

# MARSHALL ISLANDS

## EMPLOYMENT AND ENVIRONMENTAL SUSTAINABILITY FACT SHEETS 2019

The *Employment and Environmental Sustainability Fact Sheets* series provides key features of employment and environmental sustainability performance. Jobs that are green and decent are central to sustainable development and resource productivity. They respond to the global challenges of environmental protection, economic development and social inclusion. Such jobs create decent employment opportunities, enhance resource efficiency and build low-carbon, sustainable societies. The fact sheets include the most recently available data for selected indicators on employment and environmental sustainability: (i) employment in environmental sectors; (ii) skill levels; (iii) vulnerability of jobs; (iv) jobs in renewable energy; (v) scoring on the Environmental Performance Index; and (vi) air quality.

### DEMOGRAPHICS

The Marshall Islands<sup>1</sup> is located in the north-western Pacific Ocean, within the Micronesian group of islands.<sup>2</sup> The country consists of 2 parallel chains of 29 coral atolls, thousands of tiny islets and hundreds of low-lying islands (Fig. 1).<sup>3</sup> Its population is mostly urban and growing, with a fertility rate of 4.1 children and life expectancy of 65.2 years. Around 61 per cent of the population is of legal working age (15–64 years) (Fig. 2).

Figure 1. Map of the Marshall Islands

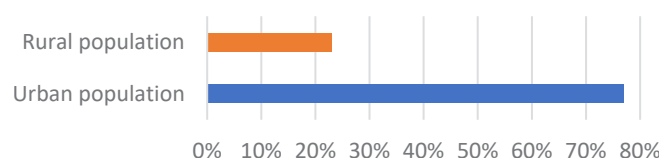


Figure 2. Marshall Islands population statistics

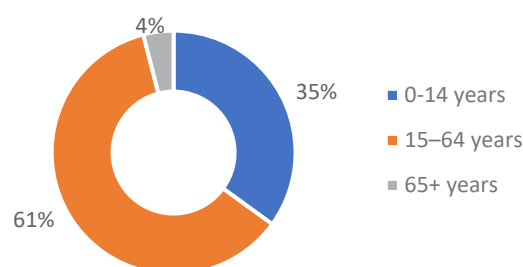
Population:<sup>4</sup> 0.05 million



Population growth rate	Fertility rate	Life expectancy at birth
0.1%	4.1 children	65.2 years



Population age categories



Note: Data is for 2017 except fertility which is 2011, and life expectancy, which is 2000.

Source: ILO compilation using World development indicators, last updated: 28/06/2018; <http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators#> and UN ESCAP Statistics. [http://data.unescap.org/escap\\_stat/](http://data.unescap.org/escap_stat/) (accessed on 30 December 2018).

<sup>1</sup> The Marshall Islands became a member of the International Labour Organization in 2007.

<sup>2</sup> See <http://www.ilo.org/suva/countries-covered/marshall-islands/lang--en/index.htm>

<sup>3</sup> See <http://www.worldatlas.com/webimage/countrys/oceania/mh.htm>.

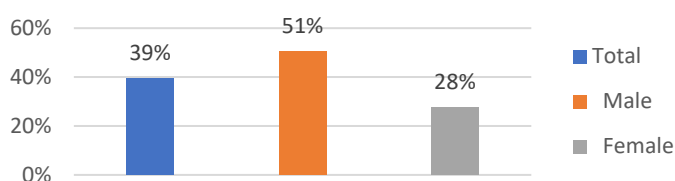
<sup>4</sup> Population data based on 2017 data.

## LABOUR FORCE

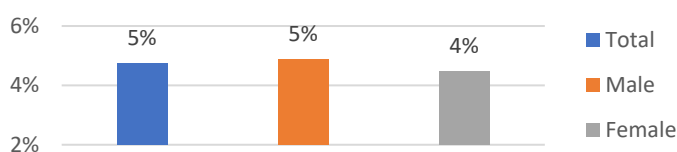
In 2011, the labour force participation rate was 41.3 per cent and the employment-to-population ratio was 39.3 per cent. Both these rates are more than 23 percentage points higher for men than for women. The total unemployment rate was 4.7 per cent, with the male rate at 0.4 percentage points higher than the female rate. There is no data on the youth employment rate. Employment is heavily reliant on services (Fig. 3).

