



“Climate change, just transition and labor markets in MENA Countries”

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What is climate change?

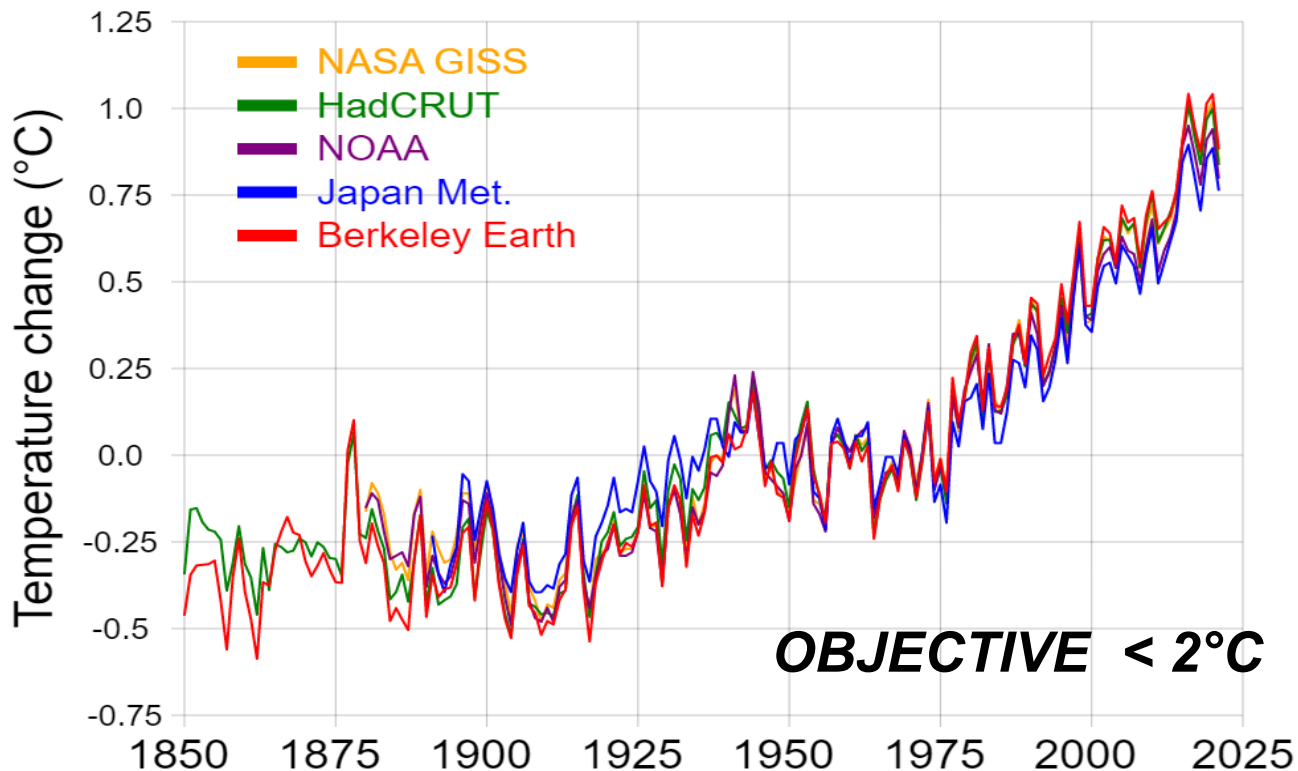
*“Climate change refers to a **change in climate** that is attributed directly or indirectly to **human activity** that alters the composition of the global atmosphere and is in addition to natural climate variability observed over comparable time periods”
(UNFCCC)*



Manifestation of climate change: Ground temperatures

2021: +1.11 °C
2020: +1,20 °C
2019: + 0,98°C
2018: +1,18°C
2016: +1,01°C
2017: +0,88°C
2015: +0,85°C
2010: +0,74°C
2014: +0,72°C
1998: +0,69°C
2007: +0,65°C
2002: +0,64°C
2005: +0,64°C
2013: +0,64°C
2009: +0,62°C

Global average temperature change



The consequences of Climate Change (Goldman and Sachs, 2019)

- **More frequent, intense and longer lasting heat waves that harm human health**, especially among vulnerable populations, reduce productivity, disrupt economic activity and harm agriculture.
- **More frequent destructive weather events (extreme events)**, including storms, winds, floods and fires.
- **Alter disease patterns, which could adversely affect human health.** Warmer temperatures could cause disease vectors to migrate from the tropics to areas where people have less immunity.
- **Changing agricultural patterns, affecting food availability.** Warmer temperatures and changing rainfall patterns could reduce yields and nutritional quality, as well as alter growing seasons and agricultural areas around the world.
- **Pressure on water availability and quality**, with wide potential consequences. The World Health Organization (WHO) estimates that half of the world's population will live in water-stressed areas by 2025.





