

# NEPAL

## 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<sup>1</sup> 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 Nepal



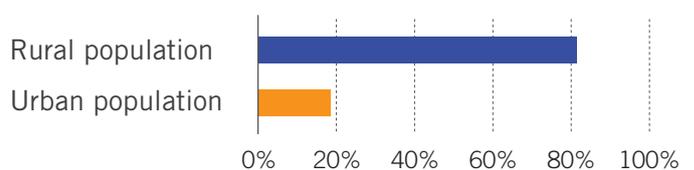
Nepal<sup>2</sup> is a landlocked country in South Asia and shares a border with China to the north and India to the south, east and west (Fig. 1). Its population is mostly rural and growing, with a fertility rate of 2.2 children and life expectancy at 70 years. Around 63 per cent of the population is of legal working age (15–64 years) (Fig. 2).

Figure 2. Demographics for Nepal

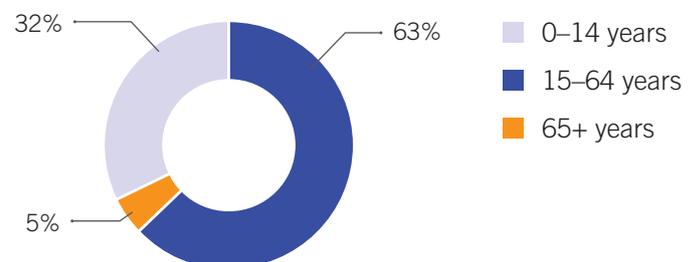
Population: 29 million



Population growth rate	Fertility rate	Life expectancy at birth
1.1%	2.2 children	70 years



Population age categories



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

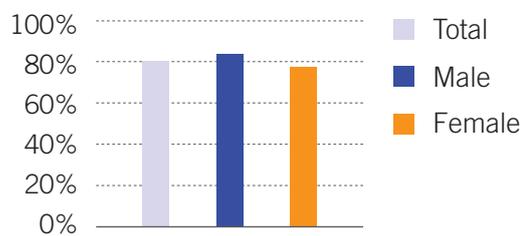
Source: ILO compilation using World Bank: World development indicators, last updated 20 July 2017, <http://databank.worldbank.org> (accessed 30 July 2017).

1. The fact sheet is based on available data only.  
2. Nepal became a member of the International Labour Organization in 1966.

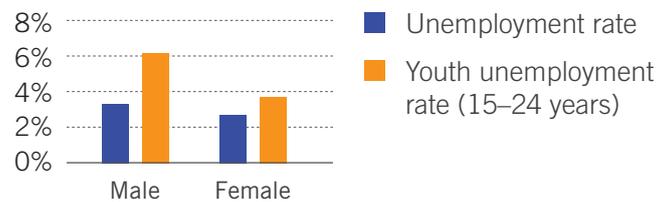
As of 2017, the labour force participation rate is 83 per cent and the employment-to-population ratio is 80.5 per cent. Both of those rates are more than 6.2 percentage points higher for men than for women. The total unemployment rate is 3 per cent, and the youth unemployment rate is 5 per cent, with the male youth unemployment rate 2.4 percentage points higher than the female rate. The youth (aged 15–24 years) not in employment, education or training rate was 23.4 per cent in 2008. Formal employment is heavily reliant on agriculture<sup>3</sup> and on medium-skilled occupations (Fig. 3).

