

THAILAND

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 indicators¹ 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 Thailand



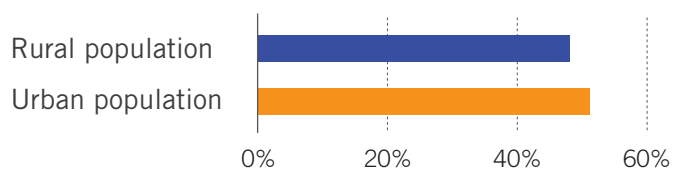
Thailand² is located in South-East Asia and borders Myanmar and the Lao People's Democratic Republic to the north, Cambodia to the east and Malaysia to the south (Fig. 1). Its population is growing and majority urban, although 48.5 per cent of the population lives in rural areas. The fertility rate is 1.5 children and life expectancy is 74.6 years. Around 71 per cent of the population is of legal working age (15–64 years) (Fig. 2).

Figure 2. Demographics for Thailand

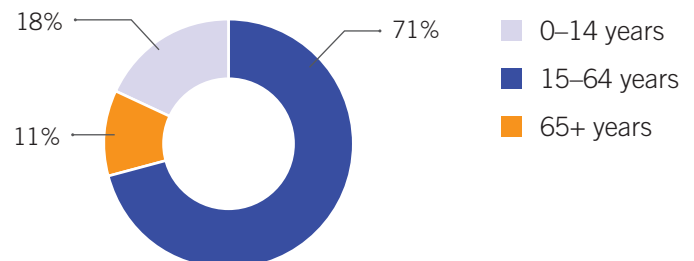
Population: 68.9 million



Population growth rate	Fertility rate	Life expectancy at birth
0.3%	1.5 children	74.6 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).

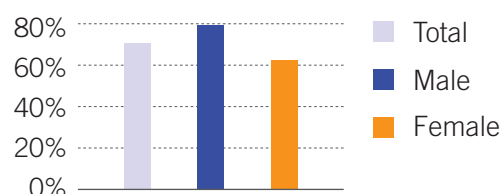
1. The fact sheet is based on available data only.

2. Thailand became a member of the International Labour Organization in 1919.

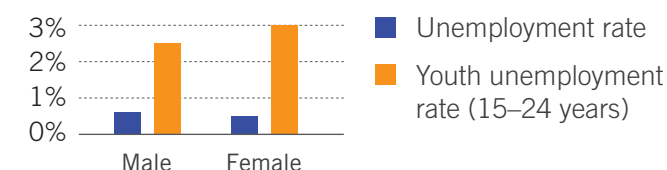
As of 2017, the labour force participation rate is 71 per cent and the employment-to-population ratio is 70.6 per cent. Both of those rates are more than 17 percentage points higher for men than for women. The total unemployment rate is 0.6 per cent, and the youth unemployment rate is 2.7 per cent, with the female youth unemployment rate 0.5 percentage points higher than the male rate. The youth (aged 15–24 years) not in employment, education or training rate was 14.6 per cent in 2016. Formal employment is heavily reliant on services and agriculture and on medium-skilled occupations (Fig. 3).³

Figure 3. Basic employment statistics for Thailand, 2017

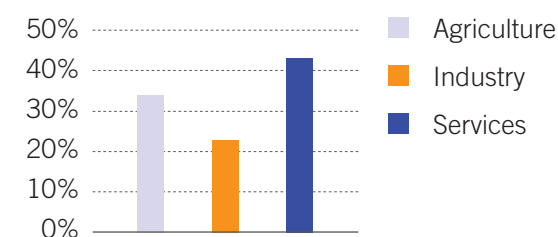
Employment-to-population ratio (15+ years)



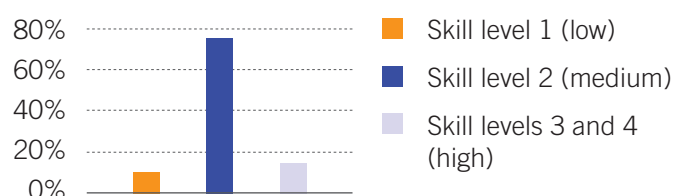
Unemployment



Employment by sector (15+ years)