**Figure 3. Basic employment statistics for the Marshall Islands, 2010 and 2011**

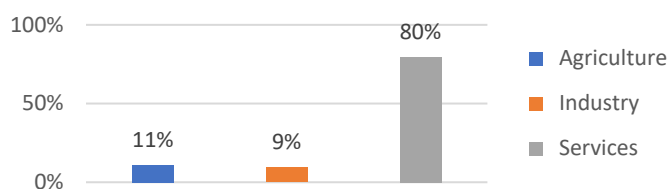
### Employment-to-population, 2011 (15+ years)



### Unemployment, 2011



### Employment by sector, 2010 (15+ years)



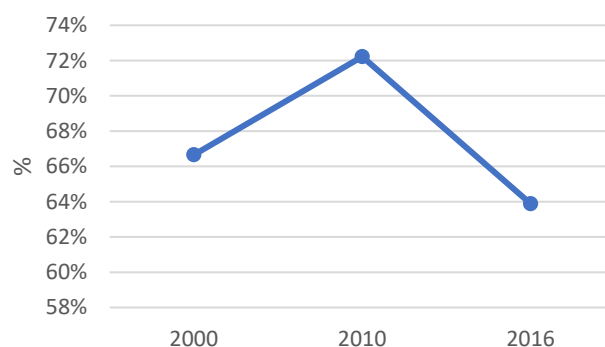
Note: ILO estimates. Labour force participation rate and unemployment: aged 15 years and older. Youth unemployment: aged 15–24 years. Employment by occupation: skill level 1 (low) for elementary occupations; skill level 2 (medium) for clerical, service and sales workers, skilled agricultural and trade workers, plant machinists and assemblers; and skill levels 3 and 4 (high) for managers, professionals and technicians.

Source: ILO estimates and compilation using ILOSTAT, [www.ilo.org/ilostat](http://www.ilo.org/ilostat) (accessed 30 December 2018).

Rural population growth was negative 1.6 per cent in 2017. The share of agricultural land in total land area increased by 5 percentage points between 2000 and

2010 and then decreased by 8 percentage points between 2010 and 2015 (Fig. 4). There is no trend data for agricultural employment.

**Figure 4. Agricultural land, 2000-2016**

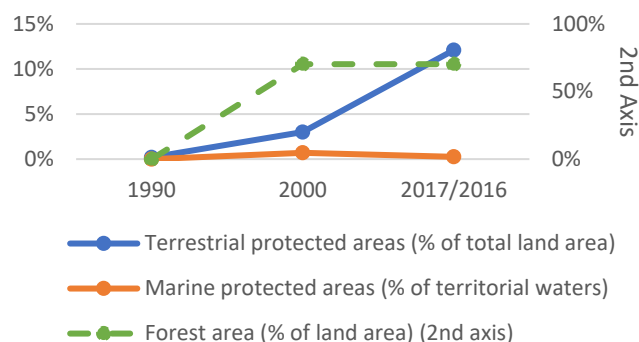


Note: Data for agricultural land is from 2016.

Source: ILO compilation using World development indicators, last updated: 28/06/2018; <http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators#> (accessed on 30 December 2018).

There is no Environmental Performance Index ranking due to lack of data. Forest area remained stable from 2000 to 2016 at 70 per cent of total land area. The share of terrestrial protected area increased from 1990 to 2017, reaching 12 per cent of total land area. The proportion of marine protected area also increased from zero to 0.3 per cent of total territorial waters (Fig.5). There will be greater prospects for employment opportunities if there is a commitment to transition to a low-carbon and resource-efficient economy, such as jobs in resource management and environmental services.<sup>5</sup>

**Figure 5. Forest area, terrestrial and marine protection area, 1990-2017**



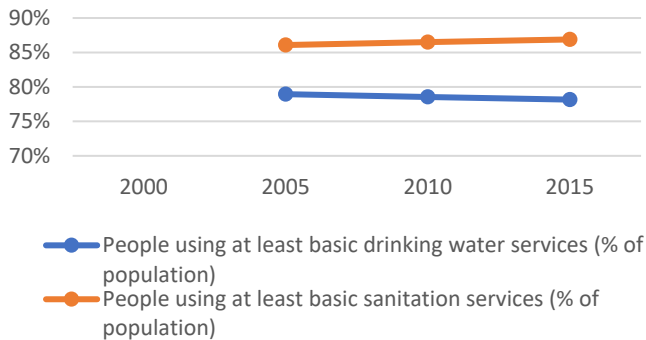
Note: Data for forest area is from 2016 and other data is from 2017.

Source: ILO compilation using World development indicators, last updated: 28/06/2018; <http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators#> (accessed on 19 February 2019).

