

DECENT WORK

A better world starts here.



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Organization

Introduction to Green Jobs

Key concepts

SESSION 2

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Green Jobs in Asia

ILO Regional Office for Asia and the Pacific

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ASIAN 2006
DECENT WORK
DECADE 2015

Outline



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1. Two key challenges of the 21st century
2. Defining green jobs
3. Green jobs in the economy
4. Estimating green jobs
5. Just Transition



Outline



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- 1. Two key challenges of the 21st century**
- 2. Defining green jobs**
- 3. Green jobs in the economy**
- 4. Estimating green jobs**
- 5. Just Transition**



1. Two challenges of the 21st century

- Green jobs address the two defining challenges of the 21st century
 - Averting dangerous climate change and environmental degradation
 - Pressing need to deliver social development and decent work for all



The environmental challenge

- **Climate change (sea level rise, increase in extreme weather events - storms, floods, droughts, water fall patterns, etc.)**
- **World population increase: 1 bn 1900 to 9 bn 2050**
- **No access to potable water: nearly 900 million people**
- **No access to reliable energy: 3 billion households**
- **Nearly $\frac{3}{4}$ of world's poorest depend on environment as a significant part of their daily livelihood**

Environmental challenges have far-reaching implications in terms of livelihoods and labour market dynamics



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The employment and social challenge

- **Unemployed: 205 million globally, 83 m in Asia-Pacific**
 - **Of these, nearly 40 per cent are between 15 and 24 years of age**
- **One in five workers in extreme poverty (< \$1.25/day)**
 - **Two-thirds of these workers in A&P**
- **World's working age population to grow from 4.5 billion in 2010 to 5.2 b in 2025**
 - **Asia home to 300 m of these 700 m additional workers**
- **Only one in five working-age population have access to comprehensive social protection systems**



The two challenges are connected



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Climate change / environmental degradation:

Measures to address
vulnerability to Climate
Change (adaptation)

Policies to avoid
dangerous climate
change (mitigation)

Protecting
environmental
resources



Employment and social challenges:

Changing employment
needs eg. Green skills

Poverty and
environmental
degradation

Population pressures
on natural resources

Increasing energy use



Responding to these challenges

- Responding to these challenges requires a far-reaching transformation to the way we produce, consume and earn a living
- **Green jobs** will be a key element of this shift to a sustainable, low-carbon economy



1. The two challenges of the 21st century
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2. Green Jobs

Green jobs is defined by the ILO/UNEP as:
employment created in economic sectors and activities, which reduces their environmental impact and ultimately brings it down to levels that are sustainable



What are green jobs?

Green Jobs = Environmentally Sustainable + Decent

GREEN

Activities that are environmentally sustainable

- Low-carbon (mitigation)
- Climate resilient (adaptation)
- Environmentally-friendly (minimizing waste and pollution, protecting biodiversity...)

JOBS

Decent work is defined by the ILO as:

Opportunities for women and men to obtain productive work in conditions of freedom, equity, security and human dignity



What do we mean by green?

- Green jobs contribute directly to reducing the environmental impacts of the economy

- by enhancing green sectors

Green Jobs in e.g. renewable energy, pollution control, forestry, eco-tourism

- Improving the environmental performance of existing sectors

Greener Jobs in e.g. sustainable manufacturing, construction, tourism

- Adapting to the effects of climate change

Green Jobs in e.g. building climate resilient infrastructure



What do we mean by decent work?



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The ILO's Decent Work Agenda provides a framework with four strategic objectives:

1. Fundamental principles and rights at work and labour standards
2. Employment and income opportunities
3. Social protection and social security
4. Social dialogue and tri-partism



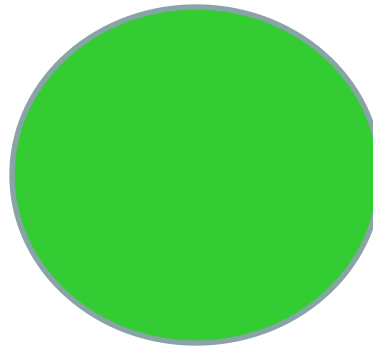
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Impact of the transformation to a greener economy on sectors



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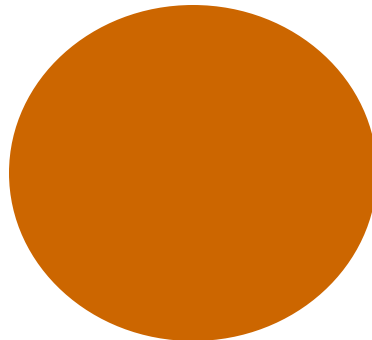
Expansion of green sectors