Employment by occupation

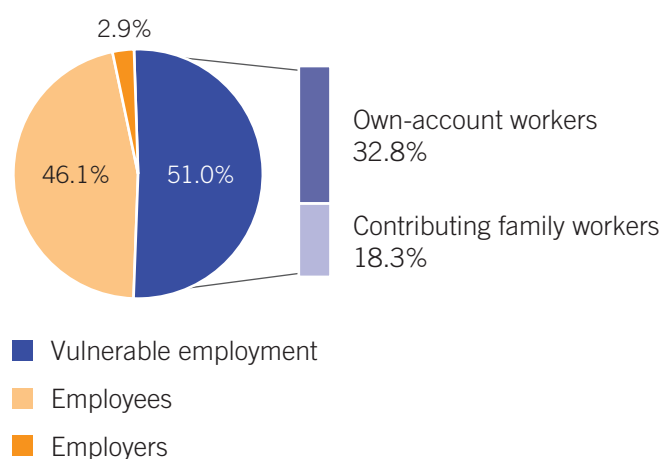


Note: ILO estimates. Labour force participation rate and unemployment: aged 15 years and older. Youth unemployment: aged 15–24 years. Employment by occupation: skill level 1 (low) for elementary occupations; skill level 2 (medium) for clerical, service and sales workers, skilled agricultural and trade 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 Thailand as of 2017 accounts for 51 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 Thailand has a medium World Risk Index score because of its medium exposure to natural hazards and partial institutional capacity to cope and adapt. Part of the country's vulnerability is due to the 2.9 per cent of the total population who lived in the 10.3 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 disasters⁷ and associated damage costs between the 1960s and the 2010s (Fig. 5). The natural disasters in that time were mostly tropical cyclones, storms, floods, landslides, droughts and cold waves which resulted in more than 5,800 deaths (1962–2017). 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.

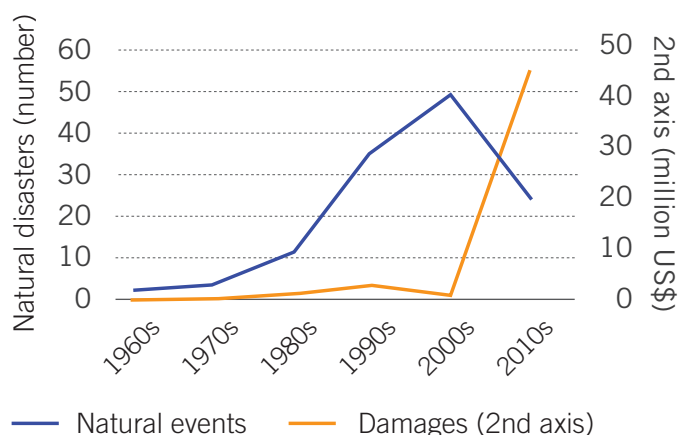
4. Bündnis Entwicklung Hilft and United Nations University: *World risk report 2016* (Berlin, 2016), <http://weltrisikobericht.de/english/>.

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 Thailand, 1960s–2010s

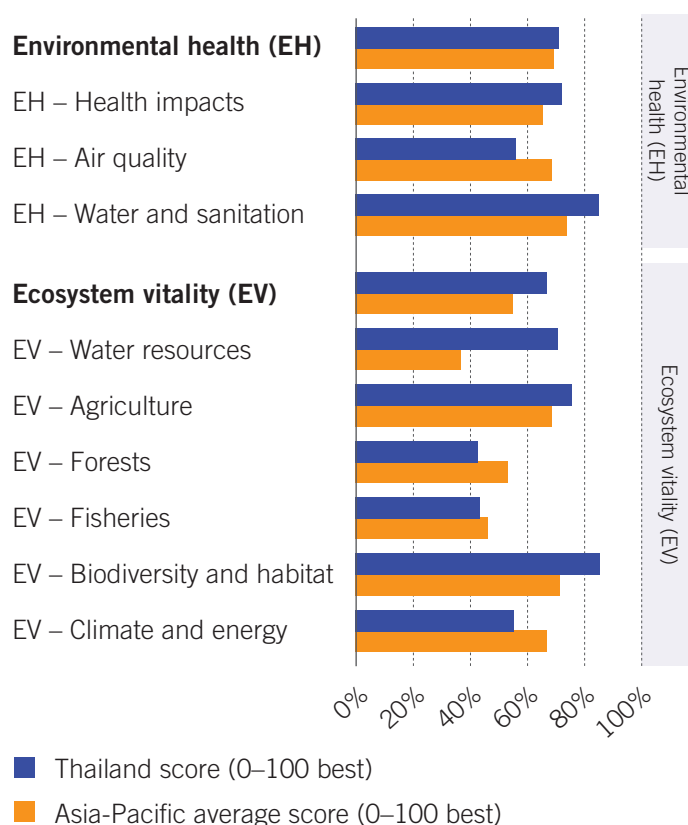


Note: Natural events include climatological, hydrological and meteorological disasters. 2010s data are only for the first half of the decade.

