

Thermal-Health Industry Program, or the Complex Use of Thermal Waters in Hungary

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Actuality and Importance of the Program

The aim of the Thermal-Health Industry Program is to develop a patriotic industry, which is really unique and has a national character in Hungary.

We do have extraordinary natural and human resources in this field, these factors **give us strategic advantage and make our economy sustainable.**

The war between Russia and Ukraine and the energy crisis – as a result of the war – make the realization really urgent.

Goals and Opportunities

The Thermal-Health Industry Program is a part of the economic development program of the Hungarian Government. The task of the Supervisory Authority for Regulatory Affairs of Hungary is the more effective use of our geothermal energy. One of the goals of the Authority concerning the geothermal program is „to maximize the use of the extracted energy”. Accordingly, the opportunities of the Thermal-Health Industry:

- More efficient, multi-purpose use of the Hungarian geothermal potential and thermal water resources,
- To organize and to boost the related health industries (production and services);



Content of the Program I.

Major (Flagship) Industries

- **Energetics** (using geothermal energy),
- **Health Tourism** (thermal-medicinal spas, healing and wellness hotels),
- **Agriculture and Food Industry** (primarily bioproduction – heating green houses, logistics, modern food processing);



Content of the Program II. Supplementary Industries

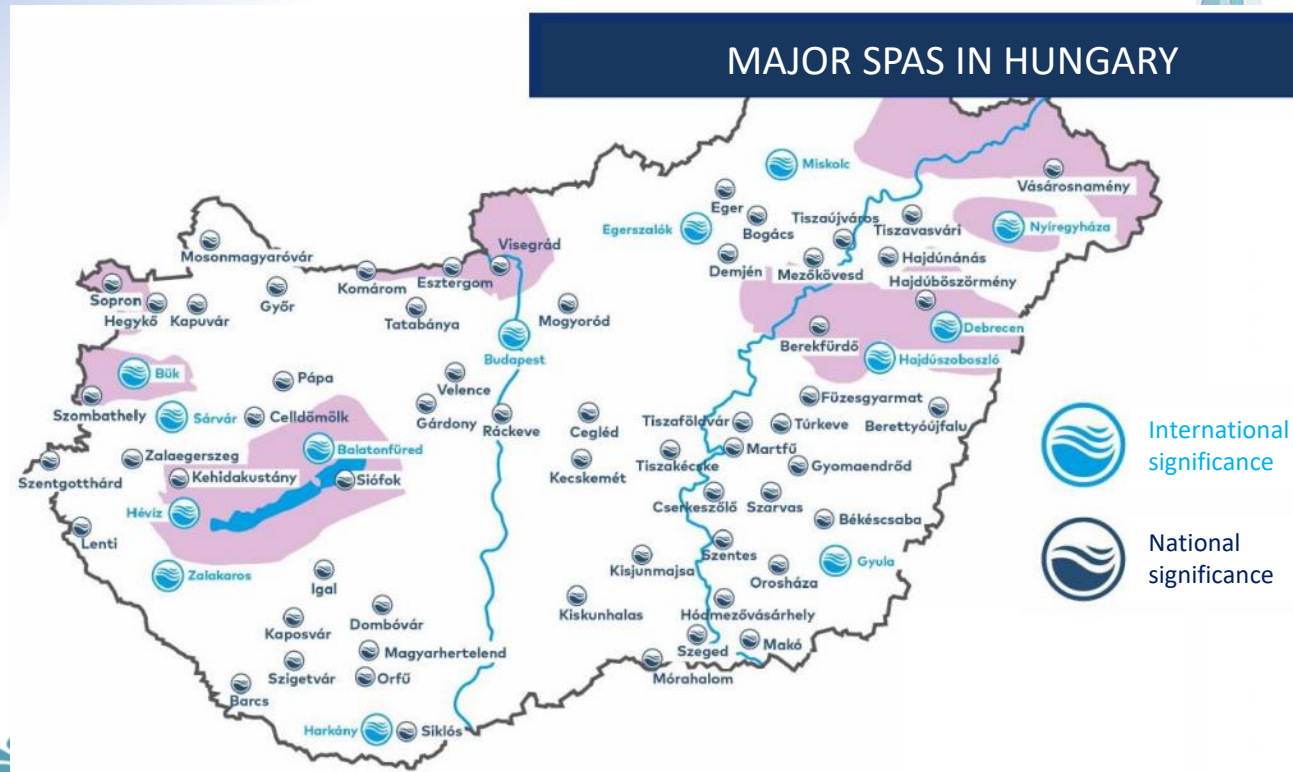
- **Health industry, linked to the Hungarian health tourism** (pharmaceutical industry, medical instruments and devices, innovative wellness products, therapeutic and wellness products based on medicinal waters, herbalism);
- **Producing and bottling mineral waters** (healthy drinking waters and related technologies);



Content of the Program III.

Background Industries

- Specialized construction industry (architects and constructors);
- Specialized IT ;
- Education;
- R&D programs.



Reality and Demand

- Using the environment friendly **geothermal energy** – mostly for heating – contributes to the EU-goal, that the member states should cover a growing % of their energy needs from renewables, furthermore it reduces our CO₂-emmission and our external energy dependence – this is an extremely urging question today.
- According to the WTTC (World Travel and Tourism Council) forecast, this decade, tourism will contribute more than 12% of Hungary's GDP, of which **health tourism** (today more than 1/3 of our tourism turnover) will play a prominent role.
- **Greenhouse gardening** is much more productive than open land gardening (3 harvests/year) and more secure (not exposed to increasingly adverse weather conditions) → profitability and reliability of agricultural and food industry production.



Indirect Impacts of the Program

- **Reduces Hungary's external energy dependence** (which is obviously more and more dangerous);
- Creates more **productive new jobs**, strengthens the SMEs;
- **Improves health status** of the population;
- Needs well-trained professionals, thus, **boosts education and training**;
- Innovation and technology developments help the re-industrialization of Hungary, which brings **lasting economic growth**;
- **Sustainable** from environmental, macroeconomic and social aspect;
- **Enhancing cohesion**: reduces regional and social differences;
- From our strengths, special natural and human resources **establishes a strategic advantage**.



Strong synergies

Strong synergies prevail between industries using directly thermal water – geothermal energy, health tourism, greenhouse gardening, spa-products based on medicinal waters.

Cooperation (clustering) is clearly more cost-effective, since this way thermal water extraction is only needed once, and – after multi-purpose use – one recompression or one placement in nature is needed. Meanwhile, geothermal energy, health tourism and greenhouse gardening mean three times turnover.



The future of using geothermal energy

Europe is struggling with a lack of energy supply, this trend enhances the value of alternative energy sources.

According to a global forecast, 86,5 bn euro investment is to be expected in this sector, till 2030.

Hungary is between the top 5 countries of Europe in using geothermal energy (heat recovery).

The local geothermal potential still has an enormous unused capacity.

To achieve the energy independence of Europe, THE BEST SOLUTION is using the future clear energy sources.

Exploiting geothermal potential of Hungary could allow the replacement of 1-1.5 billion m³ of natural gas per year.



Thanks for you attention!

