photo *Marco Maccarini*

THE PHOTO

THEY ARE VAST, ISOLATED AND FORBIDDING … and they may power the world's cars for decades to come. The **Salar de Uyuni in Bolivia** are the largest salt flats in the world, covering more than 10,000 square kilometers and serving as a breeding ground for large flocks of flamingos.

The surface of the Salar is a thick crust of salt, the remnants of ancient salty lakes thrown up to mountain-level by the movements of the earth. Broken only by "islands" that are the tops of equally ancient volcanoes, the flats rise or fall only one meter across their entire surface. The region is so flat that it was used to calibrate the altimeters of Earth-observation satellites.

However, the economic potential of the flats lies beneath the salt, in a lake of brine two to 20 meters deep. This salty mixture beneath the Salar contains up to **5.4 million tonnes of lithium – or 50 percent of the world's known reserves.** Lithium is used to make batteries for the burgeoning electric-car industry, not to mention the batteries now powering many of the world's consumer-electronics devices.

Nearby salt flats in Argentina and Chile currently produce much of the world's lithium, while the Salar remain unmined – and hence unspoiled, if you ask many of the **eco-tourists** who visit. The Bolivian government has built a plant to test the feasibility of extracting lithium from the Salar, but it has also so far rebuffed all foreign companies from setting up operations. Instead, it seems determined to break "the resource curse" on its own. ●