<sup>5</sup> Organisation for Economic Co-operation and Development: *The jobs potential of a shift towards a low-carbon economy*, OECD Green Growth Papers, No. 2012/01 (Paris, 2012), <http://dx.doi.org/10.1787/5k9h3630320v-en>.

Since 2005, there has been a slight decrease in access to basic drinking water, to an average of 78.2 per cent in 2015, and a slight increase in access to basic sanitation, to an average of 86.9 per cent in 2015 (Fig. 6). Both are still below the ideal threshold of 100 per cent. Improvement in water supply and sanitation access could provide more decent job opportunities in the future.

**Figure 6. Basic drinking water and sanitation access, 2000-2015**

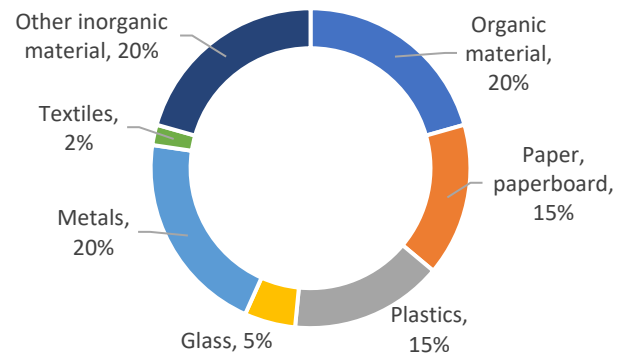


No data available for 2000.

Source: ILO compilation using World development indicators, last updated: 21/05/2018; <http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators#> (accessed on 30 December 2018).

Growth of the urban population in the Marshall Islands has meant an increase in solid waste. Waste collection varies between the inner cities and the country's outer urban areas. The majority of the waste in 2007 was metals, organic and inorganic material (20 per cent), followed by paper, paperboard and plastic (15 per cent) (Fig. 7). The much-needed implementation of a municipal waste management system for collection, safe and sustainable disposal, recycling and composting practices could create more green jobs that help the environment and general health.

**Figure 7. Waste composition, 2007**



Source: ILO compilation using UNSD-Environment statistics (released on 30 April 2018; <https://unstats.un.org/unsd/envstats/qindicators.cshhtml>) (accessed on 30 December 2018).

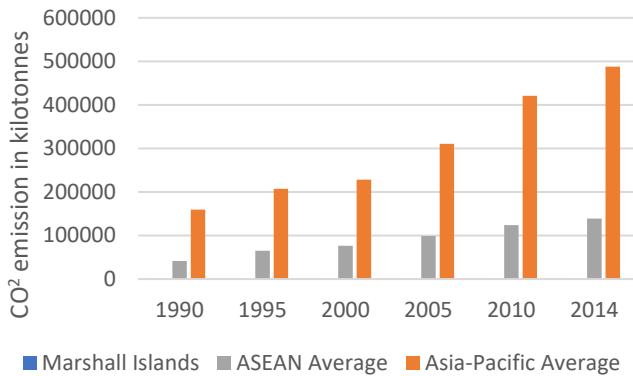
## AIR QUALITY

The carbon dioxide (CO<sub>2</sub>) emission levels for the Marshall Islands increased gradually by an average of 3 per cent from 1990 to 2014 (Fig. 8).<sup>6</sup> The increase was due primarily to the following major sources: energy sector (electricity generation); transport sector (land and shipping); waste (solid waste disposal on land); and waste water handling.<sup>7</sup> The level of emissions is so much lower than the Asia-Pacific and ASEAN averages that it appears negligible.

The PM<sub>2.5</sub> (atmospheric particulate matter with a diameter of less than 2.5 micrometres) emission levels for the Marshall Islands shows the highest level in 2005 (Fig. 9). Overall PM<sub>2.5</sub> emission levels exceeded the World Health Organization's Air Quality Guideline threshold level, thus indicating high emissions. The Marshall Islands shows a significantly lower level of emission than the ASEAN and Asia-Pacific averages.

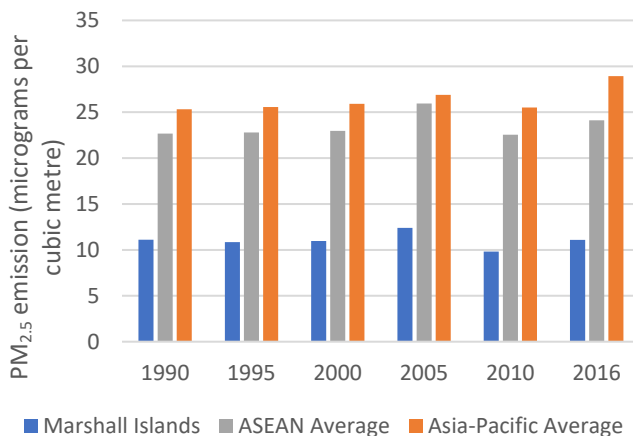
<sup>6</sup> The value is calculated on the basis of CAGR (compound annual growth rate).

