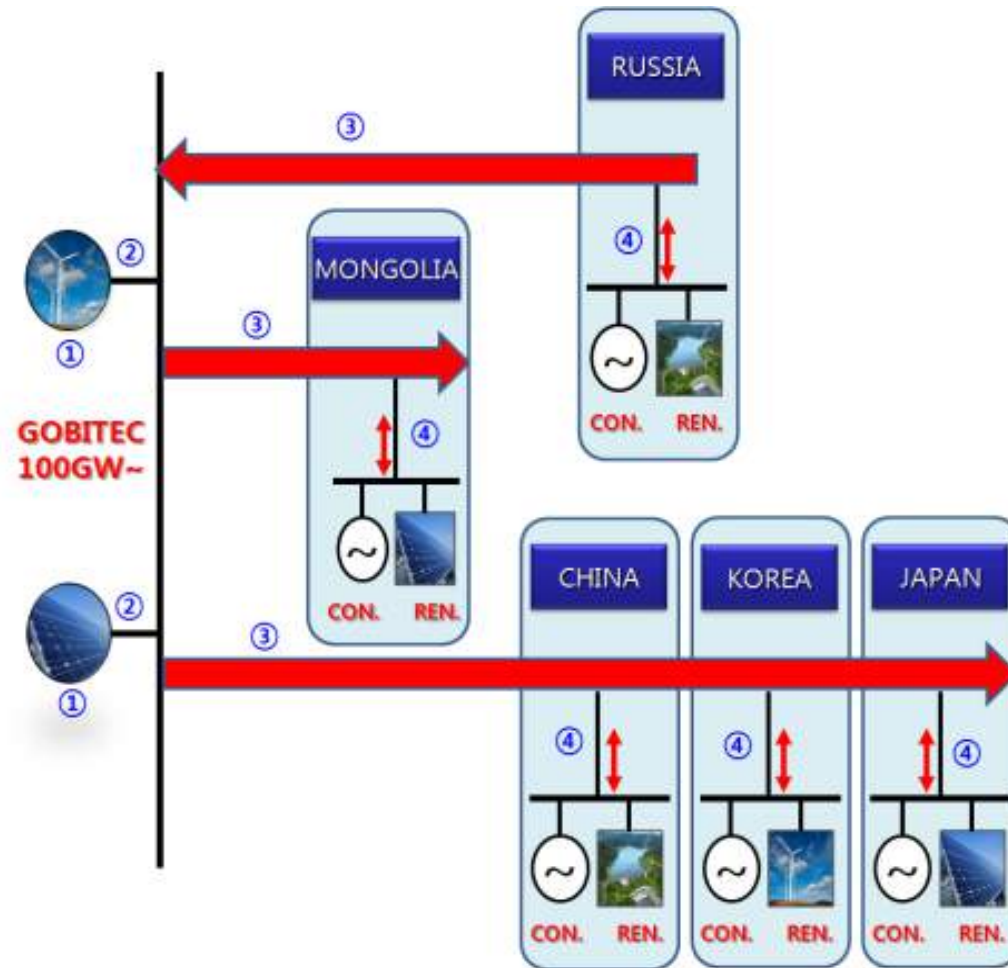


Available at www.encharter.org

Scope of the study

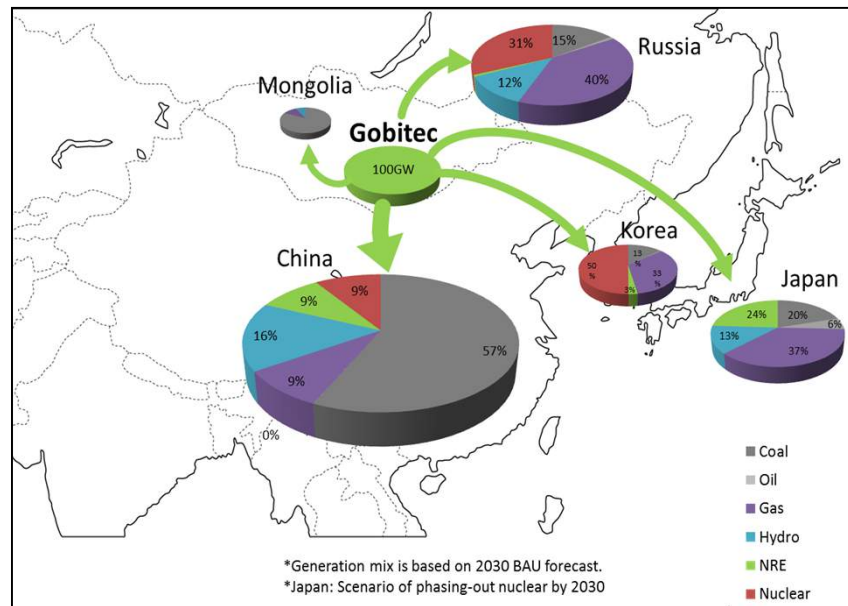


Gobitec – integrating solar, wind and hydro power

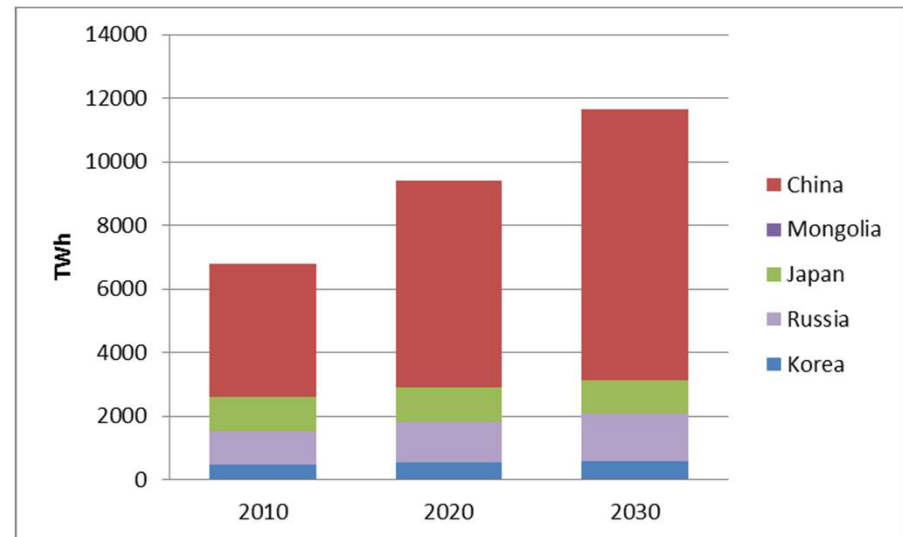


Gobitec potential - supply and demand

2030 mix and imports from Gobitec



NEA electricity demand (BAU forecast)



Export and transmission via Asian Super Grid (ASG)

100 GW RE capacity



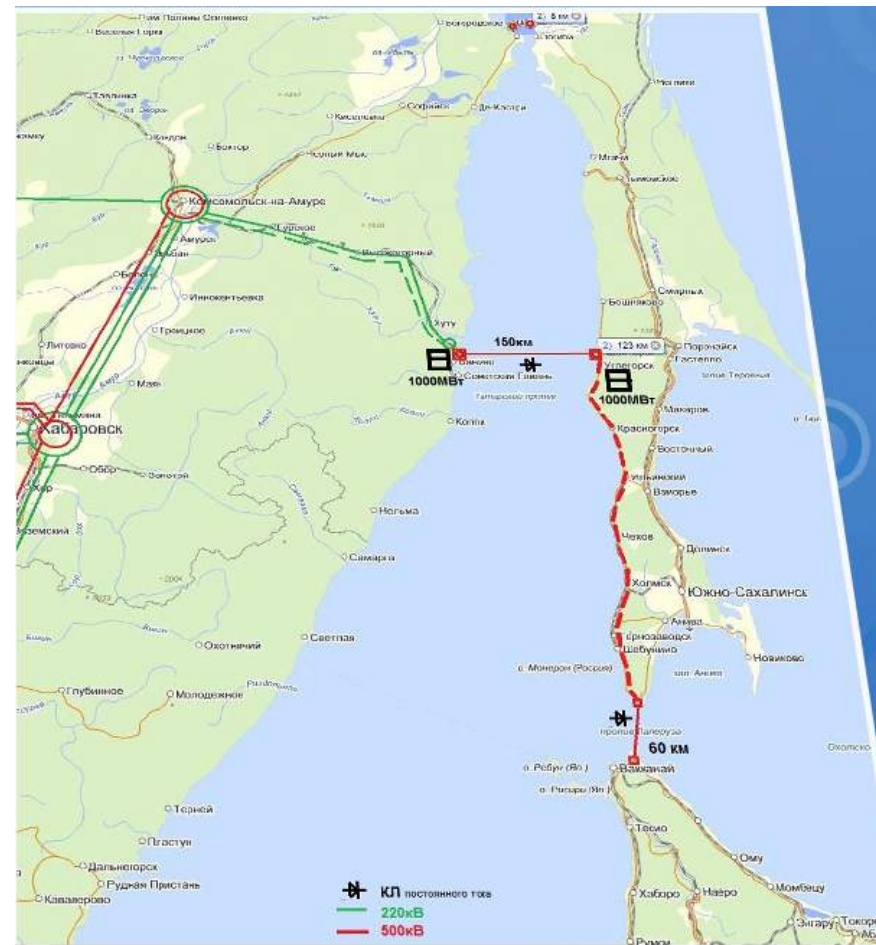
Import:
maximum 10%
of electricity
demand



Possible route of ASG



ASG as a result of many interconnections



Potential of the Energy Charter Treaty



Key messages

Interconnection

strategic countries in Northeast Asia.

RES potential

solar and wind in the Gobi

Technologies

HVDC transmission. Wind and solar

RES integration

technologies to balance the system

ECT

investment, trade & transit

Objectives

sustainability and energy security.