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

Thailand ranks 91 of 180 countries in the Environmental Performance Index (EPI), with a score of 69.54 (with 0 furthest from the high-performance benchmark target of 100). Thailand outperforms the average score for Asia and the Pacific (Fig. 6) in the majority of the EPI categories, including health impacts, water and sanitation, water resources, agriculture, and biodiversity and habitat. Still, there is room for improvement, especially in environmental health (in air quality) and ecosystem vitality (in forests, fisheries and climate and energy). Action to improve 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 Thailand.

Figure 6. Environmental Performance Index 2016 for Thailand



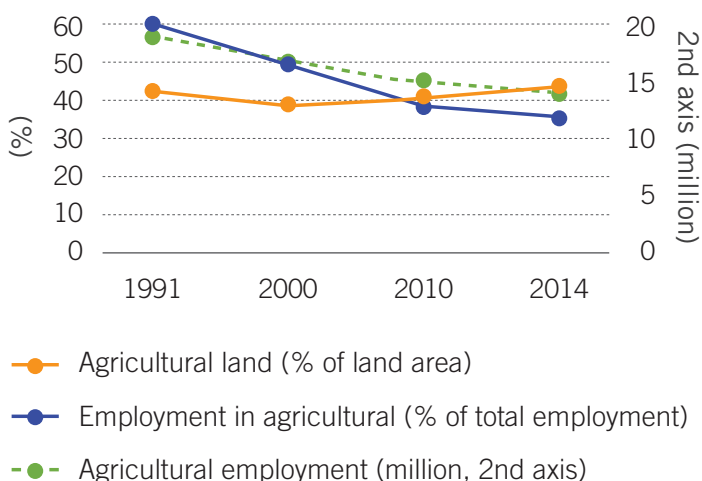
Note: Score 0–100 best. Asia-Pacific: Each score is an average of all data for ILO member States in the region, excluding four countries with no data (Cook Islands, Marshall Islands, Palau and Tuvalu).

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 2 per cent in 2015. The share of agricultural land in total land area increased by 1.2 percentage points between 1991 and 2014 to reach 43.3 per cent, while agricultural employment dropped from 18.7 million to 13.9 million people. The share of agricultural employment in total employment fell by approximately 24.4 percentage points due to the combination of job losses in the sector and job creation in other sectors (Fig. 7). Forest area increased modestly between 1990 and 2014, to approximately 32 per cent of total land area. During that same period, the share of terrestrial protected area slightly increased, reaching 18.8 per cent, while the proportion of marine protected area amounted to 5.2 per cent of total territorial waters (Fig. 8). In 2016, 33.2 per cent of total employment was in the agriculture, forestry and fishing sector (Fig. 9). Although reliance on agriculture is significant, there are opportunities

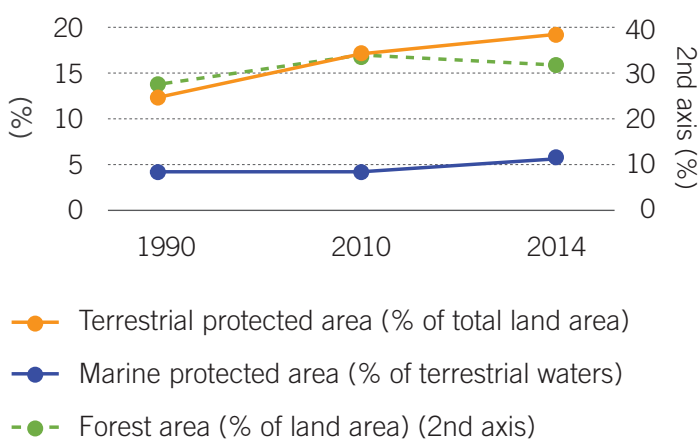
for job creation for sustainable production and organic farming. There will be greater prospects for employment opportunities if there is commitment to transition to a low-carbon and resource-efficient economy, such as jobs in resource management and environmental services.⁸

