

The European Union – Turkmenistan Sustainable Energy Days

International Conference

Sustainable Energy in Turkmenistan: prospects and challenges

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Concept of Hydrogen Strategy for Georgia

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Why Concept?

Strategy – Decree #629 of Georgian Government

- Requires strong dedication, analysis and concrete policy decisions
- Needs to be accompanied with the concrete action plan with allocation of budget and responsible entities

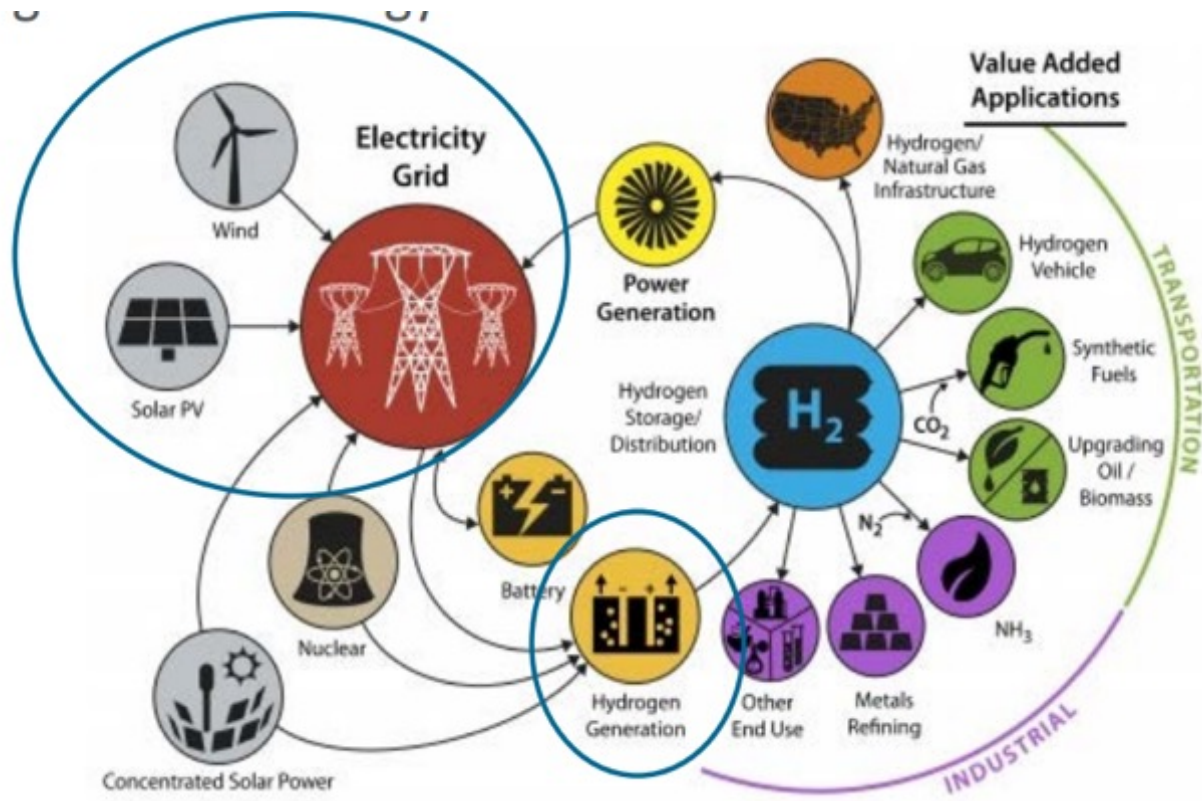
Concept – Defines the need and main parameters of future strategy

Suggested **timeframe for Strategy 2030 with outlook to 2050** in line with NECP

Rounds of internal consultations including public bodies and Hydrogen Committee of Georgia

GH2

deployment is a complex systemic task



Concentrated Solar Power

the European Union

Structure of the draft concept

- **Introduction**
- **Vision**
- **Situation analysis**
- **Main Principles**
- **Main priorities**
 - **Production**
 - **Storage**
 - **Transportation**
 - **Domestic use**
 - **Transit**
 - **Conclusions**
- **Timeframe**
- **Implementation**
- **Annex**

Roadmap to 2027

National Interests to guide the H2 development

WHY HYDROGEN SHOULD BE DEVELOPED?

