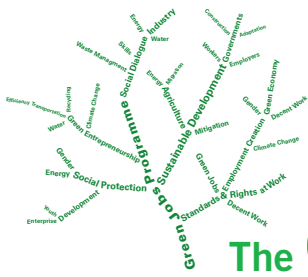




A woman wearing a red and white patterned sari is working on a small electronic device on a workbench. She is using a soldering iron to solder components onto a circuit board. The workbench is cluttered with various electronic components, including resistors, capacitors, and integrated circuits. A small orange device is also visible on the workbench. The background shows a workshop environment with shelves and other equipment.





The Green Jobs Programme of the ILO



“The mounting cost of energy-intensive production and consumption patterns is widely recognized. It is timely to move towards a high-employment, low-carbon economy. Green jobs hold the promise of a triple dividend: sustainable enterprises, poverty reduction and a job-centred economic recovery.”

Juan Somavia, ILO Director-General



Meeting the challenges of the 21st century

The 21st century faces two defining challenges.

- The first is to avert dangerous climate change and a deterioration of natural resources which would seriously jeopardize the quality of life of present and future generations.
- The second is to deliver social development and decent work for all. This includes lifting over 1.3 billion people, four out of ten workers in the world, and their families above the poverty line and providing decent job opportunities for 500 million young people entering the labour market over the next 10 years. It also means access to modern forms of energy for 1.6 billion people who still do not have any or decent housing, and sanitation for over 1 billion slum dwellers in mega-cities.

These two challenges are intimately linked and cannot be addressed separately anymore. **Green jobs** and the promotion of the green economy have become the key drivers for achieving an economic and social development that is also environmentally sustainable.





The transformation to a sustainable, low-carbon economy

A rapid shift to a low-carbon economy is needed to avoid irreversible and dangerous climate change effects on societies and economies. This transformation will have a profound impact on the way we produce, consume and earn a living in all countries and sectors. The drive towards sustainability will have to be economy-wide, greening all production processes and will involve most enterprises, workers and citizens. It will be a second great transformation, on the scale of the industrial revolution, but it needs to happen very fast.

Global emissions of greenhouse gases need to be reduced sharply over the next decades. This requires the contribution of millions of enterprises and workers to drastically improve energy efficiency and shift to clean sources such as renewable energy. There are similar challenges to curtail unsustainable use of natural resources, reduce waste, prevent pollution and safeguard sustainable food production for a growing world population. These changes will affect significantly economies and labour markets.

Climate change is already taking its toll through increasingly variable weather patterns and more frequent extreme events. More frequent and more severe droughts, floods and storms are costing lives, destroying infrastructure and disrupting economic activities. Developing countries, micro-enterprises, small businesses, poor workers and poor communities are particularly vulnerable.

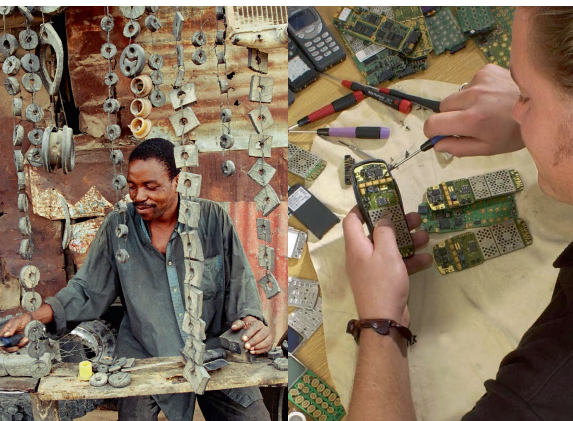




Green jobs: a low-carbon economy with decent work in sustainable enterprises

For the ILO, the notion of **green jobs** summarizes the transformation of economies, enterprises, workplaces and labour markets into a sustainable, low-carbon economy providing decent work.

Green jobs can be created in all sectors and types of enterprises, in urban and rural areas. The creation of direct jobs comes with the production of green goods and services. The creation of indirect jobs flows from the required inputs in the making, handling and selling of these goods. On top of this, more jobs are added by using savings from energy-intensive sectors for more labour-intensive investments (so-called induced employment effect).



ILO's definition of green jobs:

Jobs are green when they help reducing negative environmental impact ultimately leading to environmentally, economically and socially sustainable enterprises and economies. More precisely green jobs are decent jobs that:

- Reduce consumption of energy and raw materials
- Limit greenhouse gas emissions
- Minimize waste and pollution
- Protect and restore ecosystems

The potential for **green jobs** exists in countries at all levels of economic development. Indeed, it is often higher in developing countries. Investments and programmes to promote **green jobs** can be targeted at those who tend to need them most: young people, women and the poor.

