

Award-winning paper in 2015

Papers published in *Environmental Geotechnics* are eligible for awards from the Institution of Civil Engineers. Papers from any of the ICE journals can be nominated for several awards. In addition, each journal has awards dedicated to their specific subject area.

On Friday 7 October 2016, ICE president John Armitt presented an award to the following paper published in *Environmental Geotechnics* in 2015.

Thomas Telford Premium Prize

The Thomas Telford Premium Prize, presented for the best paper published in *Environmental Geotechnics*, was awarded to Barla and Perino (2015).

Abstract

Underground geotechnical structures (piles, diaphragm walls, tunnel linings, anchors etc.) can be instrumented to become energy geo-structures. This short paper focuses on the use of energy tunnels, which are shown to have a number of advantages. An example of a possible application to the Turin Metro Line 1 south extension is discussed. Preliminary results of numerical analyses, performed to study the hydro-thermal interaction and the influence of the energy tunnel on the surroundings, show that the energy stored in the ground can be exploited without generating relevant effects on the aquifer. This highlights the importance of additional research to improve the understanding of the geothermal process and exploit the potential of energy tunnels allowing for great economic and environmental benefit.

REFERENCE

Barla M and Perino A (2015) Energy from geo-structures: a topic of growing interest. *Environmental Geotechnics* **2**(1): 3–7, <http://dx.doi.org/10.1680/envgeo.13.00106>.



Andrea Perino and Marco Barla, winners of the Thomas Telford Premium Prize, with ICE president, John Armitt