Eg. Recycling,
eco-tourism

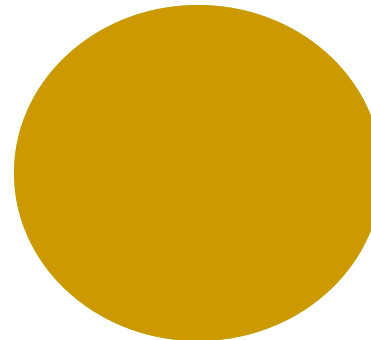
Some sectors will decline

Eg. Fossil
fuels



Most sectors will evolve

Eg.
Manufacturing,
construction,
transport



Impact of a greener economy on employment



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Additional jobs
will be created

Example: Manufacturing
of pollution control devices

Employment
will be substituted

Example: From fossil fuel
production to renewables

Jobs
may be eliminated
Example: Extraction industries

Existing jobs
will be transformed
Example: Building & construction

Just Transition



Impact of sustainability on jobs

- **Most studies show that climate policies would have positive or neutral net employment impacts**
- **However, there will be shifts in the labour market from high environmental impact jobs to low environmental impact jobs**
- **Positive and negative employment effects**
 - **Opportunity for companies and regions to become leaders in green innovation**
 - **Adjustment costs for workers and communities dependent on fossil fuels, or companies that are slow to rise to the environmental challenge**



Some measures to support green jobs



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Public and private measures to support green jobs and minimize disparities among winners and losers

- **Micro level – consumer preferences, workplace practices...**
- **Meso level – industry initiatives, green financing, social protection...**
- **Macro level – national economic plans, skills policies, regulatory environment...**



Examples of potential green jobs

Need to look at:

- environmental impact
- decent work element



Examples of potential green jobs

- Mangrove planter
- Mechanic for CNG bajaj
- Manufacturer of fuel efficient car
- Sustainable farmer (resource management, carbon capture)
- Farmer in agro-forestry
- Workers in certified forestry
- E-Waste collector
- Architects and engineers designing renewable technologies and energy efficiency products

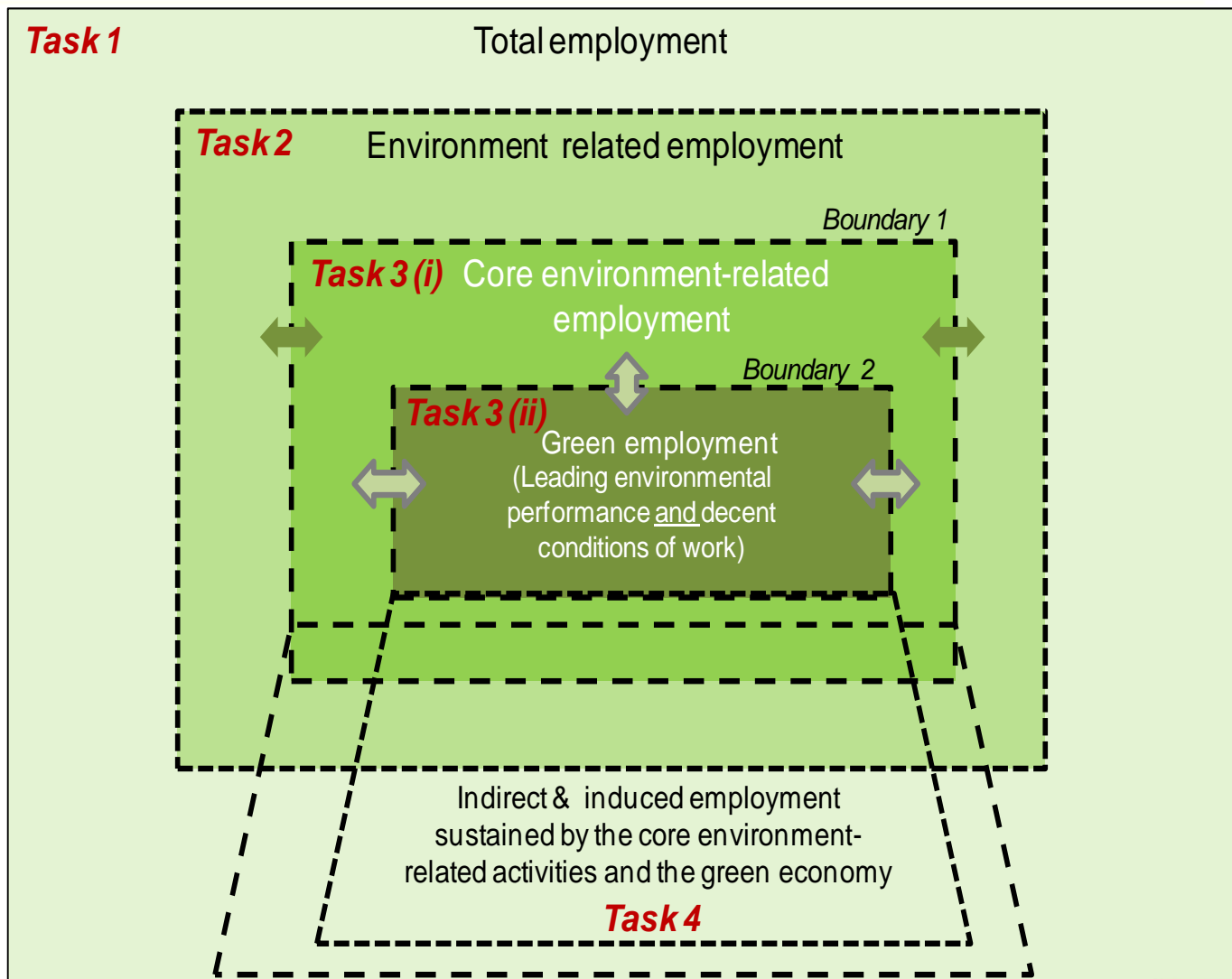
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4. Estimating green jobs