In order for **green jobs** to play this key role in socially inclusive development, they need to be decent jobs which provide adequate incomes, social protection and respect for the rights of workers, and give workers a say in decisions which will affect their lives. Investment in skills development for **green jobs** is a vital condition for the successful greening of enterprises and economies.



Green jobs and the economic crisis

In recent years a significant number of countries have adopted economic stimulus packages with major investment in greening their economy.

Large green recovery packages have been put in place in China, the United States, the Republic of Korea, Japan, the European Union and elsewhere.

They include investments in reducing the demand for energy through the promotion of energy efficient buildings, public transport, electrical appliances and cars, as well as diversifying the supply of clean and renewable energy (wind, solar,

biomass and geothermal). Green stimulus packages, including in developing countries, aim to restore ecosystems services and rehabilitate rivers, forests and water catchment areas.

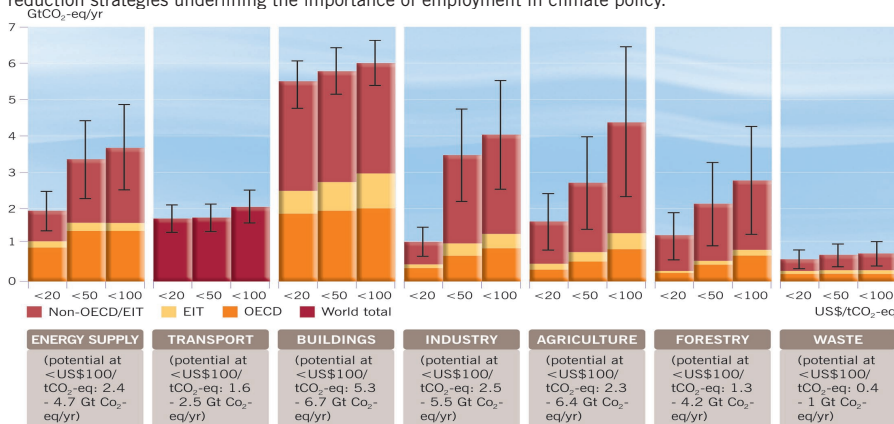
Green jobs are crucial to overcoming the economic crisis. They are a practicable and effective option for reviving economies and can contribute to creating large numbers of jobs quickly. This is also true for the major investments needed to adapt to climate change.

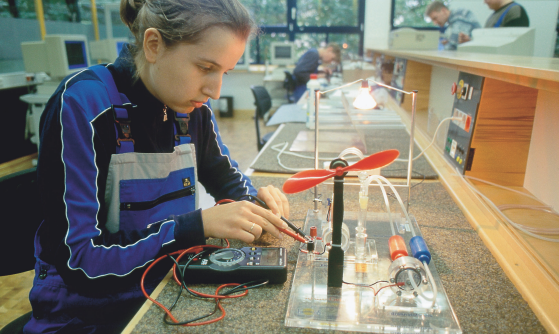
If invested wisely, the resources to overcome the economic crisis could leave a legacy of energy-efficient infrastructure, rehabilitated ecosystems, renewable energy sources, and enterprises and workplaces that are more resilient to

WG3 emissions reduction potential

Source: IPCC 2007 *Fourth Assessment Report*

The graph depicts the emission reduction potential for different sectors and price categories. While the potential is highest in buildings, energy and agriculture these are also the sectors with high employment rates. Accordingly, there is a clear environment-labour link in emission reduction strategies underlining the importance of employment in climate policy.





climate change. They could lay the foundations for a green economic future which is environmentally sound, economically productive and socially sustainable.

Making green jobs a reality: the ILO's Global Programme

The ILO aims to become the recognized international organization addressing the employment and social dimension of climate change, policies related to it, as well as other environmental challenges and new opportunities in the green economy.

To this end, the ILO works to:

- Strengthen its analytical capacity;
- Advise on policies and measures contributing to the recovery from the economic crisis;
- Support the creation of sustainable enterprises as well as fair globalization;
- Contribute to the creation of economies which are efficient, socially just and environmentally sound.

Green jobs - some visible, some less visible

Potential for mitigating climate change by reducing the emission of greenhouse gases is concentrated in economic sectors such as energy, building, manufacturing, transport, agriculture and forestry. Fulfilling this potential, however, depends on inputs from many other sectors, including energy and resource-intensive ones like mining, iron and steel, chemicals and information technology.

Green jobs include direct employment in the manufacture, installation and operation of low-emission renewable energy, but also indirect jobs in making steel for gearboxes and windmill towers, composite chemicals for blades and concrete for the foundations of a windmill.

In order to achieve sustainable economies and societies, enterprises and workers need to be resilient in the face of climate change and natural resource constraints. In particular, they need to develop the capacity to adapt to climate change and to meet the challenges of a transition from energy and resource-intensive products, services and processes to a green, low-carbon economy. A socially just transition for enterprises, workers and communities is part of the ILO agenda on green jobs.