GLOBAL PLATFORM FOR
DISASTER RISK REDUCTION



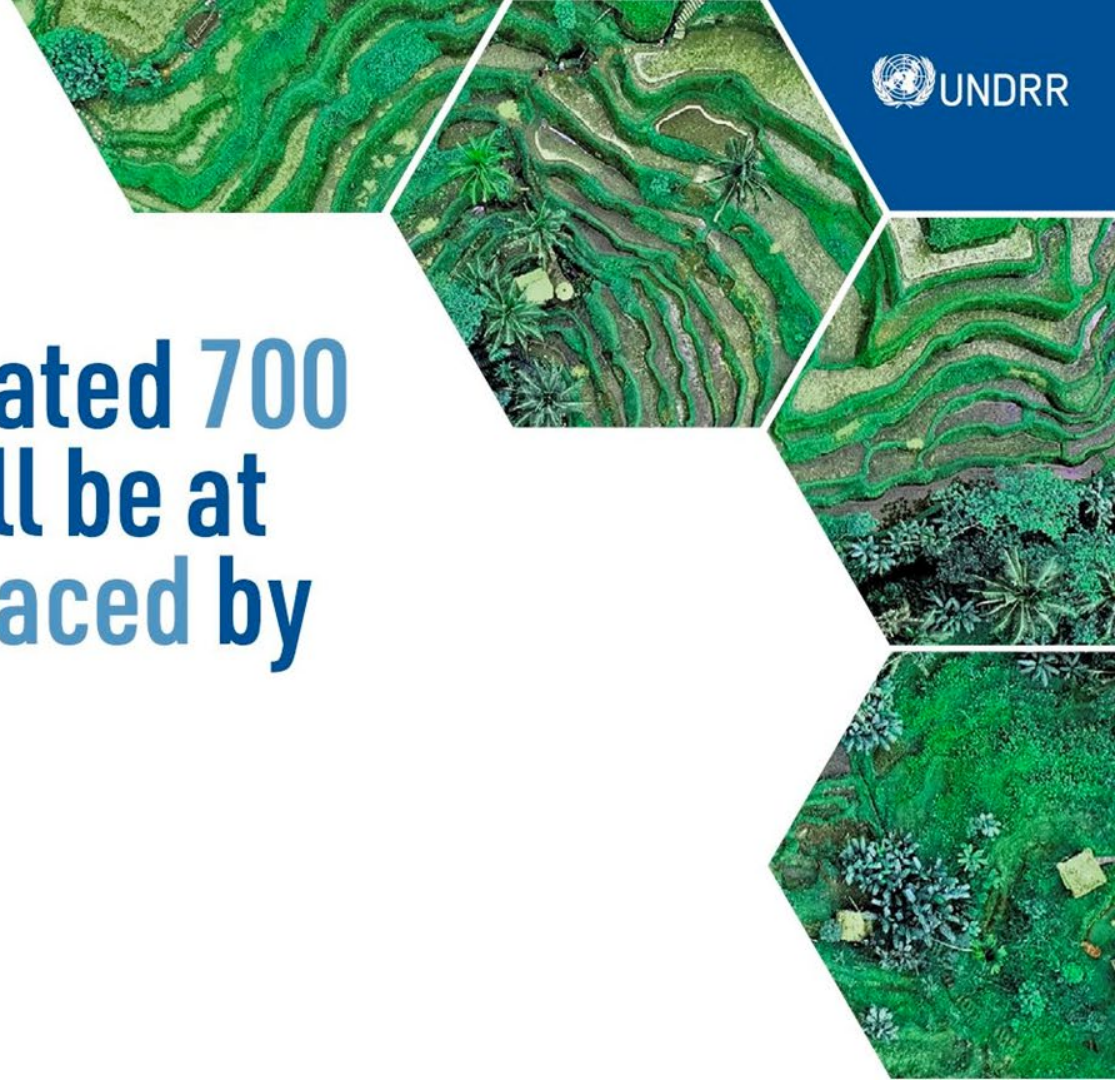
INDONESIA
23-28 MAY 2022



By 2030, an estimated 700 million people will be at risk of being displaced by drought.

