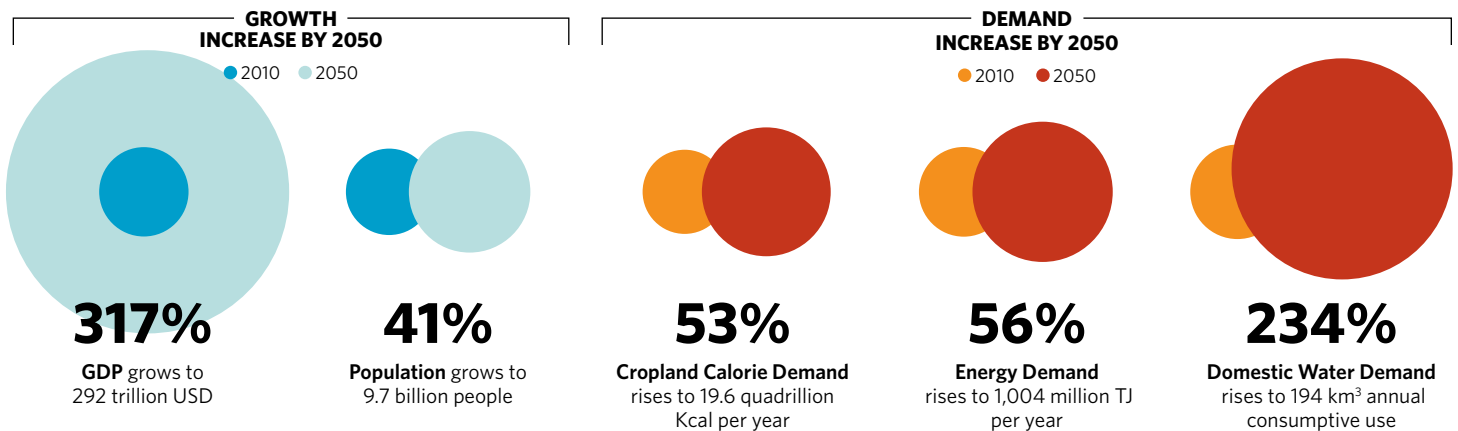


Two Paths to 2050

Together with the University of Minnesota and 11 other institutions, The Nature Conservancy designed a study based on realistic assumptions about how the world will change between now and 2050 and modeled what the future could look like if we follow a 'business as usual' or 'sustainability' path. The difference is stark but the research is encouraging. A brighter future is possible, provided we make significant changes in the ways we provide food, water, energy and other resources. **Below are the projections we used, followed by a contrast of the two paths.**



PROJECTED GROWTH IN POPULATION AND RESOURCE DEMANDS BY 2050



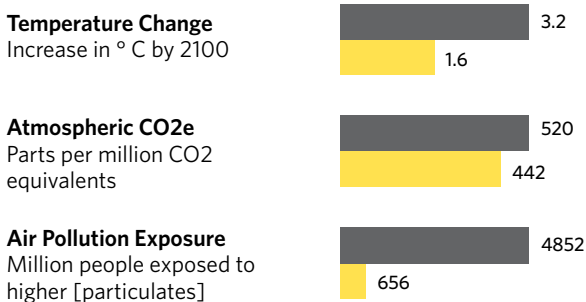
If we stay on today's business-as-usual path, we risk an intensifying cycle of scarcity. But with some changes to how we meet our food, water and energy demands, we can find a much more sustainable pathway to mid-century.

IMPACTS BY 2050

■ Business As Usual ■ Sustainable Path

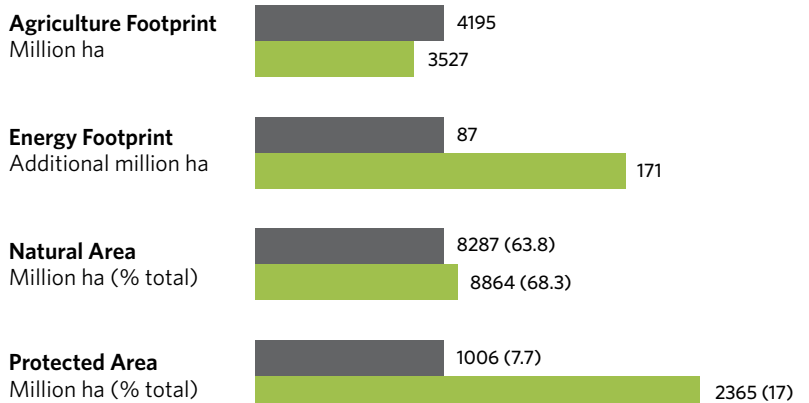
AIR & CLIMATE

By shifting energy production away from fossil fuels, we constrain CO2 emissions, limit global temperature increases and reduce air pollution.



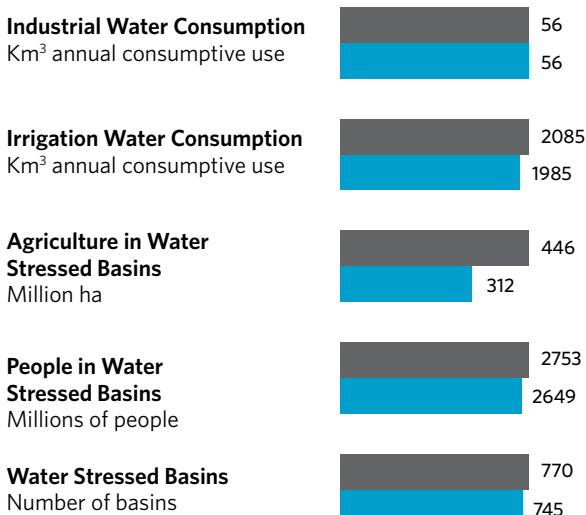
LAND FOOTPRINT

Improving placement of crops and energy installations allows us to preserve more natural and protected areas.



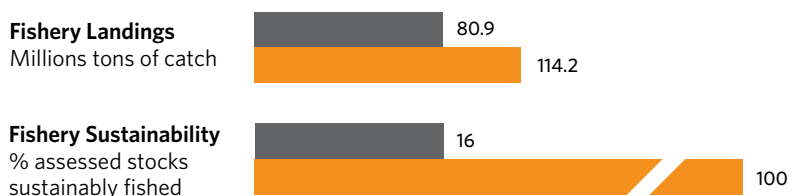
WATER SECURITY

By changing food and energy production and shifting where crops are grown, we can reduce the number of water-stressed basins.



FISHERIES SUSTAINABILITY

Managing all fisheries sustainably will result in increased catch yields over 2010 yields.



Assumptions: We assume the same growth in population and GDP in both scenarios, expanding from 2010 to 2050. Population and GDP growth are used to predict growth in demand for food, energy, and industrial and irrigation water use. Impacts on climate, air pollution, land, water, and fisheries vary between Sustainability and BAU scenarios. Water stress for population and agricultural area is defined as >40% of precipitation within a basin consumed per year. Water stress for biodiversity is defined as basins where >20% of precipitation is consumed per year. Natural areas reflect all land not in agriculture, energy, or urban development. Protected areas (a subset of natural areas) represent all lands under IUCN I-IV classification. Sustainable fisheries are fished at maximum sustainable yield. All variables are shown scaled to the maximum value.