Much less visible but equally important are people improving process efficiency in industry; managers reducing energy and resource consumption of factories, offices and other buildings; technicians, procurement officers and logistics dispatchers among others.

What world leaders say about **green jobs**

Mr. Ban Ki-moon, **UN Secretary-General**

“The crisis, devastating as it is, offers an excellent opportunity to promote green economic development. The way forward should include a focus on labour-intensive projects that reduce greenhouse gas emissions and help communities adapt to global warming. The transition to a low-carbon economy can create millions of jobs.

International Trade Union Confederation, **2nd World Congress, Resolution**

“Congress emphasizes the enormous potential for the creation of green and decent work from a successful process of just transition that provides new green jobs opportunities, anticipates potential losses of economic activity, employment and income in certain sectors and regions, and protects the most vulnerable throughout the economy and the whole world.

Mrs. Ronnie Goldberg, **Vice-President, International Organisation of Employers**

“Employers make an essential contribution to the pursuit of sustainable development. The challenges of climate change require the collaboration of all parts of society. The engagement of business will be critical for workplaces and societies if they are to evolve to more efficient and sustainable lower carbon pathways. The transition to greening of all workplaces and work methods are best achieved where business is part of the solution.

The ILO strategy for the **Green Jobs Programme** includes a comprehensive knowledge base, tested tools and practical approaches. The programme brings together a strong team from various ILO units and offices across the world seeking the full involvement of the ILO constituents and building strategic partnerships.

The ILO **Green Jobs Programme** currently concentrates on six priorities:

1. Analysis of the employment and labour market dimensions;
2. Practical approaches to greening enterprises;
3. **Green jobs** in waste management and recycling;
4. Renewable energy and energy efficiency;
5. A just transition towards a green economy and a sustainable society;
6. Adaptation to climate change.

Policy assistance for green job creation and capacity building

The **Green Jobs Programme** is increasingly providing policy guidance. This includes:

- active participation in international high-level policy debates on climate change and sustainable development (UNFCCC, Rio+20);
- global analysis and country assessment of the potential of **green jobs**;
- direct technical assistance to ILO constituents through awareness raising, national policy workshops and policy implementation;
- capacity building for ILO constituents in global and regional training courses

President Barack Obama, United States of America

“ Now, the choice we face is not between saving our environment and saving our economy. The choice we face is between prosperity and decline. ... We can allow climate change to wreak unnatural havoc across the landscape, or we can create jobs working to prevent its worst effects.

President Hu-Jintao, China

“ Achieving sustainable development and protecting the earth - our common homeland- is closely bound up with the fundamental interests of peoples of the world as well as the immediate interests of vast numbers of workers. Pursuing the civilized development road of faster productivity growth, better standard of living and sound ecosystem and realizing economic and social development while living harmoniously with nature so that workers live and work in a good ecological environment is the basic purpose of achieving sustainable development as well as an important precondition for decent work for all workers.

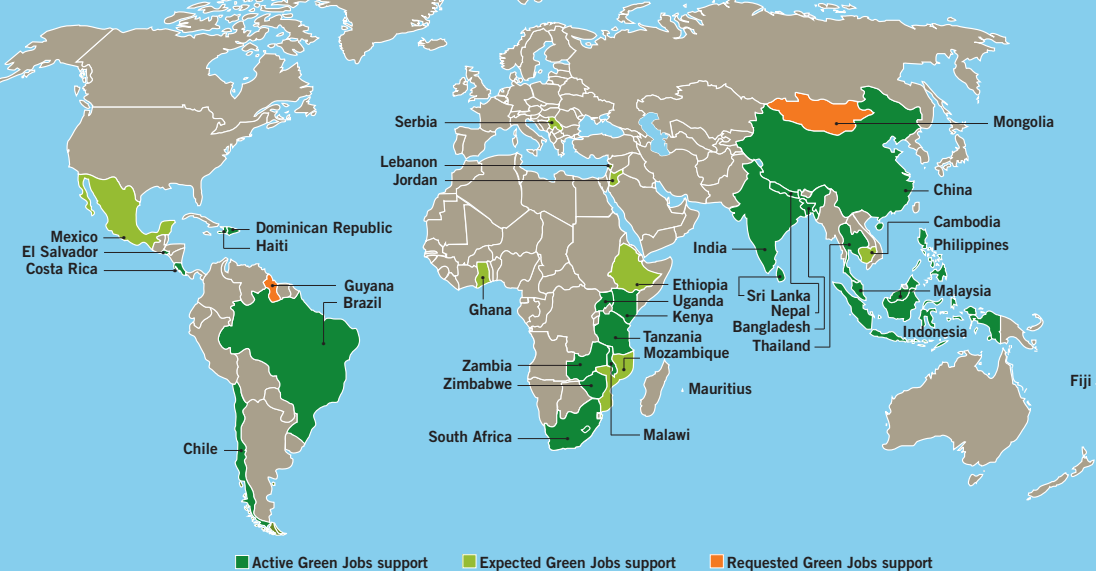
Deputy President Kgalema Motlanthe, South Africa

“ Measures to protect the environment and mitigate the impact of climate change can also contribute to job creation.