Source: UNCCD - Drought in Numbers 2022

#GPDRR2022



There could be 1.2 billion climate refugees by 2050. Here's what you need to know

Sustainability | Article | May 26, 2022 | ⌚ 7 min read

Extreme weather, rising seas and damaged ecosystems could threaten the safety and livelihoods of billions of people. A collective effort is needed to find solutions to help climate change refugees: the “world’s forgotten victims” of climate change.

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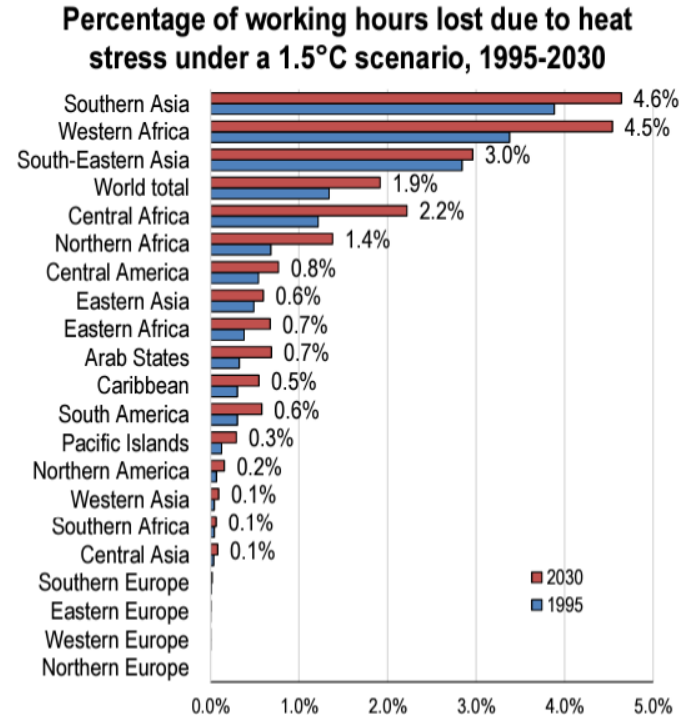


As the threat of climate change increases globally, it's no surprise that living conditions are becoming more precarious around the world.

EFFECTS OF CLIMATE CHANGE ON THE LABOR MARKETS

Heat stress reduce workable hours in most regions

- Due to warming temperatures, some areas will become too hot to work.
- Under a conservative scenario of warming at 1.5 degrees, 1.9 per cent of work hours will be lost in 2030 (up from 1.3 per cent in 1995).
- Agriculture and construction will be hit the hardest



Source: ILO calculations based on ILOStat and HadGEM2-ES and GFDL-ESM2M climate models.

EXAMPLE : HEAT WEAVES IN THE WORLD 2023-2024

During the period studied, 6.3 billion people (nearly 80% of the world's population) experienced at least 31 days of extreme heat (defined as temperatures hotter than 90% of those observed in their region during the 1991–2020 period), a phenomenon that has been made twice as likely due to climate change.

Suriname experienced 182 days of extreme heat compared to an estimated 24 days in the absence of climate change;

Ecuador (180 days instead of 10),

Guyana (174 days compared to 33),

El Salvador (163 days instead of 15),

Panama (149 days instead of 12).

Structural effect (effects on some sectors - structure of the employment will change)

Agriculture:

- Climate change exacerbates desertification and reduces water availability, leading to decreased agricultural productivity.
- This decline threatens food security and the livelihoods of those dependent on farming

Tourism:

- Rising temperatures and sea levels negatively impact coastal tourism, a significant contributor to GDP in countries like Morocco and Egypt.
- Infrastructure damage and reduced tourist appeal lead to job losses in the sector

Energy Sector:

- The transition from fossil fuels to renewable energy sources is reshaping employment structures.
- While traditional energy jobs decline, opportunities in renewable energy are emerging, necessitating workforce reskilling

Changes in worker productivity due to climate change

Heat Stress: Increased temperatures lead to heat stress, reducing labor capacity and productivity, especially in outdoor and manual labor sectors. This results in economic losses and heightened health risks for workers.

Health Impacts: Climate-induced health issues, such as respiratory problems from poor air quality and the spread of vector-borne diseases, increase absenteeism and decrease productivity.