Estimation of Green Jobs in Bangladesh

Sectors	Core env- related jobs	Direct 'Green' jobs	Indirect jobs
Sustainable agriculture	41,548	n.a.*	47,482
Sustainable and participatory forestry	28,813	n.a.	28,121
Sustainable energy	18,823	18,823	50,561
Waste management and recycling	189,180	n.a.	212,753
Collection purification/distribution of water	8,441	n.a.	n.a.
Climate adaptation activities	1,726,755	616,052	967,849
Manufacturing and energy efficiency	10,934	10,934	21,472
Sustainable transportation	178,510	178,510	54,049
Sustainable construction	1,340,000	536,000 – 670,000	1,416,364
Total	3,543,004	1,427,319	2,798,651



GHK Consulting 2010

*n.a. – not available

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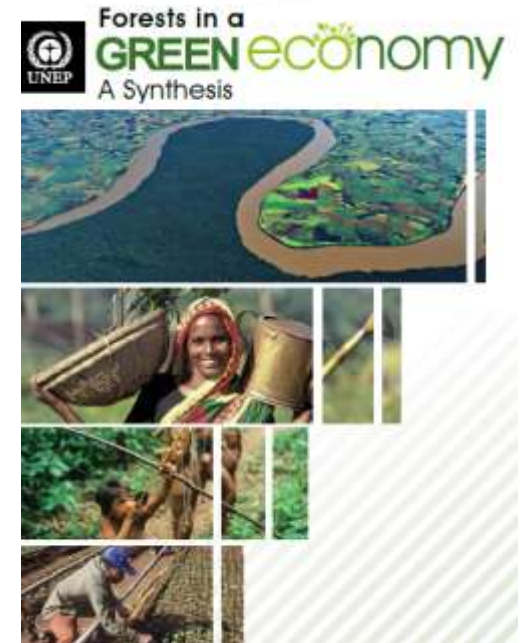
Brazil

- 2.65 m existing formal green jobs (comprising 6.7% of the formal labour market)
- Growing faster than overall labour market
- For example, approx. 60,000 workers in formalized recycling industry
 - However, there are many more workers in the informal sector



India

- Millions of new jobs could be created by investing an additional \$40 billion annually in the forestry sector
 - This investment could halve deforestation rates by 2030
- Government's Green India Plan will invest \$10 billion over 10 years to improve the quality of forests by involving local communities, civil society and elected representatives



