

GENERAL INFORMATION	
Parameter name	Specific hydraulic productivity
Name of the layer in EGD Map Viewer	Specific hydraulic productivity, Vienna
Original name of the layer uploaded to EGD database	PP01_GBA_spec_hydraulic_prod.shp
Category	Resources for open-loop systems
Definition	Maximum yield or pumping rate of a groundwater well doublet per square meter at a given location.
Harmonized unit	l/s
Relevance for shallow geothermal energy	The maximum pumping rate [l/s] determines, together with the temperature shift (temperature difference between pumping and injection well), the thermal capacity of the groundwater, which can be used for heating and cooling with a groundwater heat exchanger .
Data type	Discrete data classes referring to a joint classification scheme
Data format	Raster
Projection	EPSG: 3034
Dataset selected for pilot area	Cork (TBC), Bratislava, Zaragoza (TBC), Girona (TBC), Ljubljana, Vienna

ATTRIBUTES	
Unit	l/s

DATA SOURCE	
Pilot area	Vienna
Data source	Geological Survey of Vienna
Contact data owner	Cornelia.steiner@geologie.ac.at
Last Update	13.04.2021

Explanatory text English
Based on the Dupuit-Thiem well equation for an unconfined groundwater body and a fixed hydraulic radius of 25 m, the hydraulic productivity was determined. It represents the maximum pumping rate available, which depends on the groundwater thickness and the hydraulic conductivity.

Explanatory text national language	
Language	German
Basierend auf der Dupuit-Thiem Brunnenformel für einen ungespannten Grundwasserkörper und einem festgelegten hydraulischen Radius von 25 m, wurde die hydraulische Produktivität bestimmt. Sie entspricht der maximal möglichen Pumprate am Standort in Abhängigkeit der Grundwassermächtigkeit und der hydraulischen Leitfähigkeit.	