Energy Security

Decarbonization goals and CC mitigation

Economic growth

Political gains – EU integration, transit routes and stability

Technology R & D

Social benefits

Vision and Principles

**Hydrogen is the future of energy system –we need to be prepared,
Global markets, technologies, projects and are in rapid development
EU plays the global leading role in GH2 market and technology development**

Georgia needs to maximize its readiness explore its strengths and opportunities, and to become an active participant of international initiatives.

**Private investment - state support measures should be justified
Innovative solutions and niche opportunities for cooperation and competitive advantage**

Outlook for 2050 – becoming climate neutral

Priorities - Hydrogen production

Electrolysis with the use of own **Hydro Wind and Sun** niche solutions to be explored

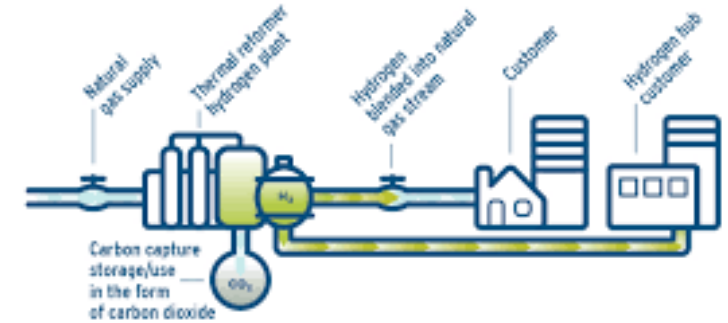
Factors to address:

- Alternative uses of renewable electricity,
- Export markets (average this year USD72/MWh).
- Additionality requirements
- 350-720GWH of seasonal excess over consumption - 6-7 thousand tons annually
- GH2 production with summer excess to be coordinated with BSC

Other production

- Natural or white hydrogen - Collection from the bottom of the Black Sea – theoretical
- Biological production –include in priority themes for R & D
- Hydrogen sulfide – unrealistic

PRIORITIES



Hydrogen transportation:

- **Blending in pipeline system** – questionable – needs exploration
- **Transportation and transit over rail and BS ports** – ammonia or methanol
- **Transportation through dedicated pipelines**

Hydrogen use:

- **Transport sector**
RFNBO
- **Industry**
Decarbonization of **Fertilizers, Metallurgy, Mining, Cement industry**
- **Heating and power production**
Production of heat and power

International transit of Hydrogen and derivatives

Kazakhstan - Germany

- Announcement of 40GW plan with EUR 50bln investment
Plan to transport ammonia over Caspian and Black Sea ports to EU

Azerbaijan-EU MoU and RE/Hydrogen plans

- 25GW MoUs signed study including BSC and hydrogen as per Azeri RE Agency

Turkmenistan -

- Potential role for TCP in long term to export Hydrogen

Black Sea Cable

- under feasibility study funded by Georgia
- Claimed by Az and EU as the way for exporting Az green power to the EU
- Capacity 1-1.5 GW,

Explore the potential for Ammonia Pipeline

Geopolitics of Hydrogen and Central Asia



[The Green Hydrogen disruption: what nations, firms and investors are doing to reshape global energy -](#)

[Energy Post](#)

[Central Asia decarbonizing the Southern Gas Corridor](#)
WWW.WEG.ge



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Road Map till 2027

- Institutional
- Policy
- Technology
- Legal
- R & D & I
- International Cooperation
- Domestic use
 - Industry
 - Transport
- Studies
- Pilot projects

Over 45 different measures





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