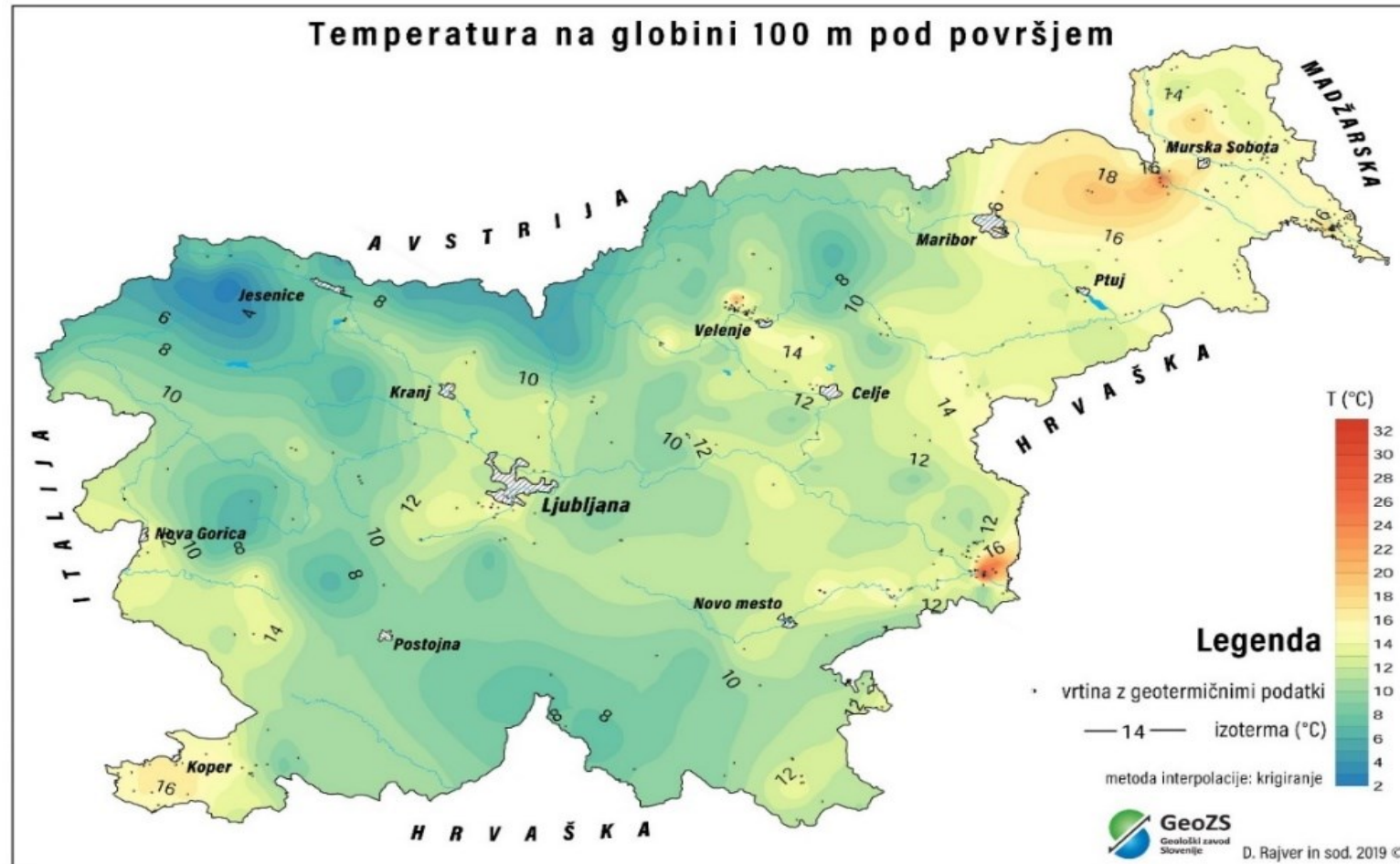


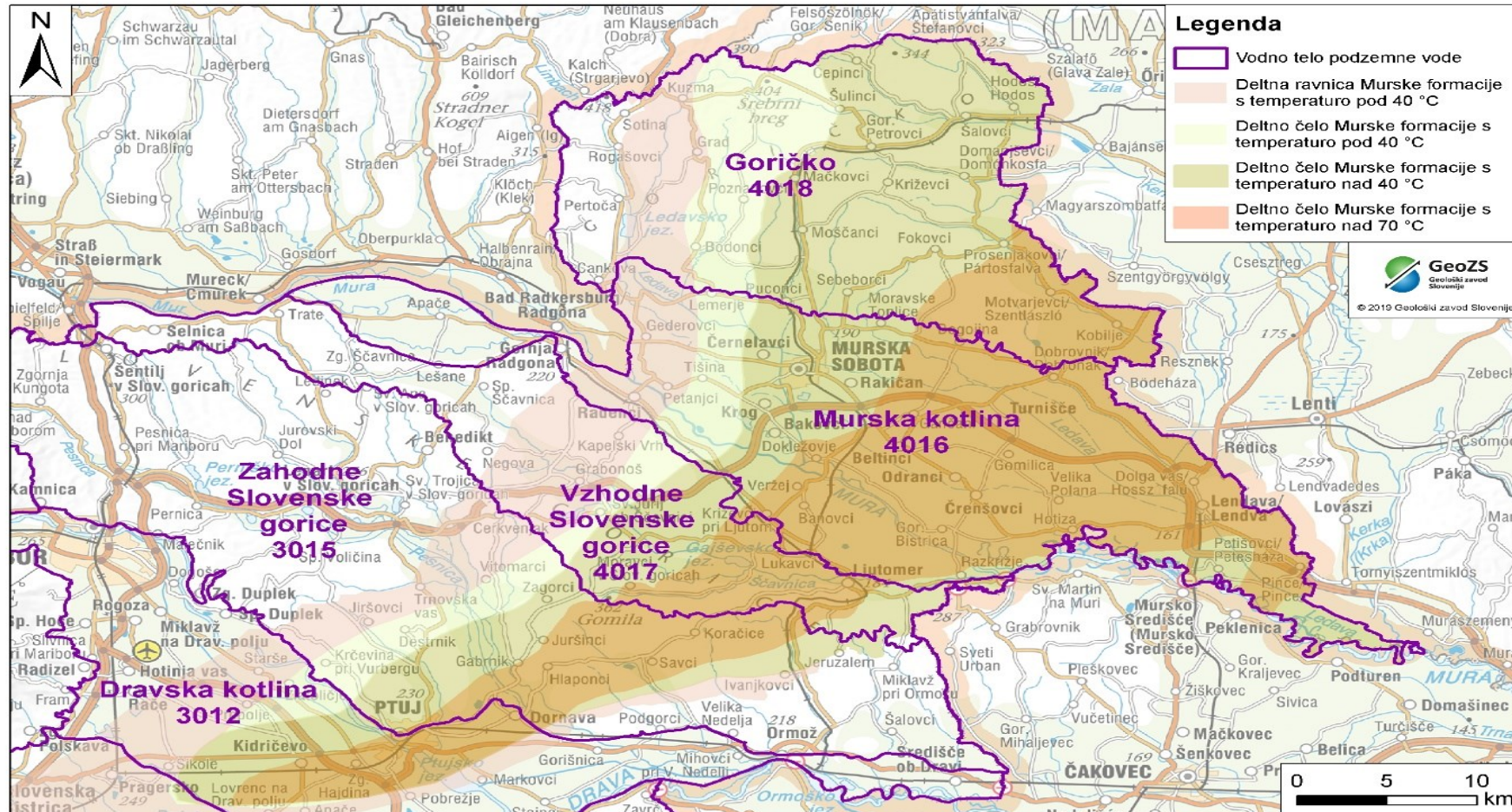


