Decent Work

International Labour Organization

MALAYSIA

EMPLOYMENT AND ENVIRONMENTAL SUSTAINABILITY FACT SHEETS 2017

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 recent available data for selected indicators[1] on employment and environmental sustainability: (i) employment in environmental sectors; (ii) skill levels; (iii) vulnerability of jobs; (iv) jobs in renewable energy; and (v) scoring on the Environmental Performance Index.

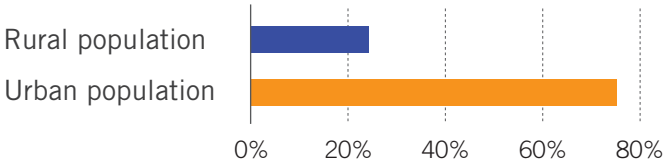
Figure 1. Map of Malaysia

Malaysia[2] is located in South-East Asia, north of the equator (Fig. 1). Its population is mostly urban and growing, with a fertility rate of 1.9 children and life expectancy at 74.9 years. Around 69 per cent of the population is of legal working age (15–64 years) (Fig. 2).

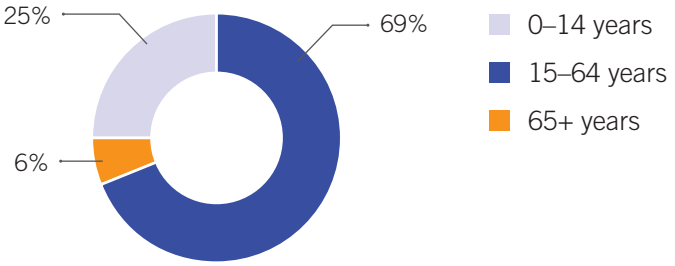
Figure 2. Demographics for Malaysia

Population: 31.2 million

Population growth rate	Fertility rate	Life expectancy at birth
1.5%	1.9 children	74.9 years



Population age categories



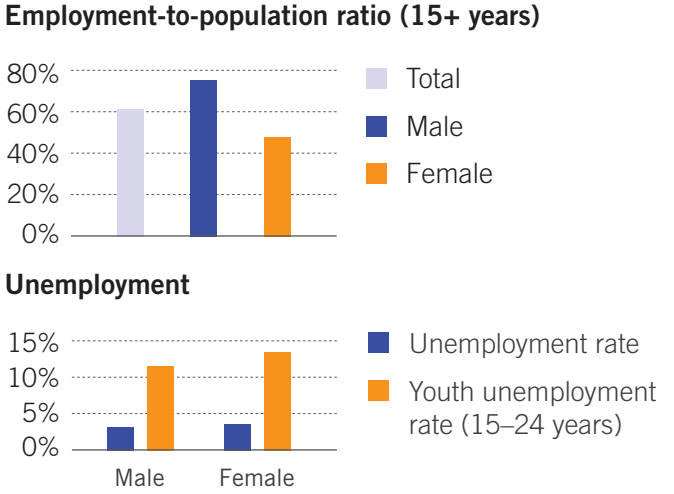
Note: All data for 2016, except fertility and life expectancy, which are 2015.

Source: ILO compilation using World Bank: World development indicators, last updated 20 July 2017, http://databank.worldbank.org (accessed 30 July 2017).

1. The fact sheet is based on available data only.
2. Malaysia became a member of the International Labour Organization in 1957.

As of 2017, the labour force participation rate is 63.4 per cent and the employment-to-population ratio is 61.3 per cent. Both of those rates are more than 27 percentage points higher for men than for women. The total unemployment rate is 3.3 per cent, and the youth unemployment rate is 12.4 per cent, with the female youth unemployment rate 2 percentage points higher than the male rate. Formal employment is heavily reliant on services and medium-skilled occupations (Fig. 3).[3]

