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**OVERVIEW OF RENEWABLE ENERGY
IN VIETNAM**

Mr. Nguyen Ninh Hai
Deputy Director
New and Renewable Energy Department
General Directorate of Energy, Ministry of Industry and Trade

Content

- 1. Renewable Energy potential in Vietnam**
- 2. Objectives and orientation for renewable energy development**
- 3. Mechanism and policy to encourage the development of Renewable energy**
- 4. Barriers and solutions**
- 5. Conclusion**

Renewable potential

- Grid connected RE projects (to 2012): 1466MW (mostly SHPs)
- Off grid: mini hydro, micro hydro, wind, solar, biogas: ~ 45-60MW

Small hydro power



Potential: > 7.000 MW
Current use: 1466 MW

Solar power



Potential: 4-5 kWh/m²
Current use: 1,5 MW

Municipal wastes

Potential: 220 MW
Current use: 2,4 MW

Biomass



Potential: 500 MW
Current use: 150 MW

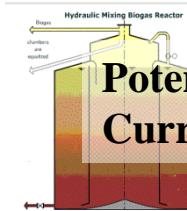
Wind power

Potential: 7000MW
Current use: 46 MW

Tidal

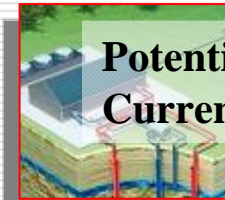
Potential: 100-200 MW
Current use: 0 MW

Biogas



Potential: 58 MW
Current use: 0,5 MW

Geothermal

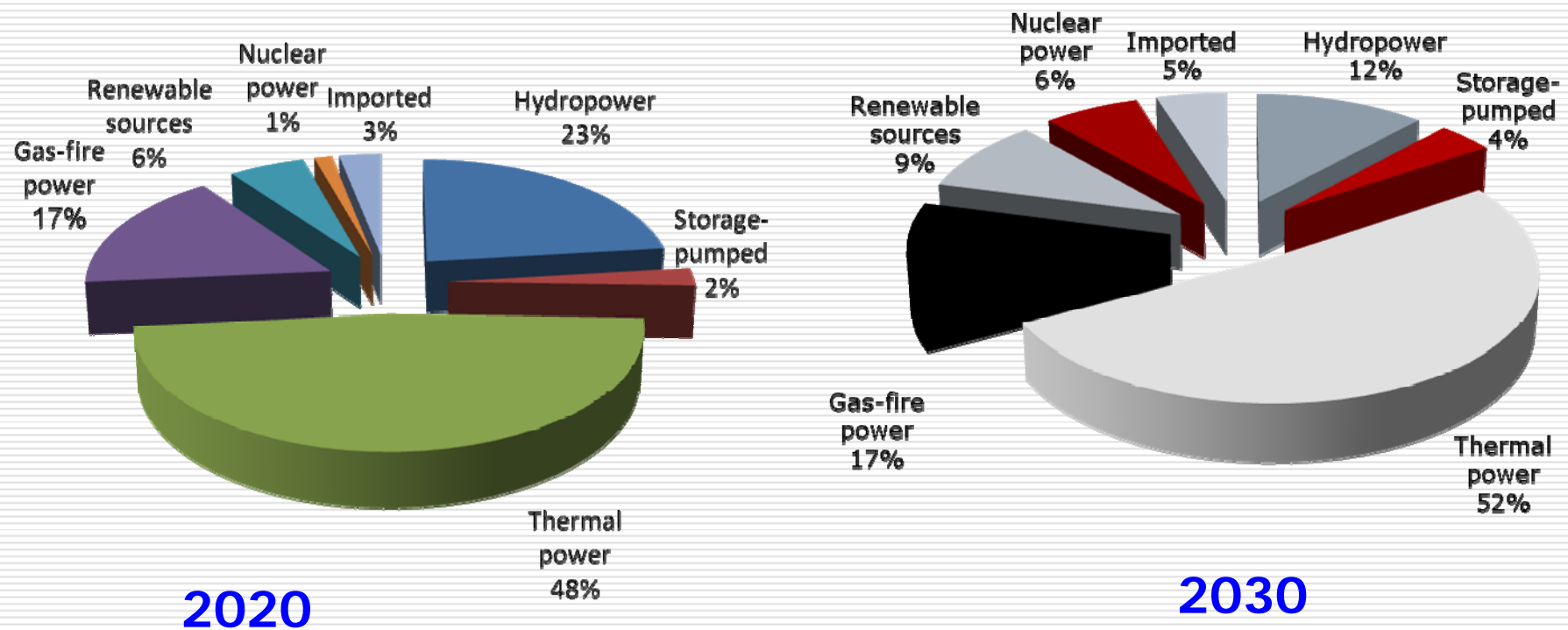


Potential: 340 MW
Current use: 0 MW

2. Objectives and orientation for RE development

Increase the RE share in total installed capacity:

