Theme 4

Green skills

ACQF connects regional and national QF

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01

Green transformation

Future of Jobs

Reskilling needs

WORLD ECONOMIC FORUM

44%

of workers' core skills are expected to change in the next five years

Source: World Economic Forum, *Future of Jobs Report 2023.*

Almost half of core skills are expected to change. Image: World Economic Forum

https://www.weforum.org/agenda/2023/05/future-of-jobs-2023-skills
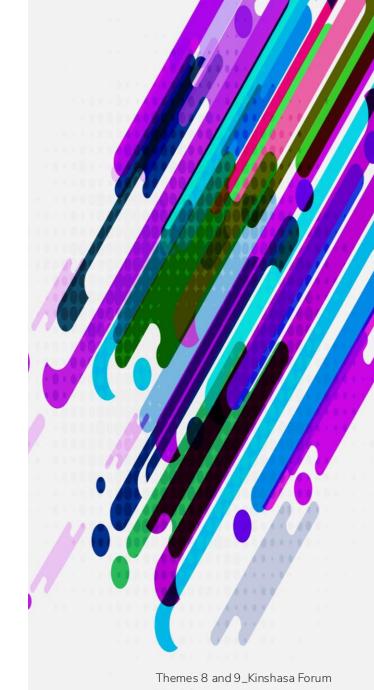
Green skills

Definitions

Green skills – an important area of debate and policy action and which has become a priority in research (quantitative and qualitative) and social communication. Several international organisations are working on the analysis and taxonomies related to green competences.

Cedefop defines green skills as "the knowledge, skills, values and attitudes needed to live, work and act in economies and societies that seek to reduce the impact of human activity on the environment".

Skills for the green economy consist of:

➢ **transversal skills, linked to sustainable thinking and acting, relevant to all economic sectors and professions;**

➢ **specific skills needed to adapt or implement standards, processes and services to protect ecosystems and biodiversity and reduce energy, materials and water consumption;**

➢ **highly specialised skills needed to develop and implement green technologies such as renewable energy, wastewater treatment or recycling;**

Skills for the green economy are also referred to as skills for green jobs, skills for the green transition or green skills.

Themes 8 and 9_Kinshasa Forum

Green-enabled recovery and growth

- Green with a touch of brown is the colour of recovery
- Greening of the economy and society – at heart of post-Covid19 recovery strategies and growth in many countries
- **Green growth opportunities abound across massive sectors such as energy, mobility, and agriculture**.
- Just as digital-economy companies have powered stock-market returns in the past couple of decades, so green-technology companies could play that role in the coming decades.
- EU, US, China, Japan, South Korea's Green New Deal, Canada, Africa – green stimulus packages

<u>Major implications for jobs, education, training and skills;</u>

- need to develop **environmentally friendly** technologies, production processes, products, services, and business models across all sectors of the economy;
- It changes the way **traditional occupations** are performed (and taught) and creates **new occupations**;
- It creates a demand for new skills and knowledge and the need to **upskill** and **reskill** large numbers of people;
- need to increase **environmental awareness** in education and training curricula;
- requires close interaction between education and training systems and their environments to build **skills ecosystems** in which skills development goes hand in hand with economic, technological and social change.

Greener jobs future

- To compensate for expected job losses, global efforts to decarbonize in response to the climate crisis are giving rise to a wealth of green jobs across sectors and industries.

- A green-recovery scenario could generate around 3.5% of additional global GDP growth and a net employment gain of 9 million new jobs each year, according to International Energy Agency data.

- The green transition could **create 30 million jobs globally in clean energy, efficiency and low-emissions technologies by 2030.**

- But while there has been continued growth in green jobs for the past four years, **reskilling and upskilling towards green skills is not keeping pace.**

https://www.weforum.org/agenda/2023/04/future-jobs-2023-fastest-growing-decline

Green skills share – selected countries Africa / and All-Africa

Green Share	Kenya	Nigeria	South Africa	Angola	Cameroon	Ghana	Africa
2022	2,46%	1,75%	1,53%	4,72%	2,95%	2,62%	1,58%
2023	3,08%	1,90%	1,83%	5,28%	5,27%	2,40%	1,73%
2024	3,24%	2,22%	1,94%	6,59%	6,12%	6,32%	1,90%

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Green skills share (%)
Updated data: 31/08/2024