**Figure 3. Basic employment statistics for Nepal, 2017**

#### Employment-to-population ratio (15+ years)



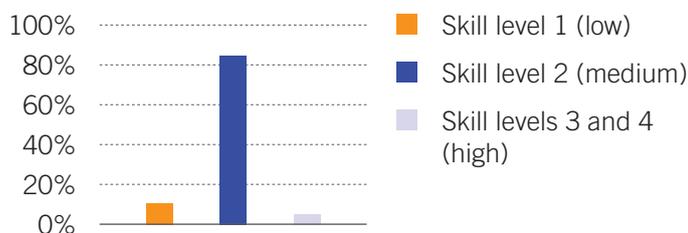
#### Unemployment



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



#### Employment by occupation

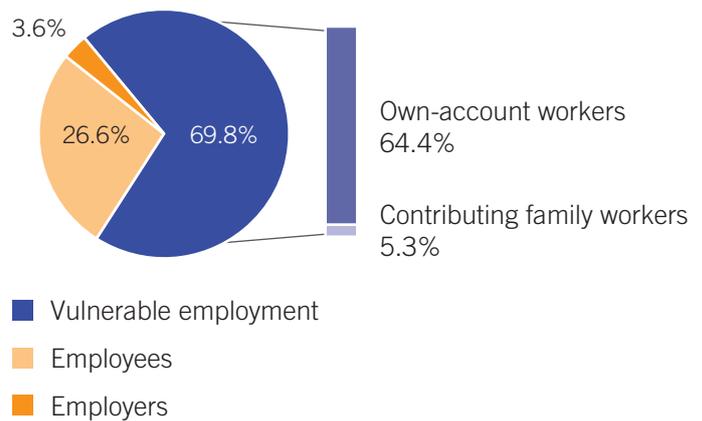


Note: ILO estimates; labour force participation rate and unemployment: aged 15 years and older. Youth unemployment: aged 15–24 years. Employment by occupation: skill level 1 (low) for elementary occupations; skill level 2 (medium) for clerical, service and sales workers, skilled agricultural and trade 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 Nepal accounts for 69.8 per cent of the labour force, with the majority of those workers having own-account worker 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*,<sup>4</sup> Nepal has a low World Risk Index score. It ranks 108 (of 171 countries) because of its very low exposure to natural hazards, despite its limited institutional capacity to respond and adapt. According to the Emergency Events Database,<sup>5</sup> there was a substantial increase in natural disasters<sup>6</sup> between the 1960s and the 2010s and a spike in damage costs in the 1990s due to a flash flood in 1993 (Fig. 5). The natural disasters in that time period were mostly storms, floods, landslides, avalanches, droughts, forest fires and cold waves which resulted in more than 9,300 deaths (1968–2016). 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.

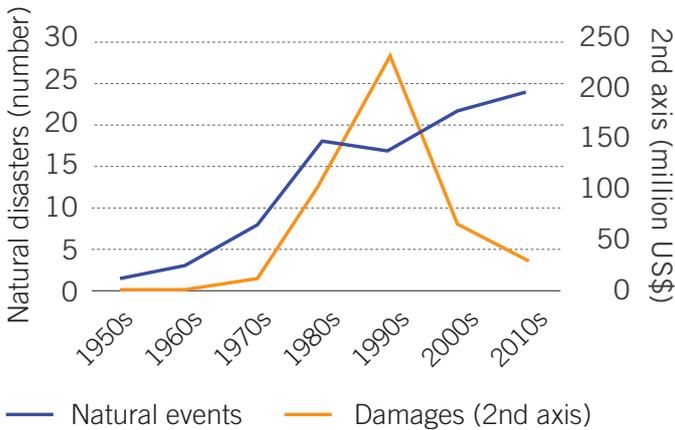
3. Informal employment (self-employed and contributing family members) is excluded from the agriculture calculations.

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

5. EM-DAT: The Emergency Events Database – Université catholique de Louvain (UCL) – CRED, D. Guha-Sapir – [www.emdat.be](http://www.emdat.be), Brussels, Belgium.

6. Climatological, hydrological and meteorological disasters.

**Figure 5. Natural disaster occurrence and damage costs in Nepal, 1960s–2010s**

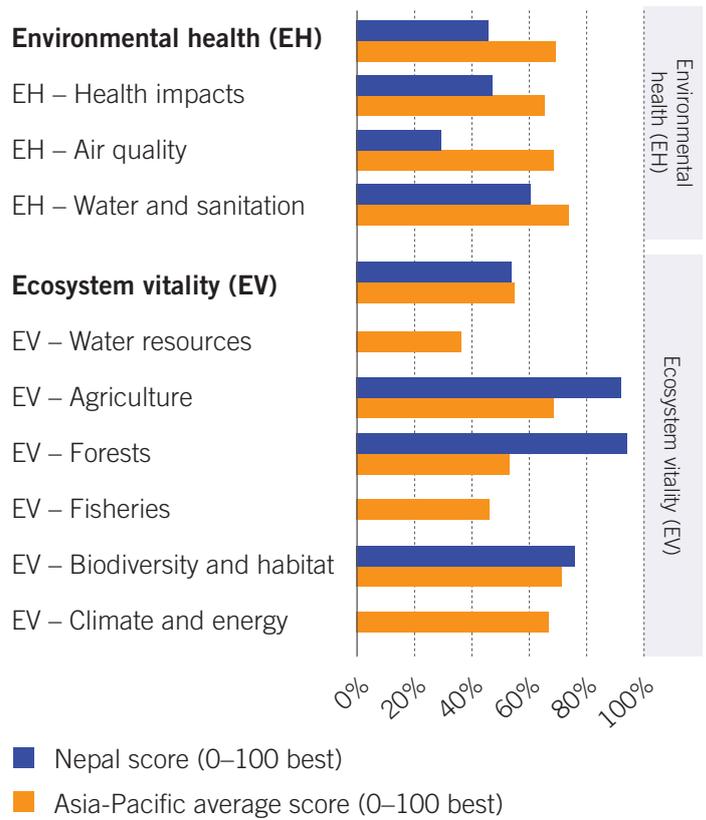


Note: Natural events include climatological, hydrological and meteorological disasters. 2010s data are only for the first half of the decade.

