

## Overview of Exploration in the Tethyan

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The Tethyan Belt spans 36 countries, from Italy in the west to Thailand in the east, encompassing 7.6% of the Earth's surface. It has a long and rich history of exploration and mining dating back to the ancient Greeks.

All up, 428 significant<sup>1</sup> non-bulk mineral deposits have been identified in the Tethyan (6% of the world total). Fifty-three of these have been found since 2006 (7.4%). In terms of contained metal, the belt accounted, respectively, for 3.9%, 10.0%, and 12.3% of all gold, copper, and lead/zinc found in the world in the last decade. With regard to nickel and uranium, the belt's contributions were insignificant.

Over the same period, the countries along the belt accounted for 2.7%, 4.3%, and 3.0% of all gold, copper, and lead/zinc exploration expenditures in the world. After adjusting for by-product credits, unreported discoveries and, likely, growth in resource, the unit discovery cost (in constant 2015 dollars) for gold in the Tethyan was US\$27/oz (versus a world average of \$51/oz). The belt's unit discovery cost for copper was 2.1 c/lb (versus 3.6 c/lb), and lead/zinc was 0.7 c/lb (versus 3.1c/lb).

Given the above, over the last decade the Tethyan delivered more discoveries per exploration dollar spent than any other region in the world. The challenge, though, is that most of these deposits were modest in size.

The unit discovery performance also varied in the regions along the belt, with Western Europe being the least productive (with only one significant discovery in the last decade) and Asia Minor being the most fertile (with 22) followed by Eastern Europe (with 10). The standout country was Turkey (as part of Asia Minor), with 21 significant discoveries.

In spite of its long history, the Tethyan is still considered to be underexplored and ripe for giant discoveries.

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<sup>1</sup>Significant is defined as being >100 koz Au, >100 kt Cu, >10 kt Ni, >300 kt Zn + Pb, >5 kt U<sub>3</sub>O<sub>8</sub> or equivalent