
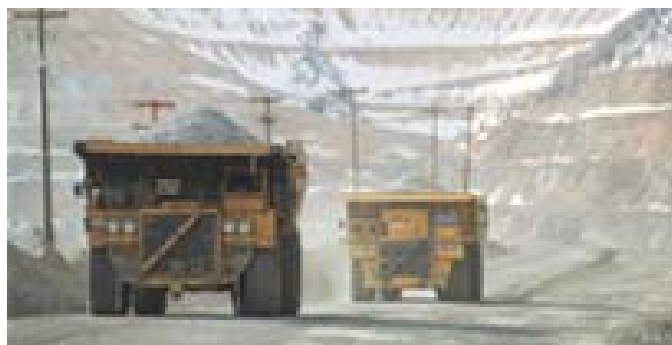


<b>Title of case study</b>	<b>Reappraising “Normal”—Designing to Weather, Climate, and Climate Change</b>
<b>Name of organization(s)</b>	<b>Rio Tinto</b>
<b>Business sector</b>	Mining and Metals
<b>Region(s) relevant to case study</b>	<input checked="" type="checkbox"/> All regions <input type="checkbox"/> Africa and the Arab States <input checked="" type="checkbox"/> Asia and the Pacific <input type="checkbox"/> Caribbean and Central America <input type="checkbox"/> Europe <input type="checkbox"/> Least Developed Countries <input type="checkbox"/> North America <input type="checkbox"/> Polar regions <input type="checkbox"/> Small Island Developing States <input type="checkbox"/> South America
<b>Country(s) relevant to case study</b>	Australia
<b>Adaptation sector(s) relevant to case study</b>	<input type="checkbox"/> Business <input type="checkbox"/> Education and training <input type="checkbox"/> Food security, agriculture, forestry and fisheries <input type="checkbox"/> Human health <input type="checkbox"/> Oceans and coastal areas <input checked="" type="checkbox"/> Science, assessment, monitoring and early warning <input type="checkbox"/> Terrestrial ecosystems <input type="checkbox"/> Tourism <input type="checkbox"/> Transport, infrastructure and human settlements <input checked="" type="checkbox"/> Water resources <input type="checkbox"/> Other (please specify):
<b>Adaptation activity</b>	<p>Rio Tinto is a leading international mining group, whose major products include iron ore, aluminum, copper, diamonds, energy products, gold, and industrial minerals. Its activities span the world but are strongly represented in Australia, North America and Europe.</p> <p>Rio Tinto’s chief climate change concerns are about water: either having too much (floods) or too little (drought). While Rio Tinto does not ascribe any individual weather event to climate change, it believes the more extreme events it experiences could occur more frequently. In addition, Rio Tinto is concerned with</p>

	<p>reports that climate change will induce deeper and/or more frequent droughts. Partly as a result, it has developed a strong water strategy to respond to various aspects of droughts and floods.</p> <p>Rio Tinto's interest in adaptation was first motivated by an internal climate change risk assessment undertaken in 2002. Rio Tinto was already engaged in climate change policy and emissions abatement work, and an evaluation of potential climate impacts seemed a natural extension. The company's first adaptation study was a review using the IPCC's Third Assessment Report (TAR), knowledge of Rio Tinto operations, and phone interviews with site managers to identify the types of climatic variables that would be important to Rio Tinto's diverse businesses. The study looked at actual impacts of weather events and predicted climate changes described by the TAR. The order of magnitude scoping study concluded that—broadly defined—changes in climate could be important and should be considered more deeply.</p> <p>Rio Tinto followed up with a second study that focused on the implications of climatic changes at a finer spatial detail using data provided by the Hadley Center for Climate Change in the UK. This study demonstrated how climate variables might change over the next 25 to 50 years in the geographic regions where Rio Tinto has mining interests, or relies on supporting infrastructure and services, such as electricity supply, water, shipping lanes, and roads.</p> <p>Rio Tinto concluded from these studies that regions in which it operates will experience changed climate regimes. In the near term the changes are minimal, but are expected to increase over the longer term. Consequent impacts to its businesses are likely to occur gradually, allowing time for operations to learn and adapt.</p> <p>Rio Tinto has also undertaken very detailed site assessments for many of its higher priority sites. The sites have been selected based on their remaining life, prospective developments and expansions, and their location in climate sensitive parts of the world. The assessments are underpinned by high-resolution climate modeling (down to 20 kilometer by 20 kilometer grids), which are able to provide some indication of changes in cyclonic activity and topographic effects.</p> <p>Rio Tinto has experienced three headline weather events over the past few years in Australia (flooding and droughts) that have reinforced the need for the company's adaptation work.</p>
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<b>Cost-benefit</b>	By understanding climate projections for the areas in which it operates and assessing its vulnerabilities, Rio Tinto can begin to determine which adaptation measures are cost-effective to undertake and when. Rio Tinto's vulnerability assessment effort has a clear cost-benefit as it identifies and mitigates risks and exploits opportunities arising from current and future climate change impacts.
<b>Case study source(s)</b>	<a href="#">Case Studies and Tools: A Systematic Review of the Literature on Business Adaptation to Climate Change (Network for Business Sustainability)</a> <a href="#">Adapting to Climate Change: A Business Approach (Pew Center on Global Climate Change)</a> <a href="#">Future Proof: Preparing your business for a changing climate (CBI)</a>
<p>CLICK FOR MORE INFO</p> 	



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