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

Nepal ranks 149 of 180 countries in the Environmental Performance Index (EPI), with a score of 50.21 (with 0 furthest from the high-performance benchmark target of 100). Agriculture, forests and biodiversity and habitat are the only environmental EPI categories in which Nepal outperforms the average score for Asia and the Pacific (Fig. 6).<sup>7</sup> There is significant room for improvement in most of the environmental areas, especially in environmental health (in health impacts, air quality, water and sanitation) and in ecosystem vitality (in water resources). 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 the country.

**Figure 6. Environmental Performance Index 2016 for Nepal**



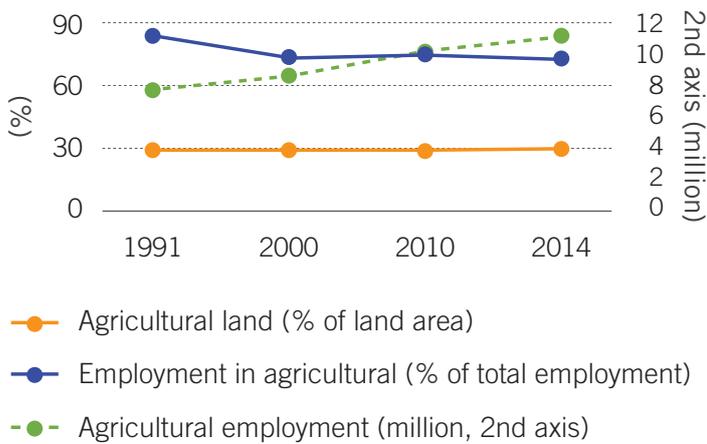
Note: Score 0–100 best. Nepal: No score for EV–Fisheries and EV–Climate and energy due to lack of data. Asia-Pacific: Each score is an average of all data for ILO member States in the region, excluding four countries with no data (Cook Islands, Marshall Islands, Palau and Tuvalu).

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 0.7 per cent in 2015. The share of agricultural land in total land area remained stable between 1991 and 2014, at around 28.8 per cent, while agricultural employment increased from 7.7 million to 11.1 million people in that same period. However, the share of agricultural employment in total employment decreased by approximately 11 percentage points during this period, due to more rapid growth in other sectors (Fig. 7). Although reliance on agriculture is large, there are opportunities for job creation for sustainable production and organic farming.

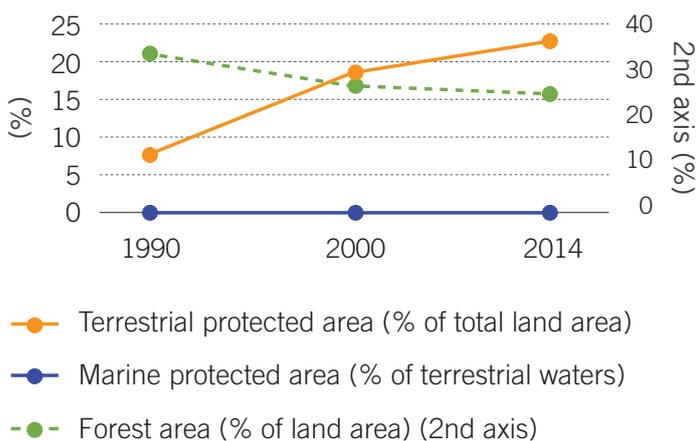


7. Due to lack of data, it was not possible to calculate the score for EV–Fisheries and Climate and energy.

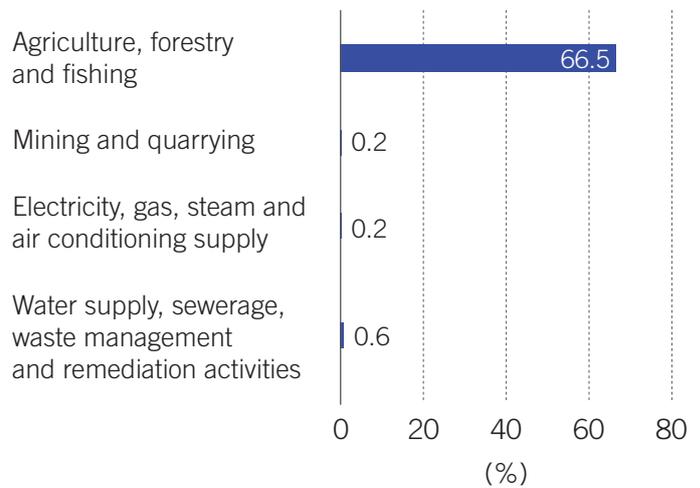
**Figure 7. Agricultural land and agricultural employment, 1991-2014**

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).

