SIT Graduate Institute/SIT Study Abroad SIT Digital Collections

Capstone Collection

SIT Graduate Institute

Summer 8-9-2013

Sustainable Development of Tajikistan: Perspectives for Tajik Aluminum Company (TALCO)

Tahmina Azizova
SIT Graduate Institute

Follow this and additional works at: https://digitalcollections.sit.edu/capstones

Part of the Environmental Chemistry Commons, Environmental Indicators and Impact
Assessment Commons, Oil, Gas, and Energy Commons, Organic Chemistry Commons, Other
Environmental Sciences Commons, and the Sustainability Commons

Recommended Citation

Azizova, Tahmina, "Sustainable Development of Tajikistan: Perspectives for Tajik Aluminum Company (TALCO)" (2013). Capstone Collection. 2607.

https://digitalcollections.sit.edu/capstones/2607

This Thesis (Open Access) is brought to you for free and open access by the SIT Graduate Institute at SIT Digital Collections. It has been accepted for inclusion in Capstone Collection by an authorized administrator of SIT Digital Collections. For more information, please contact digitalcollections@sit.edu.

SUSTAINABLE DEVELOPMENT OF TAJIKISTAN: PERSPECTIVES FOR TAJIK ALUMINUM COMPANY (TALCO)

Tahmina Azizova

A capstone paper submitted in partial fulfillment of the requirements for a

Master of Arts in Sustainable Development at the

School for International Training

August 2013

Advisor: Christian Parenti

ABSTRACT

Energy efficiency is one the most pressing objectives of the XXI century. Energy efficiency is an intrinsic part of sustainable development of any country. But it is especially crucial for country like Tajikistan, which has an inefficient energy use pattern as a result of the legacy of Soviet era. Energy resources required for economic development can be obtained not only through increased extraction of raw materials, but also through improved energy efficiency at the demand side. Tajikistan imports about 35 percent of its energy needs, which makes the country extremely energy-dependent. That leads to an obvious inference that for Tajikistan to get on a sustainable development path, it is highly important to improve its energy efficiency and increase its energy security. The biggest energy consumer in Tajikistan is the Tajik Aluminum Company (TALCO). According to the World Bank Energy Audit estimates from 2012, TALCO is the single largest power end-user in the country, which consumes 39 percent of total electricity generated. This research will explore the energy efficiency potential of TALCO. The research will use a core set of Energy Indicators for Sustainable Development (EISD) developed by UNDESA, the IEA, Eurostat and the European Environment Agency (EEA) to measure selected aspects of production and use of energy in TALCO. In particular, the research will focus on two of three dimensions of the EISD: Economic and Environmental dimensions. The objective of the research is to define the progress or the lack of progress towards sustainable development in Tajikistan. The research will provide information on current energy-related trends in the selected country and will attempt to provide a set of recommendation on alternatives and strategies to promote efficient and sustainable energy development.