Figure 3. Basic employment statistics for Malaysia, 2017

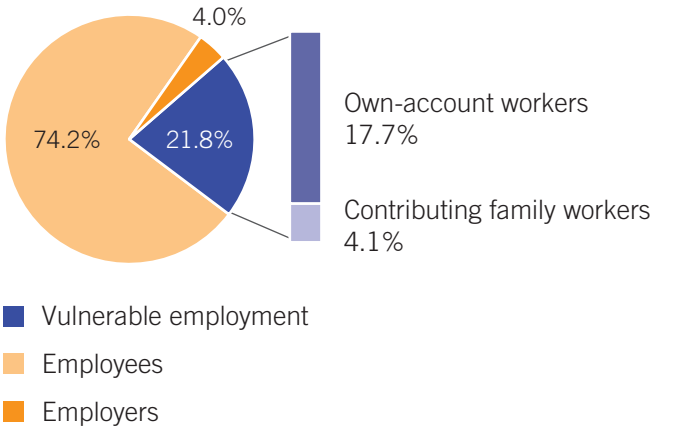


Note: ILO estimates. Labour force participation rate and unemployment: aged 15 years and older. Youth unemployment: aged 15–24 years. Employment by occupation: skill level 1 (low) for elementary occupations; skill level 2 (medium) for clerical, service and sales workers, skilled agricultural and trade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

Source: ILO compilation using ILOSTAT, http://www.ilo.org/ilostat (accessed 17 July 2017).

Vulnerable employment in Malaysia as of 2017 accounts for 21.8 per cent of the labour force, with the majority of those workers having own-account status (Fig. 4). Own-account and contributing family workers are more likely to experience low job and income security than employees and employers, as well as lower coverage by social protection systems and employment regulation.

Figure 4. Vulnerable employment, by status, 2017



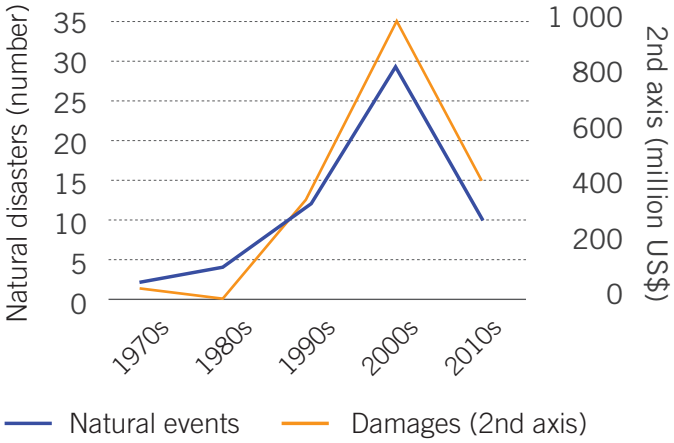
Note: Vulnerable employment includes own-account workers and contributing family workers.

Source: ILO compilation using ILOSTAT, http://www.ilo.org/ilostat (accessed 17 July 2017).

According to the *World Risk Report*,[4] Malaysia has a middling World Risk Index score. It ranks 86 (of 171 countries), although it has high exposure to natural hazards, it has the institutional capacity to cope but restricted capcity to adapt. Part of the country's vulnerability is due to the 5.1 per cent of the total population who lived in the 1.3 per cent of the total land area below 5 meters above sea level in 2010.[5] According to the Emergency Events Database,[6] there was a substantial increase in natural disasters[7] and associated damage costs between the 1970s and the 2010s (Fig. 5). The natural disasters in that time were mostly tropical cyclones, storms, floods, landslides, droughts and forest fires which resulted in more than 650 deaths (1970–2016). Developing preventive measures to limit infrastructure and property damage and increase institutional capacity, particularly for small businesses to respond to climate events, can be a source of decent job creation while building resilience.

3. Informal employment (self-employed and contributing family members) is excluded from the agriculture calculations.
4. Bündnis Entwicklung Hilft and United Nations University: *World risk report 2016* (Berlin, 2016), http://weltrisikobericht.de/english/.
5. World Bank: World development indicators, last updated 20 July 2017, http://databank.worldbank.org/.
6. EM–DAT: The Emergency Events Database – Université catholique de Louvain (UCL) – CRED, D. Guha-Sapir – www.emdat.be, Brussels, Belgium.
7. Climatological, hydrological and meteorological disasters.