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



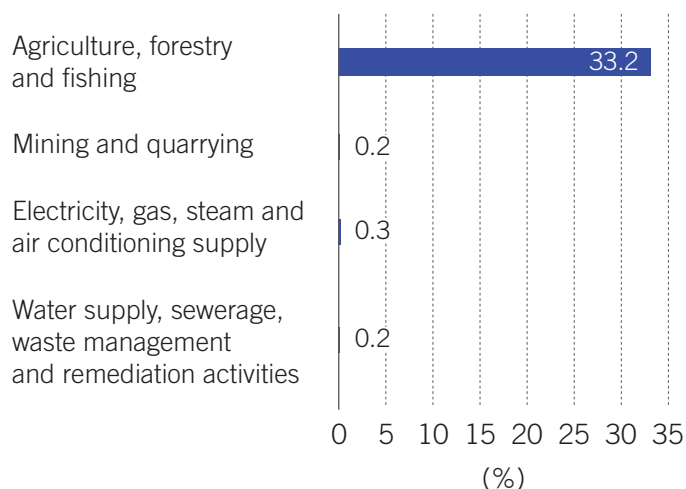
Source: ILO compilation using World Bank: World development indicators, last updated 20 July 2017, <http://databank.worldbank.org/>; ILOSTAT, <http://www.ilo.org/ilostat> (accessed 30 July 2017).

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 10.5 percentage points, to 97.8 per cent in 2015. There was a 6.1-percentage point increase in access to improved sanitation between 1990 and 2015, to 93 per cent (Fig. 10). Both, however, have not quite reached the ideal threshold of 100 per cent. According to a 2007 article,⁹ there have been improvements in waste disposal, moving from open dumping to sanitary landfilling. The survey conducted by the authors revealed a total of 425 waste disposal sites, 95 of which were landfills and 330 dumpsites. According to the World Bank, municipal solid waste generation in Thailand in 2008 was 1.76 kg per capita per day and is expected to increase to 1.95 kg per capita per day by 2025.¹⁰ The largest share of the waste in 2008 was organic (at 48 per cent), followed by paper (at 15 per cent) and plastics (14 per cent) (Fig. 11).¹¹ In 2000, only 14 per cent of the waste was recycled,¹² while the 2007 article¹³ highlighted that waste sorting for recycling occurs in three stages: prior to collection (household), by crews at collection and by waste pickers at the dumpsite. Only 0.2 per cent of the country's labour force was employed in water supply,

8. 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>.

9. C. Chiemchaisri, P.J. Juanga, and C. Visvanathan: "Municipal solid waste management in Thailand and disposal emission inventory", in *Environmental Monitoring and Assessment* (Vol. 135, No. 1–3, December, 2008).

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

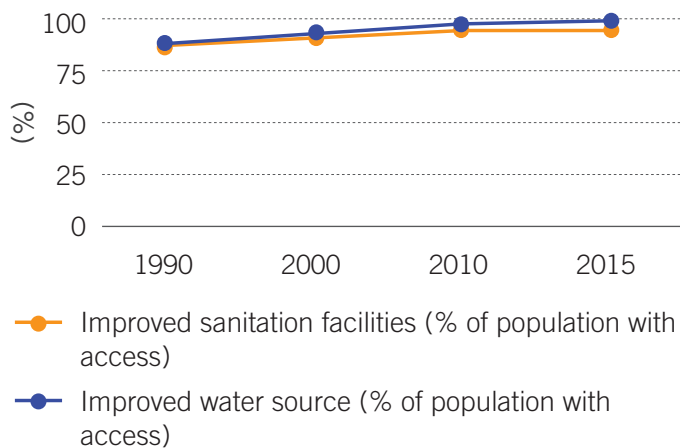
11. *ibid.*

12. *ibid.*

13. C. Chiemchaisri, P.J. Juanga, and C. Visvanathan: "Municipal solid waste management in Thailand and disposal emission inventory", in *Environmental Monitoring and Assessment* (Vol. 135, No. 1–3, December, 2008).

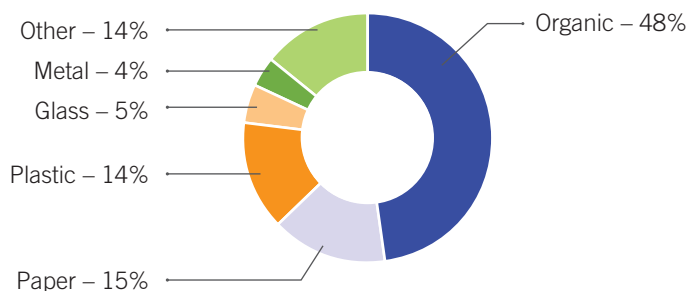
sewerage, waste management and remediation activities in 2016 (Fig. 9). Improvements in the municipal waste management system for collection, safe and sustainable disposal, recycling and composting practices will provide decent job opportunities in the future.

