

# Climate Action Kit Case study

### **ZIMBABWE**

## Standards Association of Zimbabwe (SAZ) Promoting energy and water management in industry

#### Overview

With financial support from the Climate Change Technology Centre & Network (CTCN), the government of Zimbabwe and the Business Council for Sustainable Development of Zimbabwe (BCSDZ) implemented a project to address climate change through efficient energy and water utilization. The Standards Association of Zimbabwe (SAZ) played a very essential part in the project by encouraging the adoption of a systems approach to energy efficiency in companies and promoting energy auditing techniques. Importantly, it also helped mainstream climate change mitigation through the use of ISO 50001, *Energy management systems* – *Requirements with guidance for use*, to improve operational efficiency, save energy and cut costs.

As a key stakeholder, SAZ had two of its officials participate in an energy and water efficiency training course attended by 40 participants from Zimbabwe. In addition to SAZ, national counterparts included the Ministry of Environment, Water and Climate; the Ministry of Energy and Power Development; the Ministry of Industry and Commerce; and the Zimbabwe Energy Regulatory Authority.

Ten large organizations from the fields of fertilizer manufacturing, cable manufacturing, agroprocessing, cement processing, mining, and food and beverages were given training on ISO 50001, energy efficiency, water efficiency and how these could help with climate mitigation and adaptation. After the training, each organization underwent an audit to determine its energy and water efficiency.

#### **Outcomes and benefits**

The training and audits had the following benefits with respect to energy and water efficiency and climate change mitigation:

- Reduction in emissions of up to 22 760 tCO₂e
- Training of 40 industry experts in energy and water efficiency and the use of ISO 50001
- Adoption of climate mitigation measures (improved boiler efficiency, energy-efficient lighting, adoption of renewable energy technologies in some of the case studies)

- Adoption of a 1 MW solar plant by one of the participating companies of the technical assistance project
- Implementation of 161 climate mitigation and adaptation recommendations for energy and water efficiency across ten companies
- Potential savings of about USD 3.85 million due to climate mitigation and adaptation actions
- Development of the *Energy and Water Management Manual for Industrial Sector in Zimbabwe* for use by the country's manufacturing industries and the mining sector
- Power factor correction in the selected ten case studies

#### Partners involved

#### Requesting organizations:

- Business Council for Sustainable Development of Zimbabwe (BCSDZ)
- Government of Zimbabwe

#### Supporting organizations:

- Standards Association of Zimbabwe (SAZ)
- Ministry of Environment, Water and Climate
- Ministry of Energy and Power Development
- Ministry of Industry and Commerce
- Zimbabwe Energy Regulatory Authority (ZERA)
- Scientific and Industrial Research and Development Centre (SIRDC)

#### **Timeline**

The project ran throughout 2018.

#### References

• Energy and Water Management Manual for Industrial Sector in Zimbabwe