

Abu Dhabi is the largest Emirate of the United Arab Emirates. It covers **87%** of the total area of the UAE

Abu Dhabi has a robust economy with annual growth rate of 4.8% in 2013 & GDP of **953,239 Million AED**

Annual population growth rate (2013) **↑7.5%**

Average minimum temperature **22.4°C**

Average maximum temperature **34.1°C**

Average annual rainfall **77.6 mm**

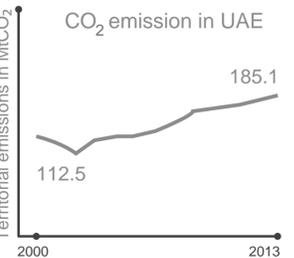
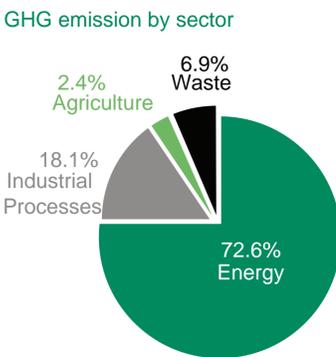
Climate Change

Climate change is a global problem & we have a shared responsibility to address it

Increase in temperatures & sea levels, as well as extreme weather are caused by an accumulation of Greenhouse Gases (GHG) in the atmosphere

As our economy & population grow, CO₂ emissions have also increased

Abu Dhabi is pursuing a diversified energy mix including solar, nuclear & traditional power generation technologies



EAD studies GHG emissions and creates biennial emission inventory reports

Abu Dhabi supports end user efficiency programs such as air conditioning, appliance & lighting standards

Air Quality

Particulate Matter (PM) & Ozone (O₃) are pollutants that regularly exceed UAE federal limits

Electricity production affects air quality



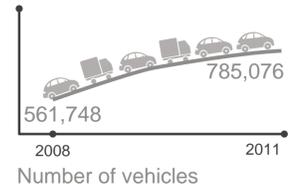
EAD operates a comprehensive network of air quality monitoring stations



PM comes from natural, but increasingly man made sources such as construction and industrial activities

Ozone is a secondary pollutant formed mainly from transport and industrial sectors

Transport affects air quality



UAE is shifting to more environmentally friendly transportation



Low sulphur diesel is now standard

Other pollutants such as NO₂, SO₂ and CO are also closely monitored, but rarely cause concern

Extreme weather events also affect air quality

25% of government vehicles are being converted to clean burning CNG

Biodiversity

Abu Dhabi is rich in biodiversity with unique flora and fauna

Abu Dhabi is home to many different types of species. Some are threatened



The expansion of our cities, towns, roads & infrastructure significantly impacts biodiversity

78% of our fish stocks are over-exploited

EAD manages a large network of protected areas in both marine & terrestrial areas



EAD uses innovative technologies like camera traps & drones to carefully monitor wildlife species

EAD operates breeding & release programs for endangered species

Marine Water Quality

With approx. **50,000 km²** of marine area and **700 km** of coastline, marine water quality is an important environmental indicator in Abu Dhabi

Overall marine water quality is **good** at public beaches

Nutrient levels, which can cause algae blooms, are a concern around Abu Dhabi city & Mussafah

Infrastructure development restricts the flow of water around Abu Dhabi islands



Nutrient-rich treated water is discharged into the marine environment



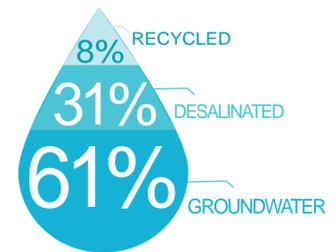
Environment Impact Assessments for proposed projects enable identification & mitigation of impacts on marine water quality

EAD operates a comprehensive marine water quality monitoring programme

The government adopted a **ZERO** waste water discharge to sea policy & will reuse all treated water for irrigation

Water

We draw water from three sources



Groundwater is a non-renewable natural resource

Desalinated water supplies the domestic & industrial sectors

Agriculture is the biggest consumer of water in Abu Dhabi nearly all of this comes from groundwater



70% of all water is consumed for irrigation

Abu Dhabi is developing a water budget to balance supply & demand

EAD is collaborating with other government entities to adopt new technologies for crop irrigation

EAD is reducing water consumption in Abu Dhabi's forests

Domestic per capita water consumption is **~5x world average**



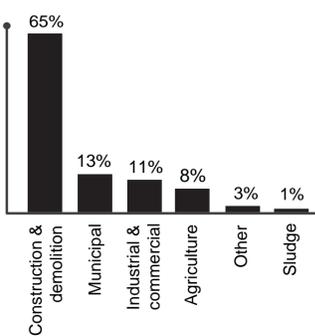
Groundwater is extracted at **25x** the natural recharge rate



54% of treated waste water is reused for irrigation

Waste

Waste is generated by many different sectors of the economy

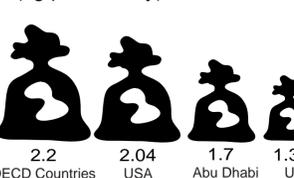


As population and economy grow, so too does the amount of waste

Abu Dhabi's population & economy are predicted to grow **3x** by 2030

On average every person in Abu Dhabi produces **1.7 Kg** of waste per day. This is comparable to world averages

Waste generation (kg/person/day)



EAD developed guidelines that encourage government & businesses to establish a proper waste management plan



Waste management standards for construction & operations for buildings are being adopted

Recycling of construction & demolition waste is now standard practice

27% of waste is recycled