NEW ENERGY STRATEGY OF UKRAINE TILL 2035: SECURITY, ENERGY EFFICIENCY, COMPETITIVE ABILITY

Brief description

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Energy Sector of Ukraine at a Glance in 2016

Ukrainian energy sector in key estimations:

- Ranks in the top 10 in Europe
- Ranks in top 30 in the World
- Occupies ~ 30% of national economy
- Provides transportation ~ 20% of annual EU natural gas consumption
- Requires adaptation to new challenges, market conditions and modernization, and state policy for development

New Energy Strategy

* Razumkov Centre’s analysis
Hierarchical Structure of the New Energy Strategy of Ukraine till 2035: the goals, tasks, mechanisms and algorithms

Legend:
- Goals
- Tasks
- Mechanisms
- Algorithms

* Source: Razumkov Centre’s presentation

Goals
- Energy Security
  - Reducing of energy import dependence
- Basis for Sustainable Development
  - Shift to higher energy efficiency and innovations
- Energy Integration with EU
  - Security of production and deliveries of energy
- Sufficient Energy Supply
  - Creation of competitive energy markets
  - Modernization of energy institutions
  - Energy balance optimization

Tasks
- Diversification of the sources and routes of energy supply
- Energy infrastructure modernization
- Clear sub-sectoral goals and programmes
- Creation of strategic energy stocks
- Energy markets reformation on the base of EU’s approaches
- Shift of the quality of state regulation and management
- Creation of incentive investment climate

Mechanisms
- Algorithms (programmes, plans) in oil & gas sub-sector
- Algorithms (programmes, plans) in nuclear sub-sector
- Algorithms (programmes, plans) in coal sub-sector
- Algorithms (programmes, plans) in the RES sub-sectors
- Algorithms (programmes, plans) in energy networks
- Algorithms (programmes, plans) in energy efficiency
Temporal Vector: the Main Phases of the Energy Strategy

Phase 1: Energy Sector Reforms on the basis of EU Legislation Implementation

Phase 2: Optimization and Innovative Development of the Energy Infrastructure
- EU-Ukraine Energy Markets Integration

Phase 3: Ensuring Sustainable Energy Development
- Adjusting the energy policy in line with the European and global tendencies
Phase 1. Energy Sector Reforms: Key Tasks

Till 2020

- Completion of the implementation of the 3rd EU Energy Package; modern energy markets formation
- Institutional reforming of the state energy companies and integration to ENTSO-G
- Increasing of domestic natural gas production
- Progressive decreasing of GDP energy intensity
- Increasing of the RES share and investments in regard to Emissions Reduction National Action Plan
Phase 2. Optimization and Innovative Development of the Energy Infrastructure: Key Tasks

- Integration to ENTSO-E
- Modernisation of the energy grids infrastructure, smart-grids implementation
- Development of heating infrastructure depending on local resources and regional specifics
- Country’s achievement to self-provision with natural gas from domestic production
- Follow-up increasing of the RES share and investments in regard to Emissions Reduction National Action Plan
Phase 3. Ensuring Sustainable Energy Development: Key Tasks

**Till 2035**

- Innovative development and CHP plants and NPP construction instead of disposal or obsolete units
- Extensive implementation of smart-grids and client-oriented networks
- Adaptation of the gas transportation system to the actual demands of the all-European gas market
- Increasing domestic natural gas production
- Follow-up increasing of the RES share up to 25% of GES and investments to further emissions reduction
Forecast of the Structure of the Primary Energy Supply
## Strategy’s Benchmark Indicators

<table>
<thead>
<tr>
<th>A. Energy Efficiency Approaching</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP energy intensity (t.o.e. /'000 $^{PPP,2005}$)</td>
<td>0,28</td>
<td>0,20</td>
<td>0,18</td>
<td>0,15</td>
<td>0,13</td>
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<tr>
<td>Losses share in electricity grids (%)</td>
<td>&gt;12</td>
<td>10</td>
<td>9</td>
<td>8</td>
<td>&lt;7,5</td>
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<tr>
<th>B. Expansion of the RES</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
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<tbody>
<tr>
<td>RES share in the Total Primary Energy Supply (%)</td>
<td>4</td>
<td>8*</td>
<td>12</td>
<td>17</td>
<td>25</td>
</tr>
</tbody>
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* RES share in the final energy consumption is estimated 11% of the total final energy consumption in 2020.
Thank you for your attention!

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