A multi-dimensional dynamic concept



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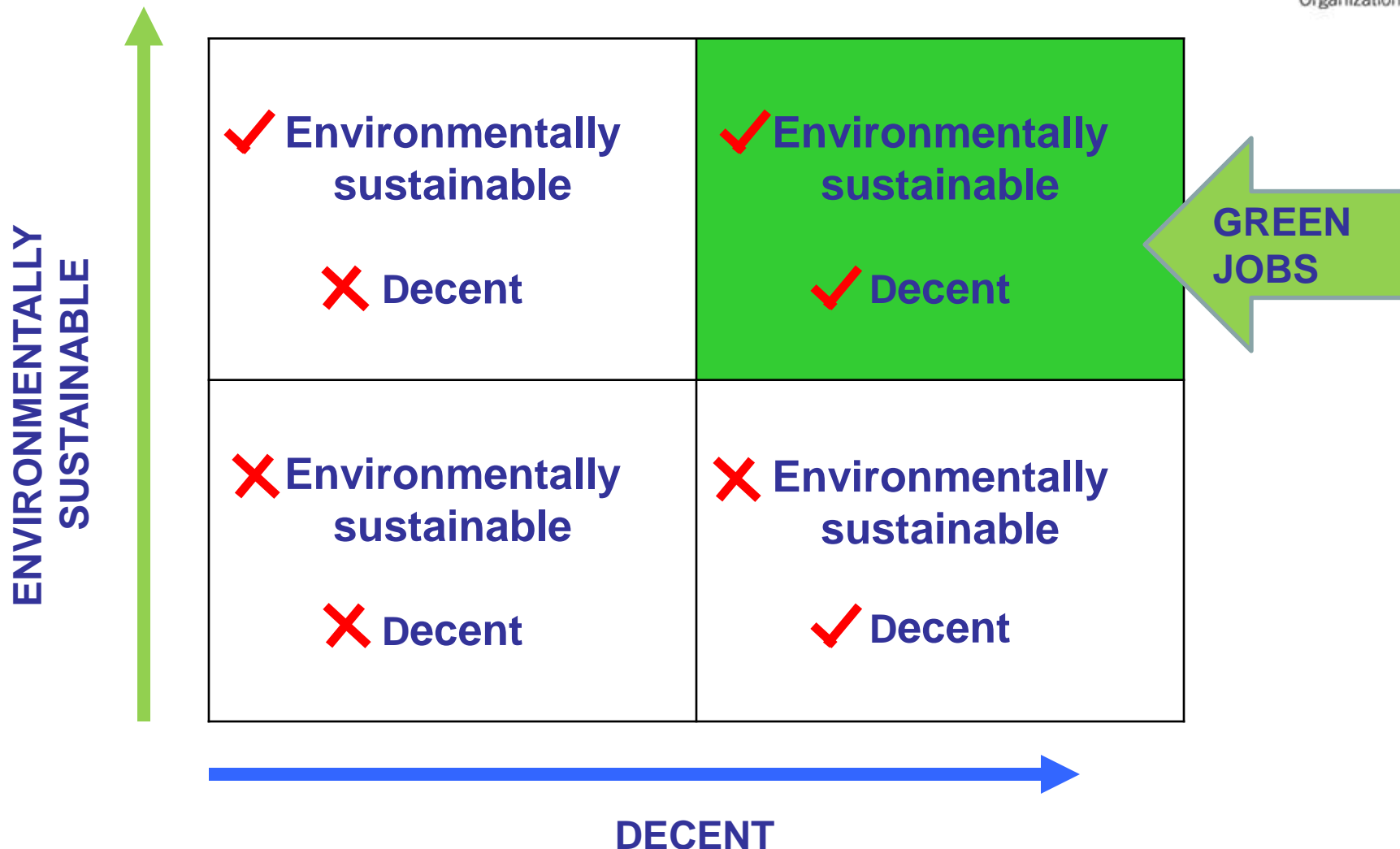
- A Green Job in country A is not necessarily a Green Job in country B
- A green job today will not necessarily be a green job tomorrow



GREEN
JOBS



A journey towards sustainability



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5. The need for a Just Transition

- Based on the decent work agenda
 - Workers' rights (to allow a Just Transition to take place)
 - Social protection
 - Social dialogue (to allow negotiation, consultation or exchange of information)
 - Employment and job creation (eg. through promotion of sustainable enterprises, skills policies)



**The Cancun Agreement (UNFCCC Dec 2010)
contained a recognition of the need for a Just
Transition as part of the shared vision for long
term global action**

**“Ensure a just transition
of the workforce that
creates decent work and
quality jobs”**



Measuring & monitoring the difference – environmental standards



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Sector	Example of environmental standard/voluntary code
Organic Agriculture	<ul style="list-style-type: none">• SNI 01-6729-2002 (Indonesian National Standards) on Organic Food System by National Standardization Agency of Indonesia
Green Building and Construction	<ul style="list-style-type: none">• SNI 03-6759-2002 (Indonesian National Standards) on Codes for Energy conservation designation of buildings; Green Star (Australia)
Green Finance	<ul style="list-style-type: none">• Principles for Responsible Investment (UN- PRI)
Sustainable Fisheries	<ul style="list-style-type: none">• Sustainable Fisheries Marine Stewardship Council Fishery Standards
Sustainable Forestry	<ul style="list-style-type: none">• Forest Stewardship Council (FSC)
Tourism	<ul style="list-style-type: none">• Tourism Green Globe 21 Standard
Manufacturing and Industry	<ul style="list-style-type: none">• (ISO) 14064 of Greenhouse Gas Accounting and Verification