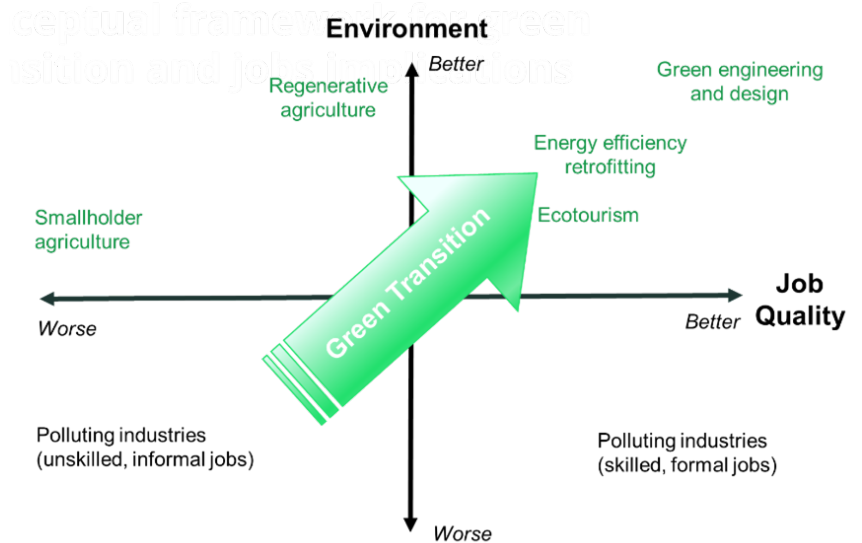
Agricultural Productivity: Shifts in climate patterns affect crop yields, leading to reduced agricultural output and income, impacting the livelihoods of those in the sector.

Economic Implications: Overall, climate change poses significant challenges to labor productivity, necessitating adaptive measures to mitigate its adverse effects on the workforce and economy.



Climate change impact informal labor markets

- There are around 2 billion people, representing 61.2 percent of the world's employed population, working in informality globally
- It is in the informal sectors, where workers and employers don't have access to social protection, training and skill building, and where support and incentives to adapt business models are lacking.
- It is needed to develop innovative approaches to ensure all parts of society are part of building a low-carbon economy.



What are the effect of labor market regulations and policies to tackle climate change?

- Policies to influence the demand for green jobs
- Programs to develop green skills for the future of the green jobs
- Fiscal policy –stimulus packages, strategies to create fiscal space
- Social protection policies (protecting the most vulnerable)
- Skills building and upgrading, training, education, and entrepreneurship development is necessary to unleash the job creation potential of a low-carbon economy
- Sectoral policies for different jobs: agriculture, services, environmental industries and services
- Migration policies
- Greening TVETs

Methodologies to capture the impact of climate change on labor market?

- Different models to capture the effects of climate change on labor market
- Weather modelled impacts of expected temperature changes and rainfall on jobs on different sectors
- Modelled impacts of climate change on the economy and labour markets
- Modelled projections of transition policies on the economy and the labour market (via public investments and fiscal incentives), particularly on technology choices (capital/labour ratios).
- Modelled projections for most vulnerable jobs impacted by climate change
- Modelled projections for green jobs and green skills

Is the gender perspective important on the impacts of climate change on labor market?

Are women disproportionately affected by climate change?

Increased volatility and socio-economic unrest resulting from climate change will put women and girls at risk and undermine investments and progress made in women's empowerment at the global level. During the last decades. Around 80% of current climate refugees are women, and women are 14 times more likely to die than men in climate-related disasters.

Can women be agents of change who can accelerate and scale up climate action?

We cannot succeed in achieving the greatest transformation of our time without the full participation of women and men. When women are involved in decision-making and designing solutions, these activities are more likely to understand and respond to women's needs.

Can green economy transition empower women?

The transition to a restorative and sustainable economy represents a significant economic opportunity. With the right investments in education and training and a commitment to providing opportunities for women to participate in decision-making and green industries, this transition can be a source of social and economic empowerment for women.

How to adopt the “Just Transition”?