Country programmes: The number of countries in which the programme is active continues to increase; they include:

- **Bangladesh**
Employment creation in solar energy
- **Brazil**
Green jobs promotion in social housing, forestry and waste management
- **Chile**
Waste management and training on renewable energies
- **China**
Greening of employment policies, green entrepreneurship promotion
- **Costa Rica**
Sustainable agriculture and eco-tourism
- **Dominican Republic**
Capacity building of national committee on green jobs strategies
- **El Salvador**
Green jobs for youth

- **Fiji**
Promoting better occupational safety and health in municipal waste management
- **Haiti**
Labour intensive infrastructure investment for adaptation to climate change
- **India**
Capacity building and support for social dialogue on employment-environment issues
- **Indonesia**
Sustainable tourism; employment promotion in reducing deforestation and degradation (REDD+)
- **Kenya-Tanzania-Uganda**
Promoting green youth entrepreneurship and new business development
- **Kenya-Zimbabwe**
Green Jobs Fund for youth entrepreneurs



- **Lebanon**
Assessing green jobs potential in energy, agriculture, constrund waste management
- **Malawi**
Green jobs for youth
- **Malaysia**
Mapping of green jobs and the need for green skills development
- **Mauritius**
Promoting green jobs as part of the national sustainability strategy
- **Nepal**
Capacity building for green jobs polices
- **Philippines**
Green social housing; insurance product development and employment promotion in the context of climate change adaptation
- **Sri Lanka**
Assessing and promoting green jobs in waste management incl. recycling
- **South Africa**
Promoting green jobs through SME development in tourism, services and the construction sector
- **Thailand**
Greening enterprises in the hotel sector
- **Zambia**
Promoting SMEs and employment in a greener construction sector

Training and capacity building.

Inadequate awareness, knowledge and capacity among ILO constituents are major constraints on their active participation in the formulation and implementation of relevant policies. The ILO International Training Centre offers to ILO constituencies regular courses on **green jobs**. These trainings are held in Turin and in the regions.

Institutional structure. Within the ILO, the **Green Jobs Programme** is a global effort implemented by networked teams of ILO fi eld offi ces, technical units at Headquarters, the International Institute for Labour Studies and the ILO International Training Centre in Turin. The teams establish partnerships with other international institutions, in member countries and in specific economic sectors.

Partnerships for solutions The Green Jobs Initiative

The ILO work on green jobs has a strong foundation in the partnership called the «**Green Jobs Initiative**» between the United Nations Environment Programme (UNEP), the International Trade Union Confederation (ITUC) and the International Organization of Employers (IOE) and the ILO.

The **Green Jobs Initiative** was launched in 2008 to promote opportunity, equity and a just transition to sustainable economies and to mobilize governments, employers and workers to engage in dialogue on coherent policies and effective programmes leading to a green economy with **green jobs** and decent work for all.

The **Green Jobs Programme** is also part of the United Nations system-wide strategy for addressing climate change. Collaborative partnerships on environment, poverty reduction have been established with a range of partners such as in the UNFCCC and Rio plus 20 framework. Increasingly, a green job focus is included in UN country programmes.

In a separate effort ILO, WHO and UN-DESA convened the Social Dimension of Climate Change working group under the

UN High Level Committee of Programmes. Major UN agencies including the World Bank joined the group feeling the need to understand Climate Change not only as an environmental and economic problem but also as a social challenge. The working group aims to shift mind-sets and influence policy at the national and international level towards a «people-centered approach» to address the climate challenge.

The growing network of international and national partners also includes development and research institutions such as the European Union, the Chinese National Academy of Social Sciences as well as non-governmental organizations, including Development Alternatives (India) and Grameen Shakti (Bangladesh)

For more information:

- The Green Jobs Programme
Job Creation and Enterprise
Development Department,
International Labour Organization,
1211 Geneva 22
Switzerland

<http://www.ilo.org/green-jobs-programme>

- **Green jobs** for Asia-Pacific
<http://www.ilo.org/asia/areas/green-jobs/lang--en/index.htm>

Partners:

- **UNEP** Global Green New Deal
<http://www.unep.org/greeneconomy/index.asp>
- ITC Turin **Green jobs** training course
<http://greenjobs.itcilo.org/>