Benefits

economic, social & environmental

Regional cooperation

to establish Gobitec & ASG.

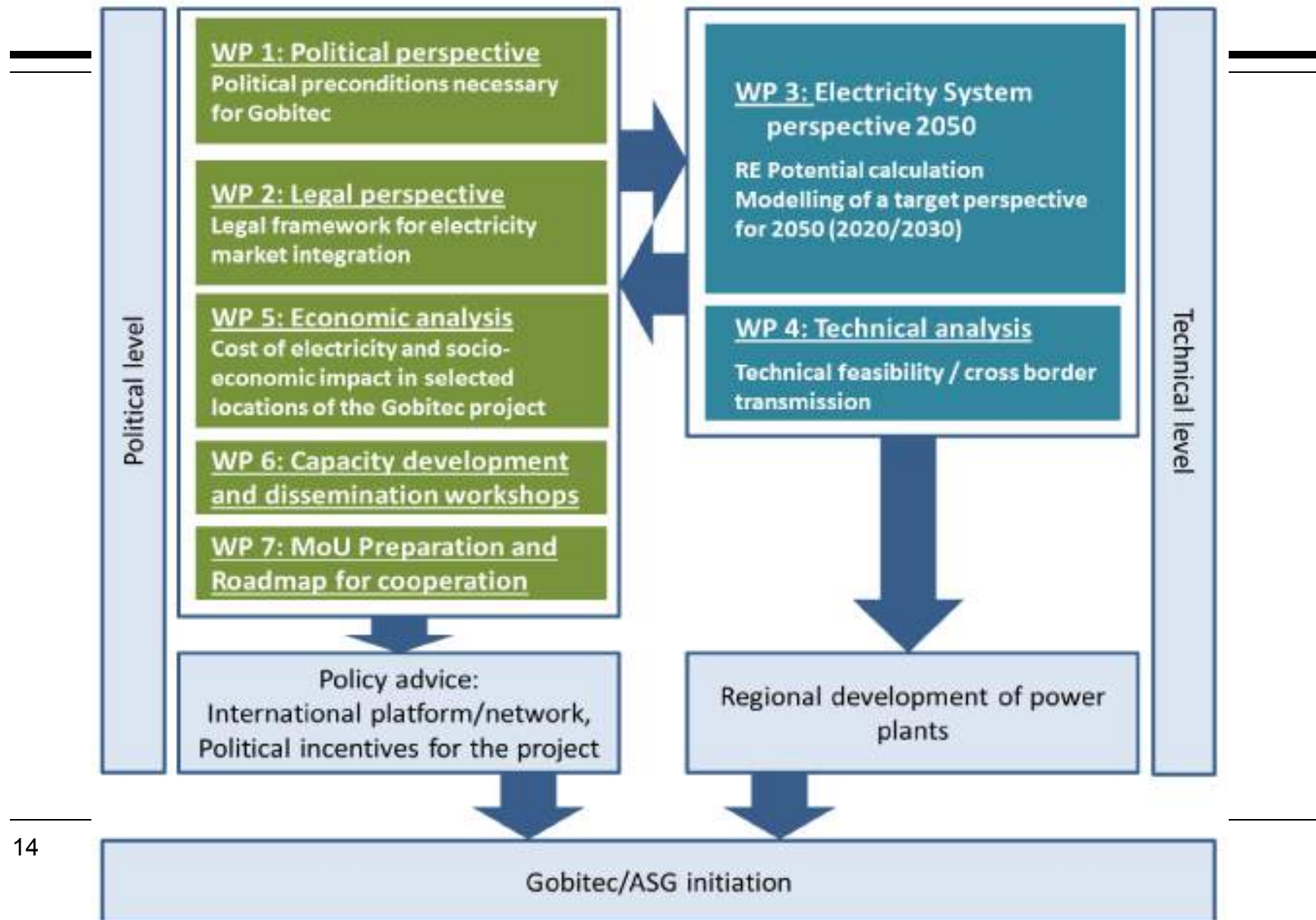
SWOT Analysis

Strengths - Huge RES potential in Gobi, South Korea and Japan	Weaknesses - Absence of common legal framework - Huge capital costs
Opportunities - Improve energy security - Cut down CO₂ emissions	Threats - Lack of political cooperation

Next steps



Future activities



Ulaanbaatar Energy Charter Forum

26 June 2014



Publication is available at www.encharter.org

The Energy Charter: a bridge between regions

Lessons learned from EU experience

- National hesitations to agree and apply common rules
- National reluctance to cross-border electricity trade
- Challenges concerning investment protection
- The importance of pragmatic solutions

Thank you very much for your attention



Energy Charter Secretariat

Boulevard de la Woluwe, 56 • B-1200 Brussels, Belgium

Tel.: +32 2 775 98 00 • Fax: +32 2 775 98 01 • info@encharter.org

www.encharter.org