Measuring & monitoring the difference – labour standards



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Decent work	Fundamental ILO Conventions
Freedom of association and the effective recognition of the right to collective bargaining	<ul style="list-style-type: none">• C87 Freedom of Association and Protection of the Right to Organize Convention• C98 Right to Organize and Collective Bargaining Convention
Elimination of all forms of forced or compulsory labor	<ul style="list-style-type: none">• C29 Forced Labour Convention• C105 Abolition of Forced Labour Convention
Effective abolition of child labor	<ul style="list-style-type: none">• C138 Minimum Age Convention• C182 Worst Forms of Child Labour Convention
Elimination of discrimination in respect of employment and occupation	<ul style="list-style-type: none">• C100 Equal remuneration Convention• C111 Discrimination (Employment and Occupation) Convention



Diversity of green jobs

▪ A cross-walk from environmentally friendly activities to green jobs

Mitigation - GHGs reduction and capture	energy supply, energy demand, prevention of emissions from biological sources, biological carbon sink services, etc;	EDUCATION, TRAINING, RESEARCH, MONITORING & CONTROL, PLANNING, ADVOCACY AND ACTIVISM, FINANCIAL & INSURANCE SERVICES, etc,
Biodiversity conservation, natural resource Mgt	Ecosystem management, conservation, sustainable agriculture, sustainable forestry, sustainable natural resource management, etc.	
Desertification prevention	Adaptation to desertification, land use planning	
Water	In-land water services, water harvesting, sustainable agriculture, water efficiency (building).	
Pollution control	environmental goods and service industry (OECD, 1999): air pollution control, waste management, waste water management, monitoring and auditing, etc;	
Air emissions prevention		
Waste water		
Waste, soil decontamination		
Adaptation to climate variability	Climate related disaster management (preventive, reactive action related services)	
Adaptation to climate change	Agricultural services, health related services, natural resource management services, etc	
Eco-system services	Environmental services, eco-tourism, etc;	



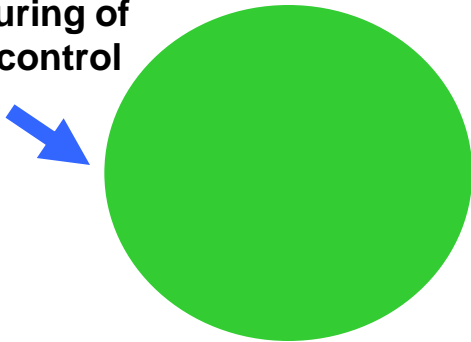
Impact of the transformation to a greener economy on jobs



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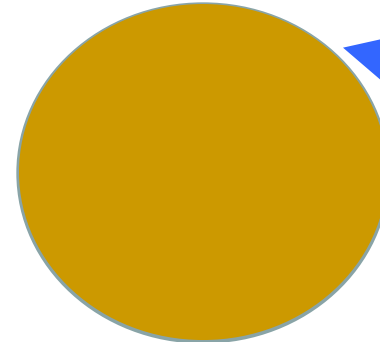
New jobs will be created

Eg.
Manufacturing of
pollution control
devices



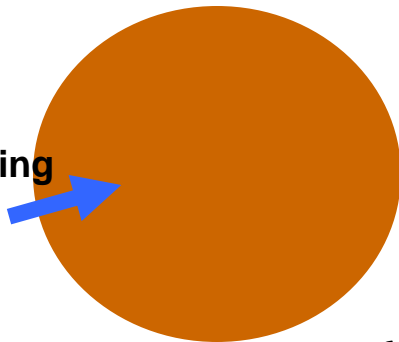
Some jobs will be substituted

Eg. Shifting from
fossil fuels to
renewables



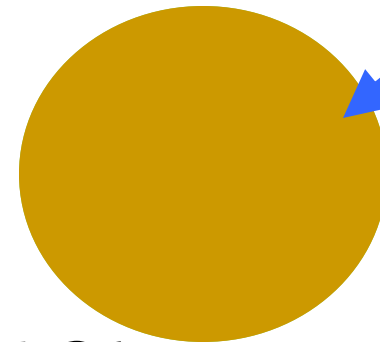
**Some jobs will be eliminated
without direct replacement**

Eg. Jobs lost
when packaging
materials
banned



Most jobs will be transformed

Eg. Skills sets, work
methods and
profiles of trades
become more
environmentally
friendly



JUST TRANSITION

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