<sup>7</sup> Subbarao, Srikanth & Mucadam, Riyad. 2015. Second National Communication of the Republic of the Marshall Islands. United Nations Development Program/Global Environment Facility. Suva, Fiji; <http://www.un-gsp.org/sites/default/files/documents/mhln2.pdf>

**Figure 8. CO<sub>2</sub> emissions for the Marshall Islands, 1990-2014**

Note: Data for ASEAN and Asia-Pacific are the average of all the ILO member states of the regions. Asia-Pacific: data excludes Cook Islands, Timor-Leste (1990, 1995, 2000).

Source: ILO compilation using World Bank indicators.  
<https://data.worldbank.org/indicator/EN.ATM.CO2E.KT?locations=IR> (accessed on 30 December 2018).

**Figure 9. PM<sub>2.5</sub> emissions for the Marshall Islands, 1990-2016**

Note: Data for ASEAN and Asia-Pacific are the average of all the ILO member states of the regions. Asia-Pacific: data excludes Cook Islands, Palau and Tuvalu.

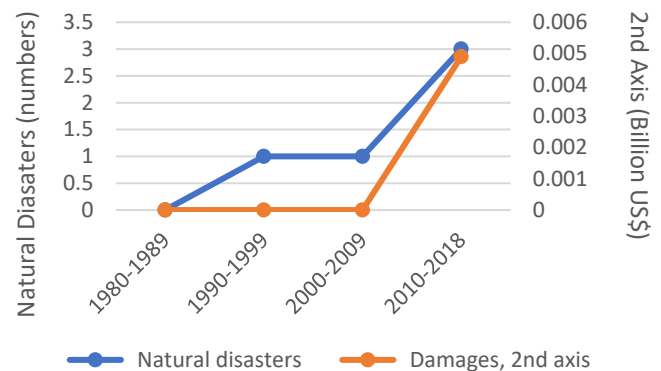
Source: ILO compilation using World Bank indicators;  
<https://data.worldbank.org/indicator/EN.ATM.PM25.MC.M3?view=chart> (accessed on 30 December 2018).

Applying the Just Transition Guidelines, an area of possible intervention includes efforts to reduce harmful emissions, which could potentially generate green jobs in high emitting sectors such as transportation and fuel-intensive industries. Reducing emissions is a significant challenge, which can be achieved not only

by mitigation methods but also by adapting to, and coping with, the changes required by the transition to a low-carbon economy.

## CLIMATE CHANGE IMPACTS

The Marshall Islands is not covered by the *World Risk Report 2016* due to lack of data. The country is susceptible to climate events and rising sea levels. As much as 43.8 per cent of the total land area is below 5 metres above sea level, and 35.9 per cent of the total population lives in that area. According to the *Emergency Events Database*,<sup>8</sup> there was an increase in natural disasters<sup>9</sup> and associated damage costs between 1980 and 2018 (Fig. 10). The natural disasters in that time were mostly floods, droughts and storms. Developing preventative measures to limit infrastructure and property damage and increase institutional capacity to respond to climate events, particularly for small businesses, can be a source of decent job creation while building resilience.

**Figure 10. Natural disaster occurrence and damage costs in the Marshall Islands**

Note: Natural events include climatological, hydrological and meteorological disasters.

Source: EM-DAT: The emergency events database - Universite catholique de Louvain (UCL) - CRED, D. Guha-Sapir - [www.emdat.be](http://www.emdat.be), Brussels, Belgium. Data accessed on: 30 December 2018.

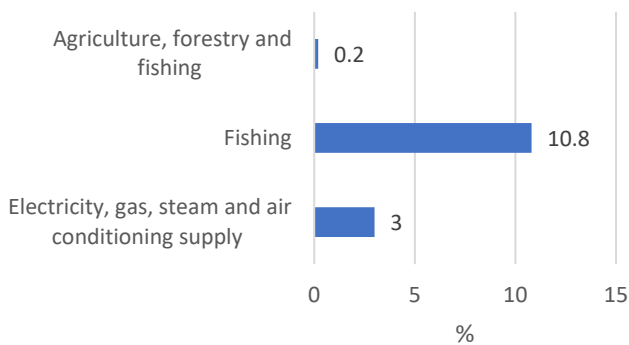
## GREEN JOBS POTENTIAL

In 2010, 0.2 per cent of total employment was in the agriculture, forestry and fishing sector (Fig. 13). Although reliance on agriculture is not significant, there are opportunities for job creation in sustainable production and organic farming.