Figure 5. Natural disaster occurrence and damage costs in Malaysia, 1970s–2010s

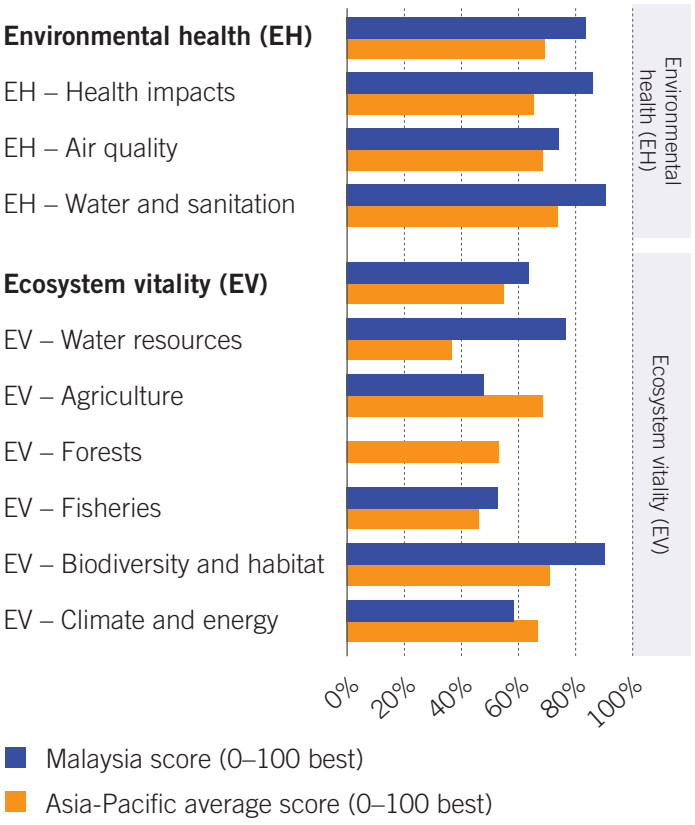


Note: Natural events include climatological, hydrological and meteorological disasters. 2010s data are only for the first half of the decade.

Source: ILO compilation using EM-DAT: The Emergency Events Database – Université catholique de Louvain (UCL) – CRED, D. Guha-Sapir – www.emdat.be, Brussels, Belgium.

Malaysia ranks 63 of 180 countries in the Environmental Performance Index (EPI), with a score of 74.2 (with 0 furthest from the high-performance benchmark target of 100). Malaysia outperforms the average score for Asia and the Pacific (Fig. 6) in most of the EPI categories. Still, there is room for improvement, especially in ecosystem vitality (in forests, agriculture, fisheries, and climate and energy). A Green Jobs Mapping Study by the International Labour Organization found that approximately 29,710 people were employed in 2012 in core environmental goods and services industries. They included industries providing equipment in air pollution control, water equipment and chemicals, instruments and monitoring systems and waste management equipment; and technological services in solid and hazardous waste management, consulting and engineering, remediation and industrial services, analytical services, wastewater treatment and water utilities.[8] Environmental health, ecosystem vitality, climate change and resilience to weather disasters all have the potential to provide job creation, green economy growth and innovation in Malaysia.

Figure 6. Environmental Performance Index 2016 for Malaysia



Note: Score 0–100 best. Asia-Pacific: Each score is an average of all data for ILO member States in the region, excluding four countries with no data (Cook Islands, Marshall Islands, Palau and Tuvalu).

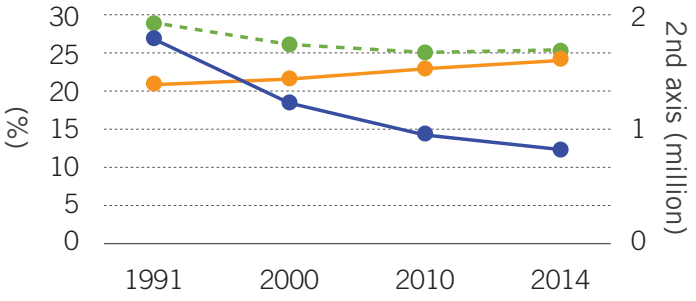
Source: ILO compilation using, A. Hsu et al.: *2016 Environmental Performance Index* (New Haven, CT, Yale University, 2016), www.epi.yale.edu.

Rural population growth was a negative 1.1 per cent in 2015. The share of agricultural land area increased by 3 percentage points between 1991 and 2014, reaching 23.9 per cent of total land area in 2014. The share of agricultural employment in total employment declined by 14 percentage points in that same period due to a combination of a loss of 237,00 jobs in agriculture and job creation in other sectors (Fig. 7). Forest area remained steady between 1990 and 2014, at approximately 67.5 per cent of total land area. During that same period, the share of terrestrial protected area slightly increased, reaching 18.4 per cent, while the proportion of marine protected area amounted to 2.3 per cent of total territorial waters (Fig. 8). In 2016, 11.4 per cent of total employment was in the agriculture, forestry and fishing sector (Fig. 9). According to the rough estimates in the 2014 Green Jobs Mapping Study, 112,253 people had green jobs in agriculture, forestry and fishing; 37 per

