Closing the Human Capital Gap in Energy Access: Scene-Setter

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IRENA’S KNOWLEDGE BASE ON EMPLOYMENT

Leading the work on jobs since 2011
GROWTH OF RENEWABLE ENERGY JOBS TO DATE

- Large Hydropower
  - 7.14 Million jobs
  - 8.23 Million jobs
  - 9.33 Million jobs
  - 9.71 Million jobs
  - 9.79 Million jobs
  - 10.34 Million jobs

- Solar Photovoltaic
  - 5.7 Million jobs
  - 6.5 Million jobs
  - 7.7 Million jobs
  - 8.1 Million jobs
  - 8.3 Million jobs
  - 8.8 Million jobs

- Bioenergy
  - 2012: 1.36 Million jobs
  - 2013: 2.27 Million jobs
  - 2014: 2.50 Million jobs
  - 2015: 2.77 Million jobs
  - 2016: 3.09 Million jobs
  - 2017: 3.37 Million jobs

- Wind Energy
  - 2012: 2.40 Million jobs
  - 2013: 2.50 Million jobs
  - 2014: 2.99 Million jobs
  - 2015: 2.88 Million jobs
  - 2016: 2.74 Million jobs
  - 2017: 3.06 Million jobs

- Solar Heating/Cooling
  - 2012: 0.75 Million jobs
  - 2013: 0.83 Million jobs
  - 2014: 1.03 Million jobs
  - 2015: 1.08 Million jobs
  - 2016: 1.16 Million jobs
  - 2017: 1.15 Million jobs

- Others
  - 2012: 0.89 Million jobs
  - 2013: 0.50 Million jobs
  - 2014: 0.76 Million jobs
  - 2015: 0.94 Million jobs
  - 2016: 0.83 Million jobs
  - 2017: 0.81 Million jobs

Source: IRENA jobs database.
FUTURE GROWTH IN RENEWABLE ENERGY JOBS

28.8 million jobs in 2050

10.3 million jobs in 2017

International Renewable Energy Agency (IRENA)
ADDRESSING THE SKILLS AND LOCAL INDUSTRY DIMENSION

50 MW Solar PV: 229 055 person days

- Project Planning: 1%
- Procurement: 22%
- Manufacturing: 2%
- Transport: 17%
- Installation: 56%
- Grid Connection: 2%
- O&M: 56%
- Decom.: 2%

- Factory workers and technicians: 64%
- Engineers: 12%
- Admin & Management: 5%
- Marketing and sales: 5%
- Logistics: 4%
- Health and safety: 4%
- Quality control: 4%
- Regulation and standardisation experts: 4%
- Operators: 8%
- Technical personnel: 8%
- Administrative and accountant personnel: 1%
- Lawyers, experts in energy regulation and management: 1%
- Construction workers: 48%
- Industrial, electrical and telecommunication engineers: 15%
- Safety experts: 19%
Closing the human capital gap in the off-grid sector

- Developing enabling conditions for off-grid renewable energy deployment with a focus on long-term sustainability.
- Mapping skills requirements across the value chain for different off-grid renewable energy technologies.
- Strengthening policies and measures focused on training and skills development.
- Integrating gender perspective in training and capacity building efforts.
- Improving data collection efforts in the off-grid sector focusing on both quantitative and qualitative aspects.
Gender and Renewable Energy survey

Complete the survey and contribute to address the data and knowledge gap on gender in renewable energy!

The findings from the survey will contribute to, and will provide quantitative and qualitative insights on the current status of women’s participation in the renewable energy sector, existing challenges and potential solutions to improve gender diversity.

www.irena.org/gendersurvey

#Renewables4Development