<sup>8</sup> EM-DAT: The emergency events database - Universite catholique de Louvain (UCL) - CRED, D. Guha-Sapir - [www.emdat.be](http://www.emdat.be), Brussels, Belgium. Data accessed on: 20 July 2018.

<sup>9</sup> Climatological, hydrological and meteorological disasters.

**Figure 11. Employment in sectors with strong green jobs potential in 2010**



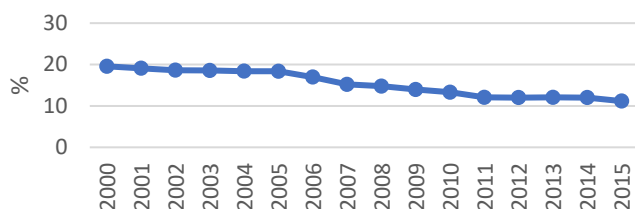
Note: These sectors have the most potential for green job opportunities. Employment by selected 1-digit sector level (ISIC - Rev. 4, 2008)

Source: ILO estimates and compilation using ILOSTAT, [www.ilo.org/ilostat](http://www.ilo.org/ilostat) (accessed on: 30 December 2018).

In 2016, more than 65 per cent of the population relied primarily on clean fuel and technology, in the sense that these do not create pollution within the home.<sup>10</sup> The share of renewable energy in total energy consumption has not kept pace with overall consumption. In 2000, it was 20 per cent, but fell to 13.3 per cent in 2010 and fell further to 11.2 per cent in 2015 (Fig. 14). However, renewable energy electricity generation has increased over the last 6 years, with solar power being the main renewable energy source in 2016 (Fig. 15).

Data is unavailable for renewable energy sector employment. The country's employment rate in electricity, gas, steam and air conditioning was only 3.0 per cent in 2010 (Fig. 13). With the push for increasing reliance on renewable energy, there is the potential for decent job opportunities in the future.

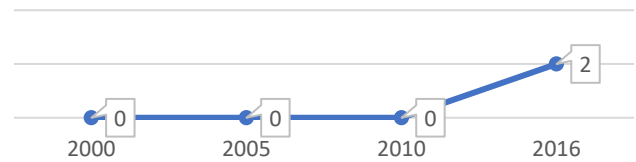
**Figure 12. Renewable energy share in total energy consumption, 2000-15**



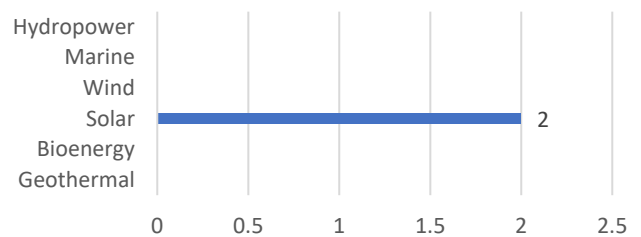
Source: ILO compilation using United Nations statistics division. SDG indicators: Global database. Available at: <https://unstats.un.org/sdgs/indicators/database/> (accessed on 30 December 2018).

**Figure 13. Renewable energy electricity generation, 2000-2016**

**Total renewable energy electricity generation (gigawatt hours - GWh)**




**Renewable energy electricity generation (GWh) in 2016, by technology**



Source: ILO compilation using source: IRENA (2018); Renewable electricity capacity and generation statistics, June 2018. Available at: <http://resourceirena.irena.org>

Better data collection relating to the green economy and the environmental sector would be very valuable for policy-makers in Asia-Pacific countries. In particular, better data on green and decent jobs is needed to assess the impact of climate change and climate-related policies on social inclusion. Without better data it will be difficult to determine what policy changes are needed to ensure a just transition to environmental sustainability and to monitor progress going forward.

<sup>10</sup> The proportion of population with primary reliance on clean fuels and technology is calculated as the number of people using clean fuels and technologies for cooking, heating and lighting divided by total population reporting any cooking, heating or lighting, expressed as a percentage. "Clean" is defined by the emission rate targets and specific fuel recommendations (against unprocessed coal and kerosene) included in the normative World Health Organization guidelines for indoor air quality; see the data for household fuel combustion, <https://unstats.un.org/sdgs/metadata/files/Metadata-07-01-02.pdf>.



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