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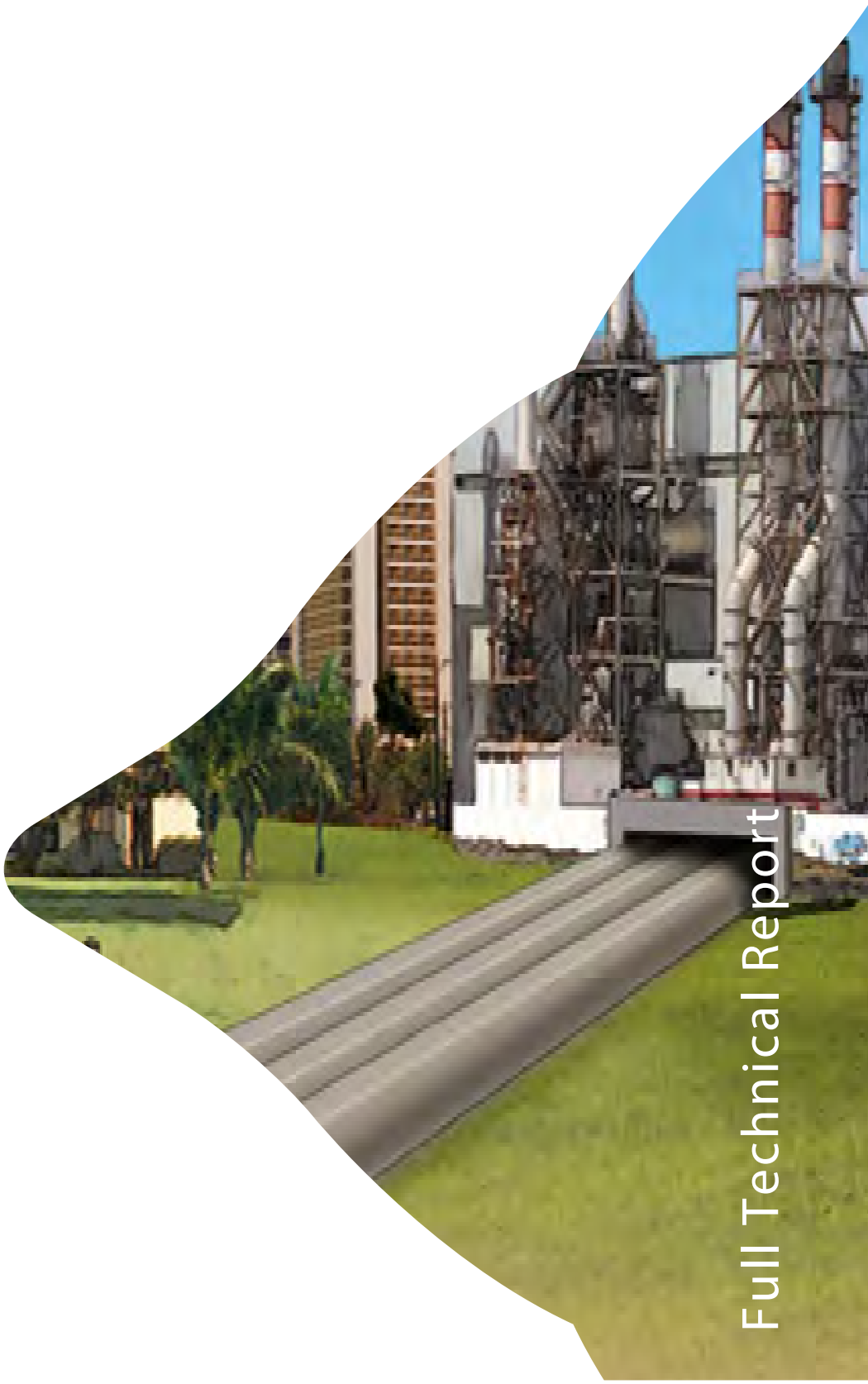
CLIMATE CHANGE PROGRAMME

SOCIOECONOMIC SYSTEMS: DESALINATED WATER SUPPLY

- Atmospheric Modelling
- Arabian Gulf Modelling
- Terrestrial Ecosystems
- Marine Ecosystems
- Transboundary Groundwater
- Water Resource Management
- Al Ain Water Resources
- Coastal Vulnerability Index
- **Desalinated Water Supply**
- Food Security
- Public Health Benefits of GHG Mitigation
- Sea Level Rise



Full Technical Report

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About this Final Technical Report

In October 2013, the Abu Dhabi Global Environmental Data Initiative (AGEDI) launched the "Local, National, and Regional Climate Change (LNRCC) Programme to build upon, expand, and deepen understanding of vulnerability to the impacts of climate change as well as to identify practical adaptive responses at local (Abu Dhabi), national (UAE), and regional (Arabian Peninsula) levels. The design of the Programme was stakeholder-driven, incorporating the perspectives of over 100 local, national, and regional stakeholders in shaping 12 research sub-projects across 5 strategic themes.[1] The "Desalination and Climate Change" sub-project within this Programme aims to assess the vulnerability of the Arabian Gulf waters to climate change in the context of socioeconomic growth in the region.

The purpose of this "Final Technical Report" is to offer a summary of what has been learned in carrying out all research activities involved in the "Desalination & Climate Change" sub-project. Ultimately, this report seeks to provide the reader with a comprehensive review of the methodological approach, analytical framework, data acquisition challenges, key assumptions, major findings, and other issues that can encourage future research regarding the strengthening of measures to protect Arabian Gulf waters.

The authors of this report are José Edson, Ilana Wainer, and Bruno Ferrero from the Oceanography Institute at the University of Sao Paulo in Brazil. *The authors would like to acknowledge the contributions of Bill Dougherty from the Climate Change Research Group and Patrick Keys from Colorado State University who assisted with projection of future brine discharges into the Gulf*

[1] For more information on the LNRCC programme and the desalination sub-project, please contact Jane Glavan (lnrclimatechange@ead.ae).

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