

THE 2013 IWA PROJECT INNOVATION AWARDS – DEVELOPMENT EXECUTIVE SUMMARIES OF WINNERS AND HONOUR AWARDS

Sanitation & Wastewater – Hardware HONOUR AWARD

Wastewater Treatment Plant Adlia, Batumi, Georgia

Posch & Partners and MACS, Georgia

In the aftermath of the disintegration of the Soviet Union, Batumi's (Georgia) water and wastewater infrastructure has deteriorated. Wastewater treatment is dysfunctional and all wastewater is released untreated into the Black Sea, causing serious health and environmental problems, significantly affecting Black Sea biodiversity and, moreover, destroying the economic basis for tourism development.

In the framework of the German-Georgian Financial Cooperation Municipal Infrastructure Rehabilitation Program a new wastewater treatment plant has been designed and constructed and has been operational since summer 2012. Plant design and treatment process selection was focused on criteria such as: low investment costs, low power consumption and low operational complexity.

As a result a wastewater treatment plant has been designed based on anaerobic ponds and aerobic trickling filters. The plant construction was realized with an extremely low investment of €17.4 million (\$23 million) (incl. the sea outfall). The low power consumption of 2.2GWh/year (10kWh/year/PE) is less than 50% of any process technology.

The plant began operation in August 2012. The treatment process is extremely robust and stable towards fluctuations in wastewater load, and still able to produce reliable effluent quality, fully complying with EU standards for non-sensitive areas.