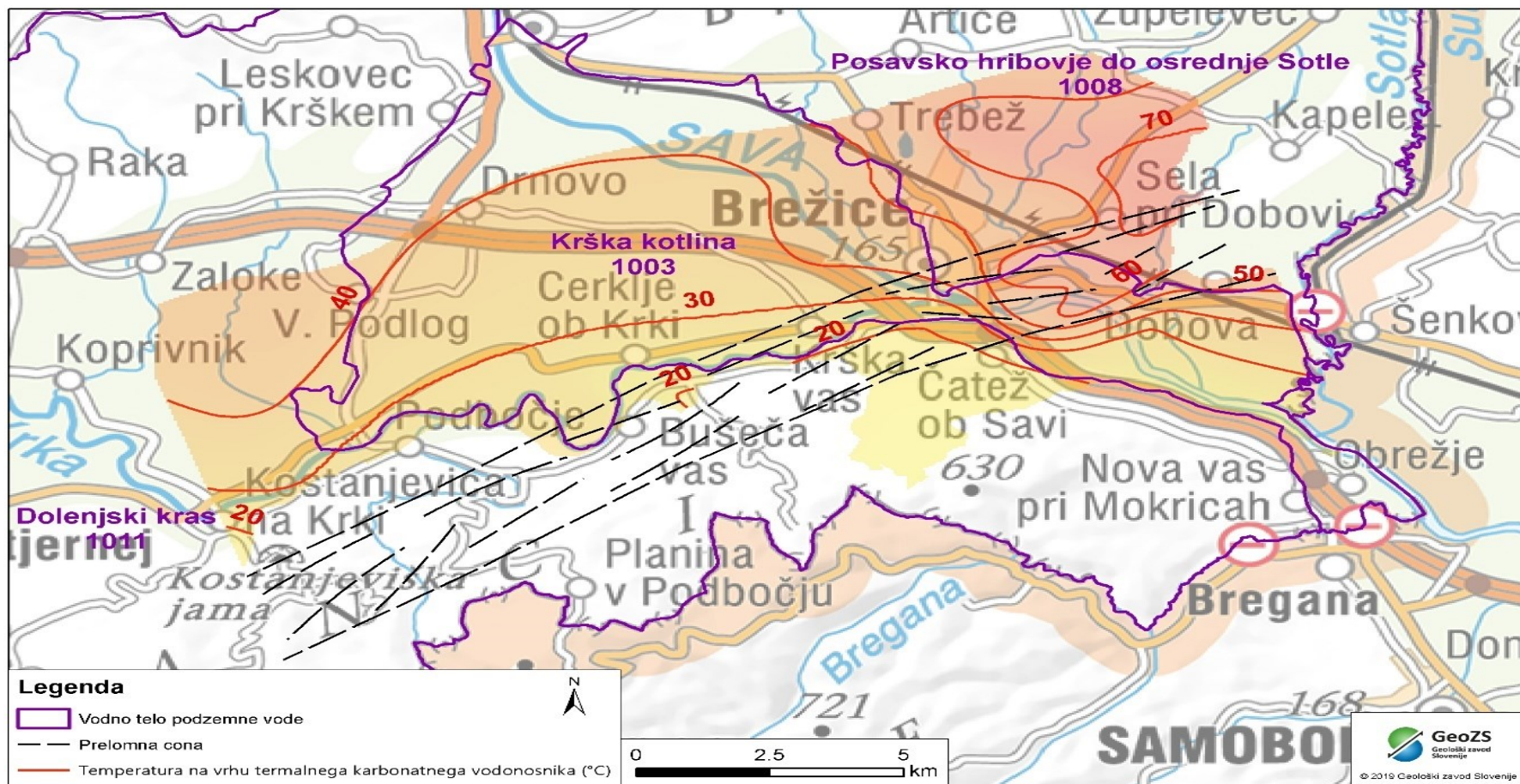
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