8. ILO: *Green jobs mapping study in Malaysia* (Bangkok, 2014).

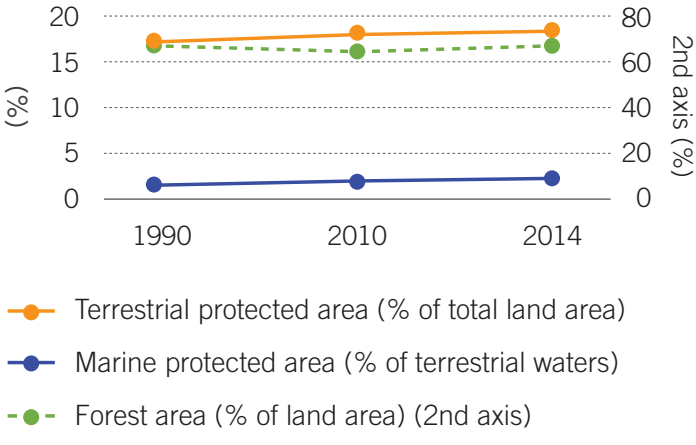
cent of the jobs were in the palm oil industry; and 63 per cent of jobs in sustainable fishery and forestry and organic agriculture were also characterized as green.[9] Although reliance on agriculture is significant, there are opportunities for job creation for sustainable production and organic farming. There will be greater prospects for employment opportunities with the commitment to transition to a low-carbon and resource-efficient economy, such as jobs in resource management and environmental services.[10]

Figure 7. Agricultural land and agricultural employment, 1991–2014



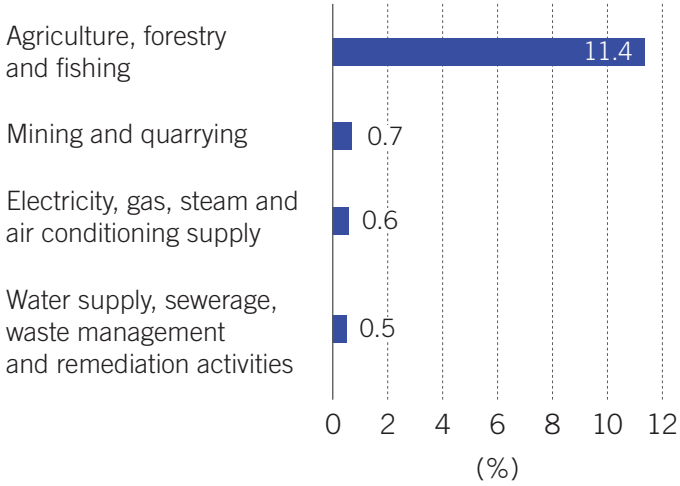
Source: ILO compilation using World Bank: World development indicators, last updated 20 July 2017, http://databank.worldbank.org/; ILOSTAT, http://www.ilo.org/ilostat (accessed 30 July 2017).

Figure 8. Forest area and terrestrial and marine protected areas, 1990–2014



Source: ILO compilation using World Bank: World development indicators, last updated 20 July 2017, http://databank.worldbank.org/ (accessed 30 July 2017).

Figure 9. Employment in sectors with strong green jobs potential, 2016



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

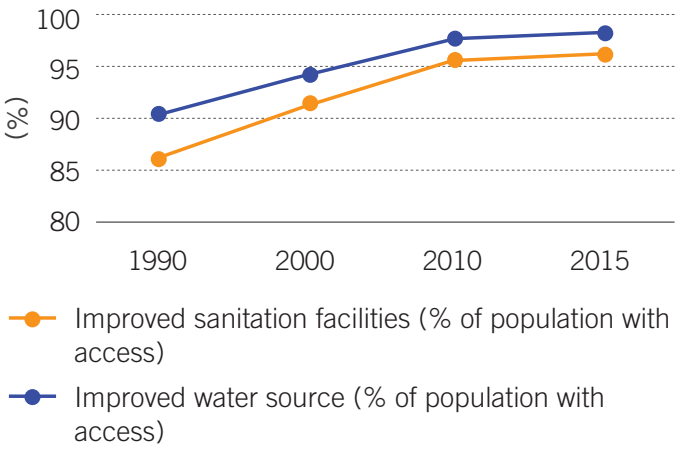
Source: ILO compilation using ILOSTAT, http://www.ilo.org/ilostat (accessed 16 November 2017).