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

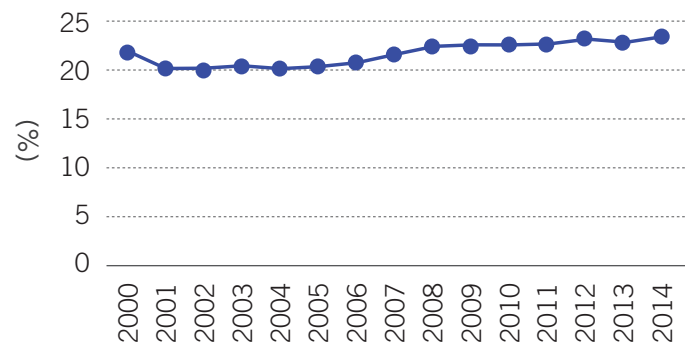


Source: ILO compilation using World Bank: *What a waste: A global review of solid waste management* (Washington, DC, 2012).

In 2014, 75.9 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.¹⁴ The share of renewable energy in total energy consumption has generally increased. In 2000, it was nearly 22 per cent but fell to 20 per cent in 2004; it then increased to 23.6 per cent in 2014 (Fig. 12). Renewable energy generation increased from 2011 to 2014 before declining in 2015 and is dominated by bioenergy (Fig. 13). In 2016, 100,000 people were employed in the renewable energy sector, 97 per cent of them in liquid biofuels and 3 per cent in solar photovoltaic (Fig. 14). The country's employment rate in the electricity, gas, steam and air

conditioning sector was only 0.3 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.

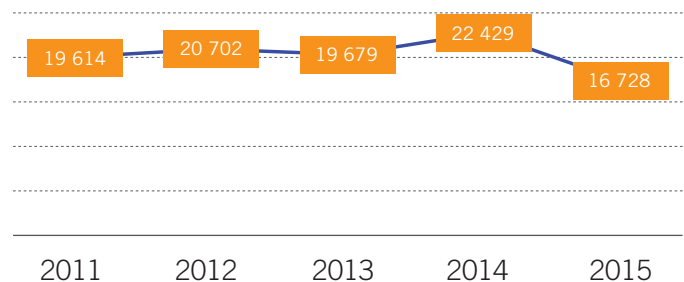
Figure 12. Renewable energy share in total final energy consumption, 2000–14



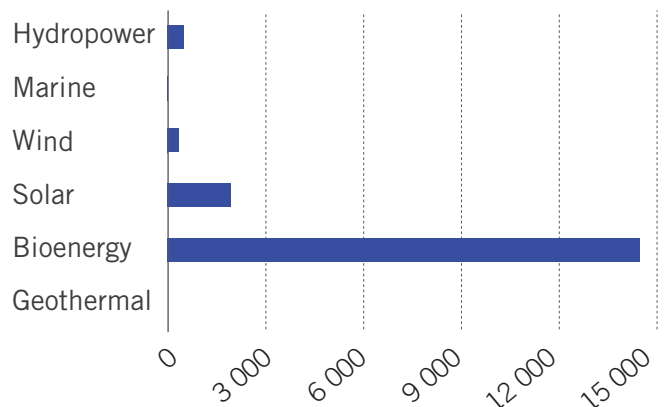
Source: ILO compilation using UN: SDG indicators: Global database (2017), <https://unstats.un.org/> (accessed 17 July 2017).

Figure 13. Renewable energy generation, 2011–15

Total renewable energy electricity generation (GWh)



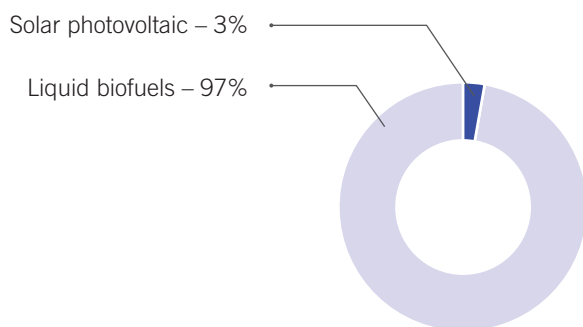
Renewable energy electricity generation (GWh), by technology 2015



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

14. 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>.

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 Thailand 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.

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