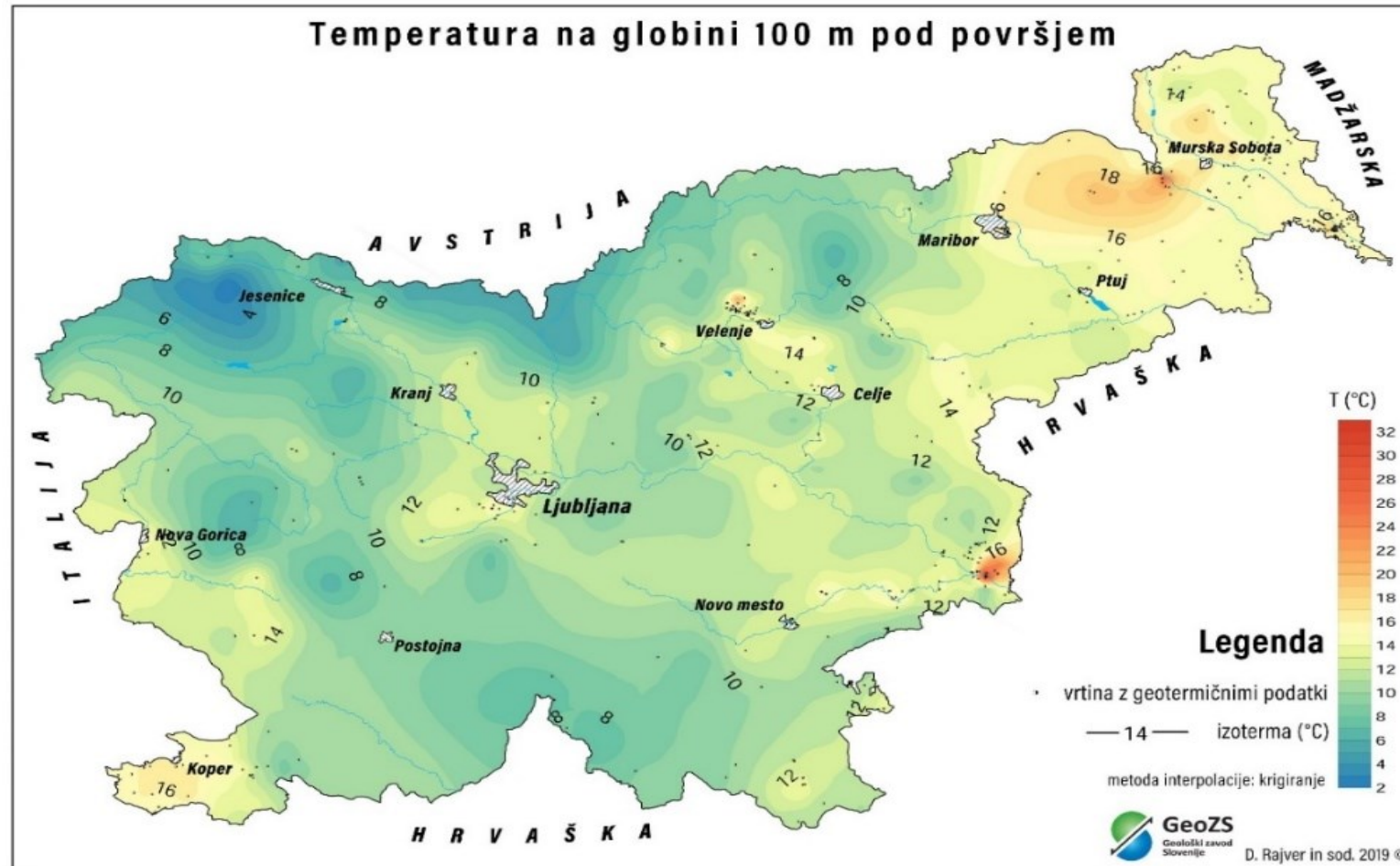
GEOHERMAL ENERGY IN SLOVENIA - A COUNTRY PROSPECTIVE