Since 1990, the percentage of the population with access to improved water supply has increased 7.9 percentage points, to 98.2 per cent in 2015. There was a 9.8-percentage point increase in access to improved sanitation between 1990 and 2015, to 96 per cent (Fig. 10). Both rates, however, are still below the ideal threshold of 100 per cent. The 2014 Green Jobs Mapping Study found an estimated 9,960 green jobs in the water and wastewater sector.[11] According to the World Bank, municipal solid waste generation in Malaysia in 2002 was 1.52 kg per capita per day and is expected increase to 1.9 kg per capita per day by 2025.[12] Most of the waste in 2000 was organic (at 63 per cent), followed by plastics (at 12 per cent) (Fig. 11).[13] Landfills take 90 per cent of the waste, while 5 per cent is recycled, 2 per cent is incinerated and the remainder is dumped illegally.[14] Only seven of 176 landfill facilities are sanitary. A big concern is the large amount of e-waste, classified as schedule or hazardous waste in Malaysia. According to the Green Jobs Mapping Study, approximately 134,036 metric tonnes of e-waste was generated in 2009 and is expected to rise to 1.11 million metric tonnes in 2020. Also in 2009, 580 people were employed with waste management equipment, 14,400 people within solid waste management services and 800 people in hazardous waste management services. An estimated

9. ILO: *Green jobs mapping study in Malaysia* (Bangkok, 2014).
10. 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.
11. ILO: *Green jobs mapping study in Malaysia* (Bangkok, 2014).
12. World Bank: *What a waste: A global review of solid waste management* (Washington, DC, 2012).
13. ibid.
14. ILO: Green jobs mapping study in Malaysia (Bangkok, 2014).

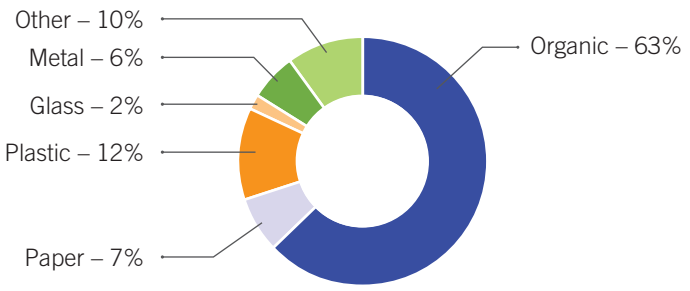
15,780 had a green job in 2009.[15] Only 0.5 per cent of the country's labour force was employed in water supply, sewerage, waste management and remediation activities in 2016 (Fig. 9). Continued improvement in waste and e-waste management will provide environmental benefits by reducing landfill and pollution, while also expanding the opportunities for decent green job creation.

Figure 10. Improved sanitation and water supply access, 1990–2015



Source: ILO compilation using World Bank: World development indicators, last updated 20 July 2017, http://databank.worldbank.org/ (accessed 30 July 2017).

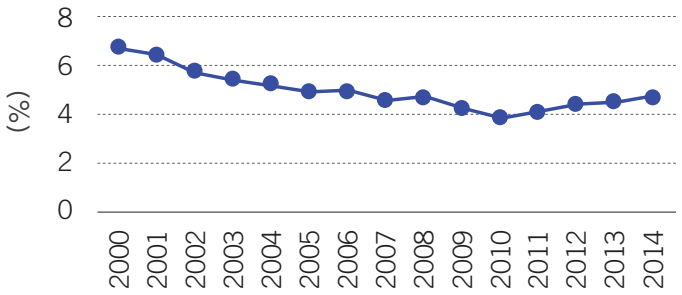
Figure 11. Waste composition, 2000



Source: ILO compilation using World Bank: *What a waste: A global review of solid waste management* (Washington, DC, 2012).