The share of forest area in total land area declined between 1990 and 2014, to approximately 25.4 per cent, while the terrestrial protected area increased, to 22.9 per cent (Fig. 8). In 2013, 66.5 per cent of total employment was in the agriculture, forestry and fishing sector (Fig. 9). There will be greater prospects for employment opportunities with commitment to transition to a low-carbon and resource-efficient economy, such as jobs in resource management and environmental services.<sup>8</sup>

**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, 2013**

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 25.7 percentage points, to 91.6 per cent in 2015. There was more than a 41.3-percentage point increase in access to improved sanitation from 1990 to 45.8 per cent in 2015 (Fig. 10). Both rates, however, are still below the ideal threshold of 100 per cent. According to the World Bank and based on the most recent available data,<sup>9</sup> municipal solid waste generation in Nepal in 2008 was 0.12 kg per capita per day and is expected to increase to 0.7 kg per capita per day by 2025. In urban areas in 2003, 94 per cent of the waste was collected. Most of the waste in 2008 was organic (at 79 per cent), followed by paper and other (at 7 per cent each) (Fig. 11).<sup>10</sup> According to the Asian Development Bank,<sup>11</sup> only six municipalities use sanitary landfill sites for final disposal, and 45 are practising open dumping, including riverside and roadside dumping. Only 0.6 per cent of the country's labour force was employed in water supply, sewerage, waste management and remediation activities in 2013 (Fig. 9). Improvement in water and sanitation access and the much-needed implementation of a municipal waste management system for collection, safe and sustainable disposal, recycling and composting practices will provide decent job opportunities in the future.

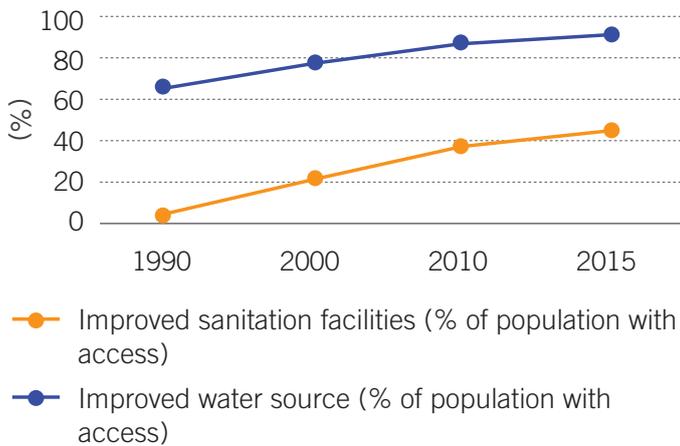
8. Organisation for Economic Co-operation and Development: The jobs potential of a shift towards a low-carbon economy, *OECD Green Growth Papers*, No. 2012/01 (Paris, 2012), <http://dx.doi.org/10.1787/5k9h3630320v-en>.

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

10. *ibid.*

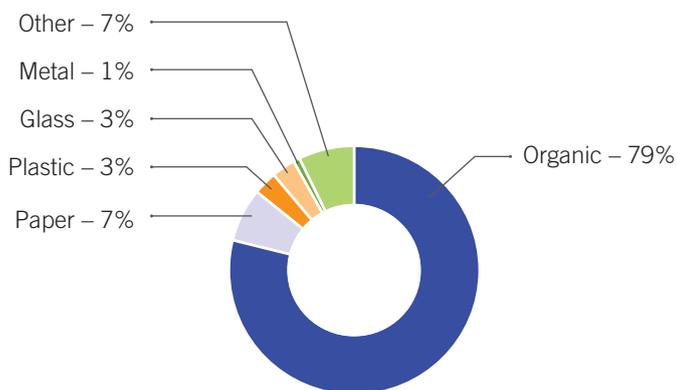
11. Asian Development Bank: *Solid waste management in Nepal: Current status and policy recommendations* (Manila, 2013), pp. x-xi, <https://www.adb.org/sites/default/files/publication/30366/solid-waste-management-nepal.pdf>.