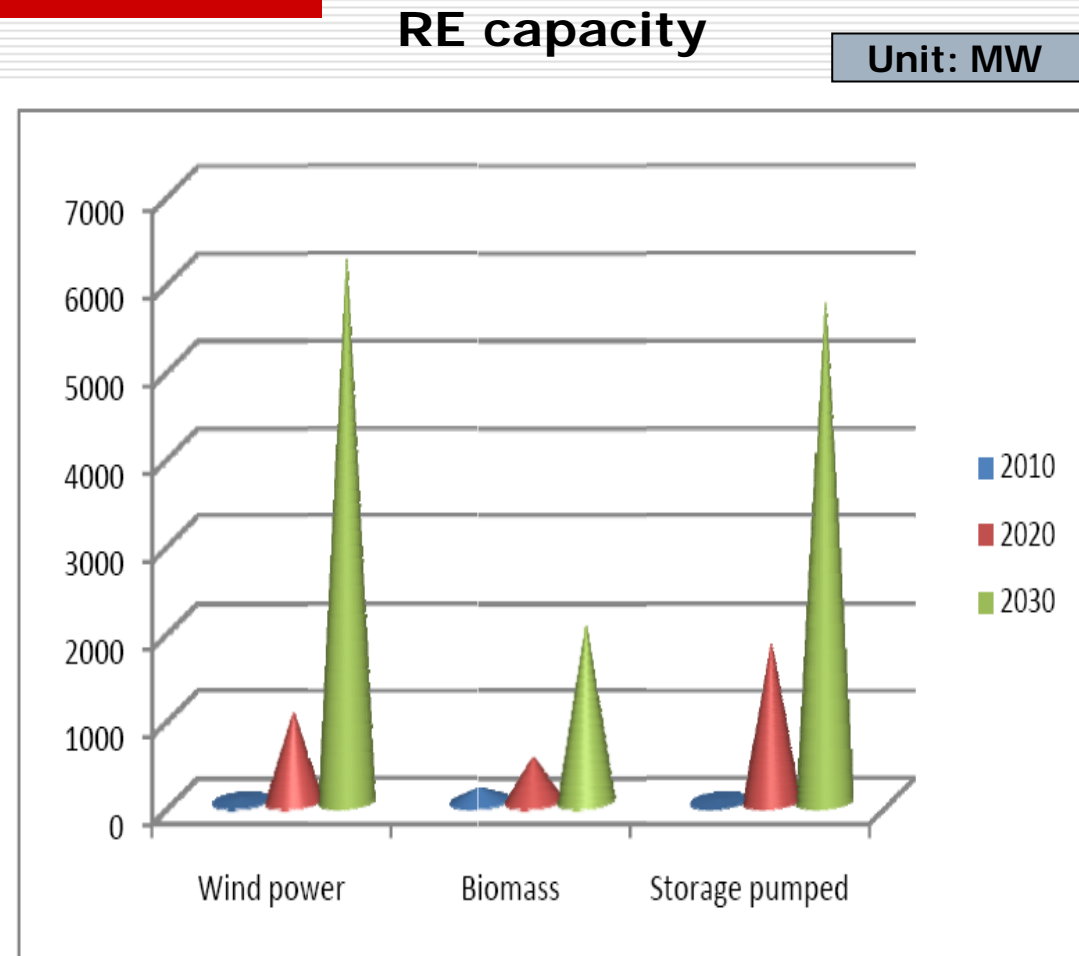
- 4.5% in 2020; 6% in 2030



2. Objective and orientation for RE development

✓ Wind power: 1,000 MW in 2020 (0.7% of the total electricity generation) and 6,200 MW in 2030 (2.4% of the total electricity generation)

✓ Biomass and cogeneration: ~500 MW (0.6%) in 2020 and 2,000 MW (1.1%) in 2030



3. Mechanism and policy to encourage the development of Renewable energy

General incentives:

- Import tax exemption for goods which can not be produced inland
- Corporate tax exemption for the first four years and reduce to 50% in the next 9 years.
- Obligation to purchase electricity: EVN must purchase all electricity generated from renewable energy sources
- Tax and land use fee exemption for renewable energy projects
- Free Environmental protection fee



3. Mechanism and policy to encourage the development of Renewable energy

Specific policy:

Decision No.18/2008/QD-BCT dated 18/7/2008 on avoided cost tariffs for small hydro projects

Decision No. 37/2011/QD-TTg dated 29/6/2011 on support mechanism for wind power projects



Circular No.32/2012/TT-BCT dated 12/11/2012 on development wind power projects and power purchase agreement for wind power projects

4. Barriers and solutions

Barriers:

- Investment costs and the electricity tariff from RE sources are higher than traditional sources
- There are no provisions at a high level to encourage the RE development such as Law/Decree
- Lack of financial resources and no support from the financial institutions/banks for renewable energy sector



4. Barriers and solutions

- Not FIT support mechanism yet for renewable energy (only for wind power, small hydro)



- Conflict in term of land using (many RE projects have been delayed due to no mine development planning)

4. Barriers and solutions

➤ Difficulty and uncertainty in the system connection are the challenge for RE projects



➤ Lack of skilled professionals and engineers, technical in the field of RE

➤ No auxiliary technologies for RE sectors

4. Barriers and solutions

- Lack of information/
reliable database for
assessing potential of RE
sources



- Low community
awareness about
the benefits of RE

- No strategy/
national plan to
develop RE sources.

4. Barriers and solutions

Solutions

- Develop mechanism, policy to promote RE
- Establishment of RE fund



- Enhancing public awareness on RE

5. Conclusions

- Vietnam is considered to have great potential for renewable energy
- Development of RE source is one of the necessary solutions to meet energy demand and ensure power energy security, especially for remote areas, islands ... which can be not connected to the national electricity system to implement the objectives of the Government's rural electrification
- It is necessary for the establishment of mechanism and policies to encourage RE development and create a legal framework for investors in RE sector
- Support from international organizations/developed countries in terms of financial and technical support to promote RE development in Viet Nam is really needed

Thank you!