In 2014, more than 95 per cent of the population relied primarily on clean fuel and technology, in the sense that they do not create indoor pollution within the home.[16] According to the Green Jobs Mapping Study, Malaysia is highly dependent on fossil fuels, although there is a push to generate renewable energy and promote energy efficiency.[17] The share of renewable energy in total energy consumption has not kept pace with overall consumption. In 2000, it was only 6.7 per cent but fell below 4 per cent in 2011 and then slightly increased, to 4.8 per cent in 2014 (Fig. 12). Renewable energy generation gradually increased between 2011 and 2015, with hydropower the main source in 2015 (Fig. 13). In 2016, approximately 99,200 people were employed in the renewable energy sector, with 53 per cent of them in liquid biofuels and 28 per cent in solar photovoltaic (Fig. 14). The country's employment rate in electricity, gas, steam and air conditioning was only 0.6 per cent in 2016 (Fig. 9). With the push for increasing reliance on renewable energy, there will be greater potential for decent job opportunities in the future.

Figure 12. Renewable energy share in total final energy consumption, 2000–14

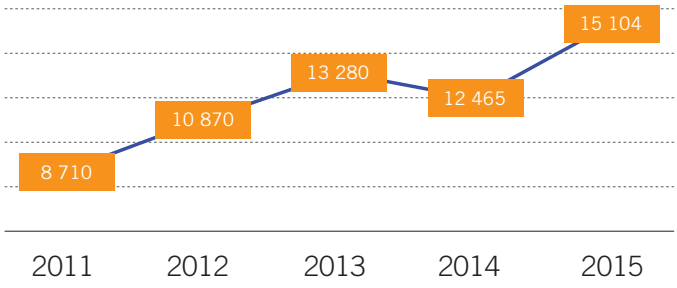


Source: ILO compilation using UN: SDG indicators: Global database (2017), https://unstats.un.org/ (accessed 17 July 2017).

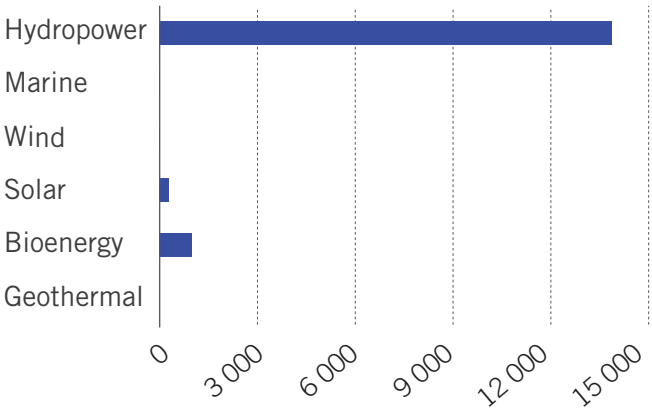
15. ibid.
16. The proportion of population with primary reliance on clean fuels and technology is calculated as the number of people using clean fuels and technologies for cooking, heating and lighting divided by total population reporting any cooking, heating or lighting, expressed as a percentage. "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.
17. ILO: *Green jobs mapping study in Malaysia* (Bangkok, 2014).

Figure 13. Renewable energy generation, 2011–15

Total renewable energy electricity generation (GWh)

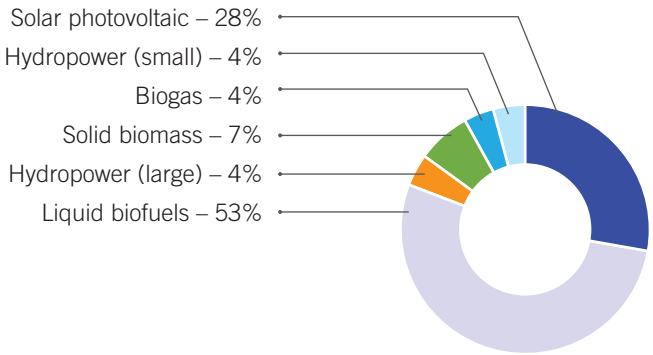


Renewable energy electricity generation (GWh), by technology 2015



Source: ILO compilation using International Renewable Energy Agency: Dashboards (2017), http://resourceirena.irena.org/gateway/dashboard/ (accessed 17 July 2017).

Figure 14. Renewable energy employment, by energy source, 2016



Note: Data limitations apply for certain technologies in certain countries. The lack of data reported for any specific technology may thus be indicative of a data gap, rather than the absence of renewable energy jobs using that technology.

Source: ILO compilation using International Renewable Energy Agency: Dashboards (2017), http://resourceirena.irena.org/gateway/dashboard/ (accessed 17 July 2017).

Better data collection relating to the green economy and the environmental sector would be valuable for policy-makers in Malaysia and Asian-Pacific countries. Better data on green and decent jobs is particularly 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 assure a just transition to environmental sustainability and to monitor progress going forward.