Ljubljana, June 29th, 2021











CURRENT SITUATION

- **551 BOREHOLES (> 500 m) REGISTERED, THE FIRST IN 1914, THE MAJORITY FOR OIL/GAS RESEARCH**
- **MORE THAN 11.700 OPERATING DEVICES FOR THE USE OF SHALLOW GEOTHERMAL ENERGY (186 MW)**
- **31 ACTIVE BOREHOLES FOR THE USE OF DEEP GEOTHERMAL ENERGY (62,4 MW)**
- **ALMOST ALL FOR BALNEOLOGY/SPA**
- **TWO WELLS FOR GREENHOUSE HEATHING.**



DEEP GEOTHERMAL ENERGY, 2018 DATA: 62.4 MW (161 GWH / YEAR)

- **NO NEW PROJECTS SINCE 2011 DUE TO PROBLEMS (PRESURE DROP IN TWO MAIN GEOTHERMAL AQUIFERS AND ENVIRONMENTAL PROBLEMS WITH THERMAL WASTE WATER EMISSIONS)**

SHALLOW GEOTHERMAL ENERGY, 2018 DATA: 186 MW (APP. 260 GWH/YEAR)

- **MORE THAN 11,700 OPERATING DEVICES WITH A TOTAL CAPACITY OF INCREASING BY ABOUT 700 TO 1,000 UNITS EACH YEAR**
 - LOW POWER UNITS (TYPICALLY 12 KW) - 46% ARE CONNECTED TO OPEN SYSTEMS, 42% TO CLOSED HORIZONTAL SYSTEMS AND 12% TO CLOSED VERTICAL OR GEOSONDES.
 - LARGER UNITS (OVER 20 KW) -79% OF THEM ARE OPEN SYSTEMS, 16% ARE GEO-PROBES AND 5% ARE HORIZONTAL CLOSED SYSTEMS



FUTURE ACTIONS

1. GEOTHERMAL USE FOR FOOD PRODUCTION – COMPETENCE OF MINISTRY OF AGRICULTURE, FORESTRY AND FOOD

- FINANCING ONLY PROJECTS FOR PRIMARY AGRICULTURAL PRODUCTION
- CURRENTLY TWO TENDERS FOR REINJECTION (FOR COBINED USE HEATING/COOLING IN AGRICULTURE)



FUTURE ACTIONS

1. GEOTHERMAL USE FOR TOURISM – COMPETENCE OF MINISTRY OF ECONOMIC DEVELOPMENT AND TECHNOLOGY

- FINANCING ONLY PROJECTS FOR BALNEOLOGY
- FORESEEN TENDERS FOR REINJECTION IN EXISTING SPA'S



FUTURE ACTIONS

1. GEOTHERMAL USE FOR ENERGY – COMPETENCE OF MINISTRY OF INFRASTRUCTURE

- MICRO GEOTHERMAL POWER PLANT - PILOT PROJECT (GEOTHERMAL GRAVITY HEAT PIPE)



THANK YOU!

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