The “Just Transition framework” adopted by governments, workers and employers:

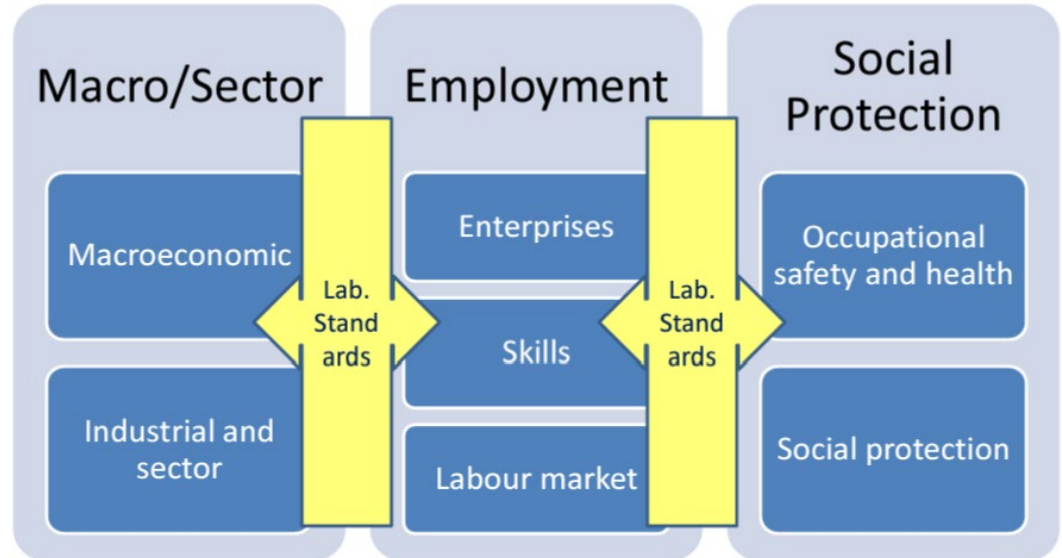
- Macroeconomic and growth policies Industrial and sectoral
- Enterprise policies
- Development and upgrading of skills
- Social protection schemes
- Active labour market policies
- Rights Social dialogue and tripartism
- Occupational safety and health

