

CASE STUDY OF A SUCCESSFUL NATIONAL ENERGY PROGRAMME/STRATEGY

Number 3

1. The problem or issue addressed: *There is no specific Law for the development of geothermal resources*
2. Name of the programme: *The Draft Law on Geothermal Resources and Spring Waters*
3. Timeframe: years Year started: 2004
4. Status: x Ongoing ☐ Completed in year
5. Main objectives:
 - *To utilize geothermal energy resources and spring waters in a sustainable and effective manner by means of investigation, exploration, development, production, and protection of them.*
 - *Increasing the utilization of geothermal energy resources whether in direct use or for generating electricity*
 - *Increasing the renewable share in energy generation*
 - *To decrease the green house gas emissions, to protect the environment*
 - *To decrease the reliance on foreign energy resources*
6. Lead institution: Ministry of Energy and Natural Resources
7. Other implementation arrangements and stakeholders involved (public, private, NGOs, CBOs, international support, etc.): *Private sector, Municipalities,*
8. The results achieved (if possible, please address the social, economic and environmental impacts of the programme): *Since the draft Law has not been enacted yet, the positive results or the accepted clear benefits could not be gathered yet. The contribution of geothermal to TPES was 0.86 Mtoe in 2003, including 89 GWh of electricity generation. Turkey has significant potential for geothermal power production equivalent to the one-eighth of the world's total geothermal potential. However, much of this potential – which is estimated as 31.5 GW_{th} - is of relatively low enthalpy making it unsuitable for electricity generation but can still be used for direct heating applications. By the end of 2003, Turkey's total direct geothermal heating capacity was 1077 MW_{th}, of which about 461 MW_{th} provided heat for 71 000 residences, 131 MW_{th} for 63.5 hectares of greenhouses, and 327 MW_{th} was used to provide hot water to about 200 spas. The government estimates that 500 000 residences could be heated by geothermal power by 2010, representing heat use of about 3 500 MW_{th}.*
9. The relationship of the programme to internationally agreed goals and targets: *This programme is directly related to the targets of MDGs, WSSD, Renewable Energy Congress, IEA Shared Goals etc.*