**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, 2008**

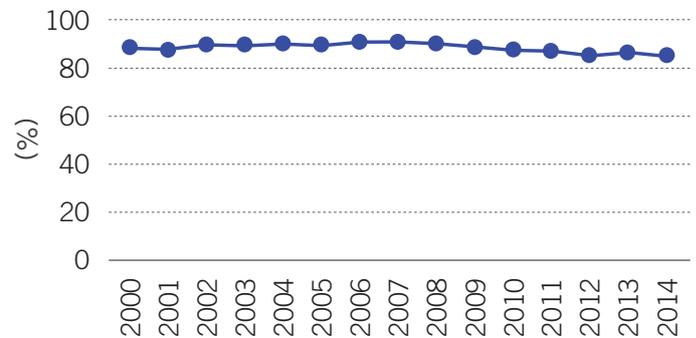


Source: ILO compilation using World Bank: *What a waste: A global review of solid waste management* (Washington, DC, 2012).

In 2014, only 26.1 per cent of the country's population relied primarily on clean fuel and technology, in the sense that they do not create indoor pollution within the home.<sup>12</sup> The share of renewable energy in total energy consumption has not kept pace with overall consumption, but remains quite high. In 2000, it was 88.3 per cent but decreased to 84.4 per cent in 2014 (Fig. 12). Renewable energy generation has fluctuated, but since 2012 it has been in decline, with hydropower the main source in 2015 (Fig. 13). In 2016, some 1,100 people were employed in the renewable energy sector, with 100 per cent of them in biogas (Fig. 14). The country's employment rate in the electricity, gas, steam and air conditioning sector was only 0.3 per cent

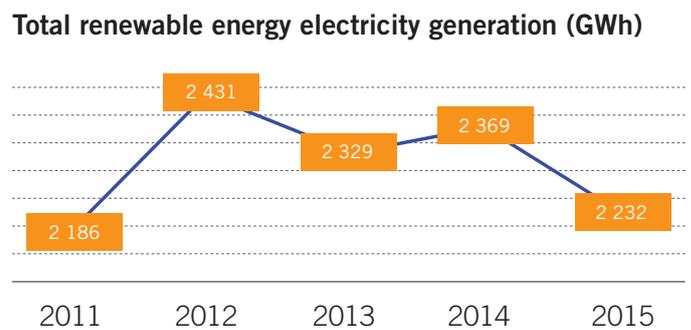
in 2013 (Fig. 9). With a push for increasing reliance on renewable energy, there will be greater potential for decent job opportunities in the future.

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

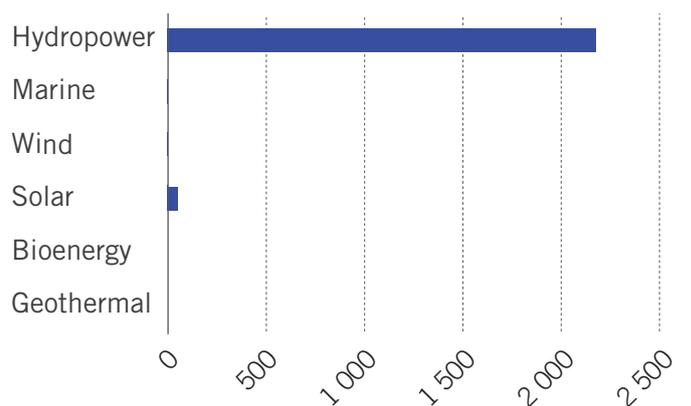


Source: ILO compilation using UN: SDG indicators: Global database (2017), <https://unstats.un.org/> (accessed 17 July 2017).

**Figure 13. Renewable energy generation, 2011–15**



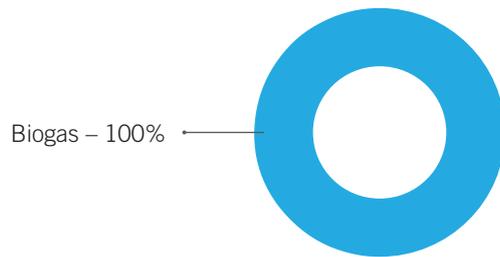
**Renewable energy electricity generation (GWh), by technology 2015**



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

12. 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 Nepal 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.

Disclaimer: The designations used in International Labour Organization publications, which are in conformity with United Nations practice, and the presentation of material therein do not imply the expression of any opinion whatsoever on the part of the International Labour Organization concerning the legal status of any country, area or territory or of its authorities, or concerning the delimitation of its frontiers