Guidelines for a Just Transition for all

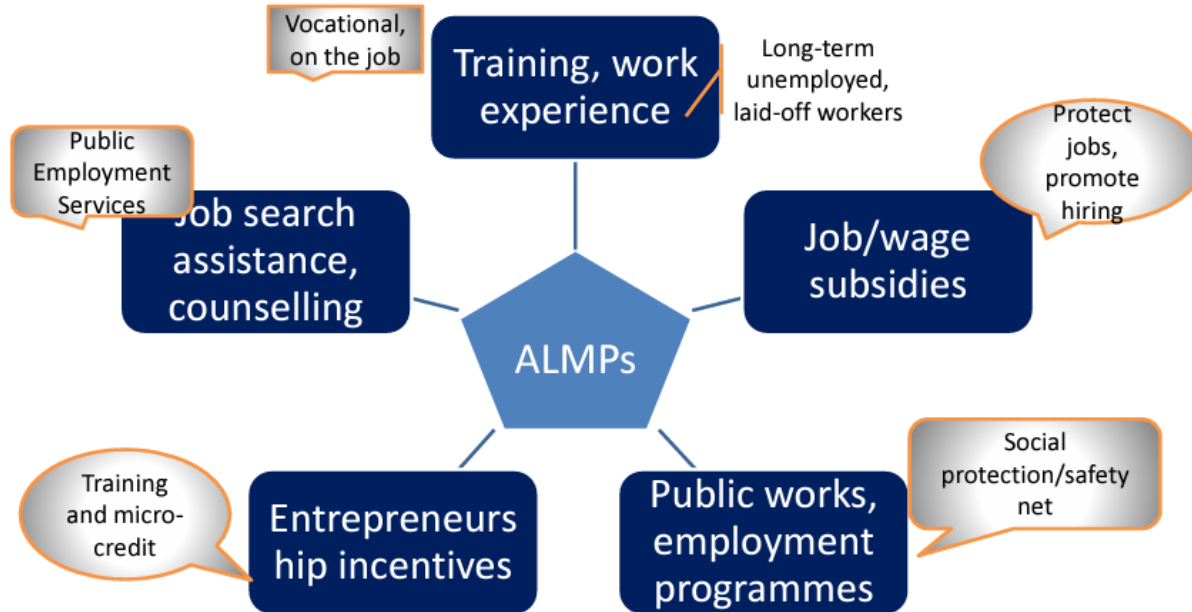


1. Policy coherence and effective institutional arrangements

2. Social Dialogue

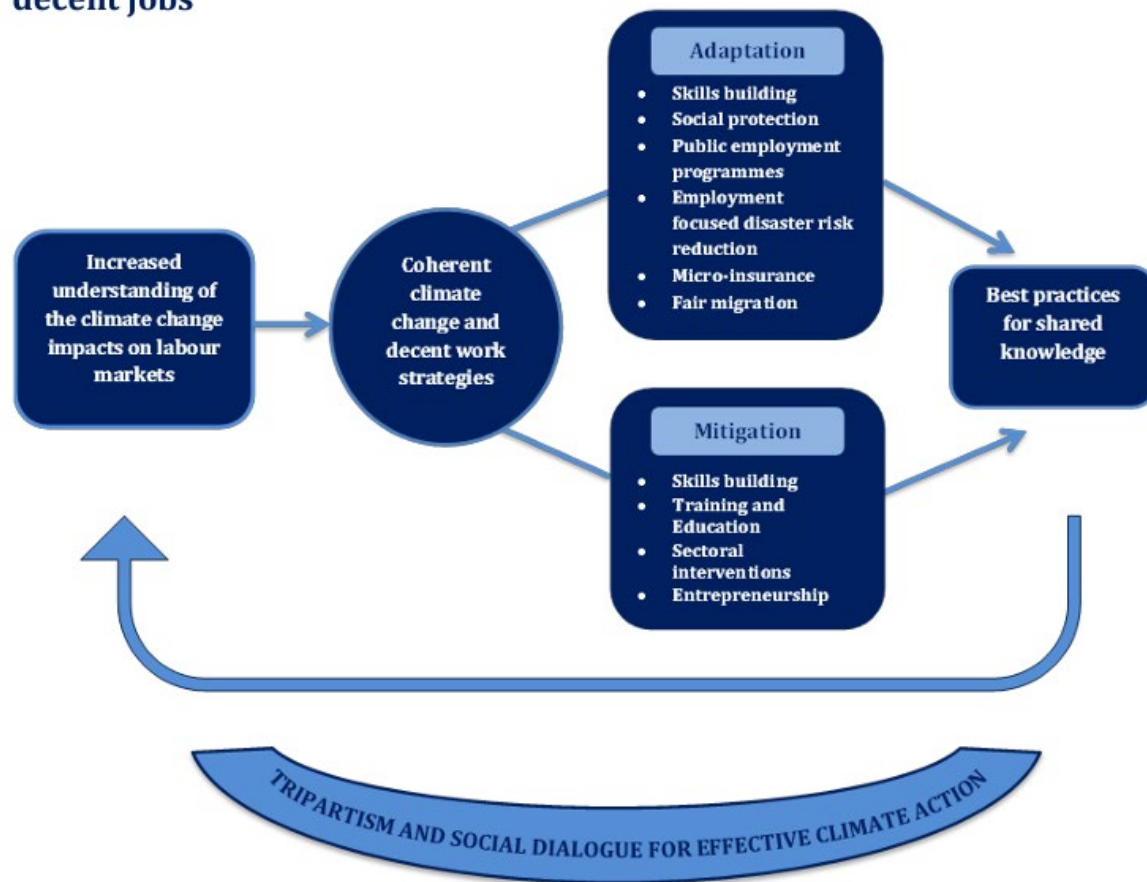


What are Climate Active Labour Market Policies ?



Source: Harasty, 2016

Solutions for climate action and decent jobs



What are the solution for decent work and climate change?

What are the data needed to capture the effects of climate change on labor market?

- Temperature variability
- Relative humidity
- Precipitation
- Heatwaves
- Jobs in different sectors
- Jobs at risk due to climate change
- Jobs in polluting activities
- Jobs in clean energy
- Jobs in recycling
- Green skills
- Green jobs
- Job losses due to climate change
- Informal jobs and climate change
- Gender perspective
- Migration due to climate change
- Jobs in green technologies
- Incomes
- Age

How to make the labor market statistics sensitive to climate change?

- Enhancing national labour force survey data, i.e. adding questions/a module to regular labour surveys
- Enhancing national accounts, ie. disaggregating green and dirty inputs to production, climate disruptions in agriculture, tourism
- Need for dedicated surveys vs integrating environmental considerations in enterprise surveys, economic censuses vs non-survey-based methods
- Fostering the implementation of the surveys related to labor market and climate change in different sectors
- Updating regularly the changes in labour markets due climate action

Thank you for your attention

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