Country	2022	2023	2024
Gambia	13,48%	10,67%	18,03%
Madagascar	13,98%	9,18%	15,87%
Guinea	16,62%	23,94%	11,45%
Mauritania	3,41%	4,67%	10,40%
The Republic of Congo	6,51%	5,08%	10,00%
Chad	8,37%	6,89%	9,64%
Malawi	5,80%	5,80%	9,62%
Liberia	6,36%	8,28%	9,44%
Benin	6,32%	6,31%	9,14%
Mozambique	4,18%	5,12%	9,09%
Togo	2,32%	9,06%	8,83%
South Sudan	4,86%	5,67%	8,78%
Burundi	5,71%	6,85%	8,51%
Guinea - Bissau	5,71%	9,02%	8,33%
Somalia	3,00%	4,63%	7,68%
Mali	6,71%	7,17%	7,59%
Niger	2,63%	5,24%	7,13%
Angola	4,72%	5,28%	6,59%
Laos	2,36%	5,53%	6,58%
Tanzania	6,64%	7,10%	6,43%
Belize	2,59%	3,18%	6,42%
Ghana	2,62%	2,40%	6,32%
Gabon	1,82%	3,09%	6,28%
Cameroon	2,95%	5,27%	6,12%
Central African Republic	4,03%	2,76%	6,04%
Burkina Faso	6,36%	6,13%	5,99%
Côte di'Ivoire	5,61%	6,84%	5,91%
Zambia	3,68%	5,02%	5,91%
Zimbabwe	3,59%	2,73%	5,86%
Libya	2,42%	4,37%	5,73%
Rwanda	4,56%	6,60%	5,39%
Lesotho	2,23%	4,18%	5,32%
Uganda	3,75%	4,74%	5,22%
Ethiopia	4,81%	5,49%	5,17%
Senegal	5,05%	4,68%	4,70%
Eritrea	5,08%	3,57%	4,17%
Sudan	4,07%	5,63%	4,10%
Kenya	2,87%	3,13%	3,08%
Namibia	1,43%	1,90%	2,90%
Tunisia	2,51%	2,53%	2,85%
Nigeria	1,75%	1,90%	2,22%
South Africa	1,53%	1,83%	1,94%
Djibouti	3,35%	3,69%	1,79%
Egypt	1,29%	1,53%	1,67%
Mauritius	1,81%	1,81%	1,66%
Algeria	1,13%	1,22%	1,65%
Botswana	4,62%	3,71%	1,50%
Morocco	1,15%	0,98%	1,20%
Sierra Leone	4,81%	2,50%	0,61%

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Greener occupations – All Africa

Based on online Job Vacancies (Big Data Analytics)

Africa - Green

Occupation	
Solar Engineer	
Solar Installer	
Waste / Recycling Coordinator	
Environmental Planner / Scientist	
Conservation Scientist	
Landfill Gas Technician	
Sustainability Specialist	
Environmental Compliance Specialist	
Alternative Energy Manager	
Safety Specialist / Coordinator	
Energy Broker	
Health and Safety Engineer	
Hazardous Materials Worker	
Water / Wastewater Engineer	
Fish Hatchery Manager / Technician	

0,00% 10,00% 20,00% 30,00% 40,00% 50,00% 60,00% 70,00% 80,00%

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Top 20 Green skills Africa

Skills / skill set	% (from 20)	Nº unique job postings
Waste Management	10,34%	20.494
ISO 14000 Series	8,90%	17.637
Renewable Energy	5,92%	11.743
Environmental Laws	5,30%	10.504
Environmental Protocols	5,08%	10.078
Climate Variability And Change	3,43%	6.807
Photovoltaics	2,40%	4.757
Energy Management	2,37%	4.696
Environmental Compliance	2,13%	4.220
Concentrix Solar	2,11%	4.189
Climate Change Adaptation	1,87%	3.716
Recycling	1,87%	3.704
Solar Systems	1,83%	3.623
Environmental Protection	1,78%	3.524
Energy Conservation	1,77%	3.514
Energy Consumption	1,48%	2.938
Environmentalism	1,30%	2.582
One-Line Diagram	1,27%	2.509
PVsyst	1,21%	2.397
Climate Resilience	1,15%	2.285

TOP 20 GREEN SKILLS AFRICA

Kenya: Green skills needed for selected occupations

Occupation	Green skill	Unique Job postings (Oct 22- Jul 23)
Electronics mechanics and servicers	solar panels	7
	solar energy	2
	environmental protection	2
Environmental engineers	environmental sustainability	32
	environmental protection	19
	sustainable procurement	9
	renewable energy	9
	sustainable business	7
	energy efficiency	7
	sustainable energy	5
	circular economy	4
	development economics	3
	climate smart agriculture	3
	green energy	2
	ecotourism	2
	clean energy	2
	carbon footprint reduction	2
	sustainable agriculture	1
	sustainability performance	1
	iso 14001	1
	hydroponics	1
	clean technology	1
	agroforestry	1
Metal production process controllers	iso 14001	2
Statistical, mathematical and related associate professionals	environmental protection	18
	clean energy	18
	energy efficiency	11
	green building	9
	sustainable materials	6
	sustainable building	6
	sustainable agriculture	6
	renewable energy	5
	circular economy	5
	biomass	4
	agroforestry	4
	sustainable energy	3
	hydropower	1
	biofuels	1

Top 20 Green Skills Kenya

Skills / skill set	% (from 20)	Nº unique job postings
renewable energy	22,95%	2.598
agroforestry	9,08%	1.028
clean energy	6,54%	740
sustainable business	6,47%	732
solar energy	6,27%	710
circular economy	5,64%	638
environmental sustainability	5,48%	620
development economics	5,05%	572
biomass	4,22%	478
solar systems	3,45%	390
environmental protection	3,41%	386
energy efficiency	3,41%	386
sustainable energy	3,38%	382
sustainable agriculture	2,99%	338
climate smart agriculture	2,54%	288
green energy	2,31%	262
iso 14001	2,19%	248
agroecology	1,80%	204
solar products	1,63%	184
electric vehicle	1,18%	134

Thank you