

# Australian Education Union

## Environment Policy



As adopted at the 2010 Meeting of the Annual Federal Conference

AEU's Environment Action page:

<http://www.aeufederal.org.au/Environment/index2.html>

# Australian Education Union

## Environment Policy

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## **Preamble**

The AEU strongly supports action to reduce climate change and to secure an environmentally sustainable future.

Environmental sustainability is a concept which goes to human engagement with the earth, with its species and to a broader commitment to socially just economies, democracy and peace. The AEU supports and commits itself to the environmental sustainability approach, advocated by world renowned physicist, philosopher, environmental activist, eco feminist and author Vandana Shiva, as defined in Appendix 1.

### Urgency and priority

Whilst the science regarding the environmental damage already taking place and specific predictions of the future impact of climate change is evolving (and is disputed by some), reversing environmental damage and creating an environmentally sustainable future is an urgent priority.

By the end of the last century the following changes due to climate change had been experienced:

- Sea level increases;
- Global temperature increases;
- Increasingly acidic oceans impacting on fish stocks and marine life;
- Shrinking snow cover and glaciers affecting water supplies;
- More frequent and intense droughts, heat waves, tropical cyclones, storm events and natural disasters such as bush fires; and
- Changes in wind, rain, and temperature patterns affecting agriculture and livestock production and access to water [in tropical and subtropical regions].

### Role of AEU and membership

As educators the AEU has shown our commitment to teaching about environmental concerns and involving students in action for change.

The AEU also has a role within the broader trade union movement to encourage union members' action in their workplaces and for the union movement to be involved in the solutions for the future.

This policy therefore discusses environmental issues of concern to the AEU, recommends action to be taken by Governments and employers in the public education system, as well as action individual union members can take with support and involvement of their Branch/Associated Body.

### Global responsibility and social justice

This devastating situation, caused by human development, is the most critical social justice concern on a global scale. The AEU believes it is a global responsibility all individuals and those in power cannot ignore. The consequences, already beginning to unfold, will be catastrophic unless significant action is taken.

The global impact includes:

#### Humanitarian disasters

- The average number of disasters has increased in the last decade and affected one third more people
- more than half the population in the developing world will be highly vulnerable to floods and storms
- there will be more droughts during the 21st century

#### Access to clean water

- As rainfall patterns have changed, droughts and water shortages have been experienced.
- The flows of major rivers are projected to fall - affecting the lives of more than a billion people.
- Glacial melt could increase summer river flow and floods and in the longer term dramatically reduce water flows as glaciers permanently retreat.

#### Food supplies and livelihoods

- Crop gardens are being damaged by rising sea levels and more severe storms. Export cash crops are also highly vulnerable to damage by heat, salination and severe weather. Reduction in river flows and water supplies will also lead to decreased agricultural production in many areas of the world
- Regions already suffering food shortages and those at risk of hunger is set to worsen – the majority of those affected are likely to be women.

#### Illness

- People's resistance to disease can be weakened by heat stress, water shortages and malnutrition. Increases in air pollution will lead to a rise in respiratory illnesses. Infectious mosquito-borne diseases such as malaria and dengue fever will spread.

#### Risk of conflict and Environmental Refugees

- As climate change hits, some people will have to leave their country; others will move within their national borders.
- Loss of food and water security will lead to increased conflict.
- There are suggestions that eventually one billion people could be displaced from their original home.

When countries are responding to challenges such as these, their ability to provide a quality public education for all is severely diminished.

### Government Responsibility

All Governments have a responsibility to reduce the environmental impact of development and human settlement.

It must be recognised that there is a disproportionate effect being had on the earth's resources by developed countries' activities and that these wealthier countries should take up a greater responsibility for mitigating environmental destruction.

Australia is the largest greenhouse gas emitter per capita in the world. Some 47% of Australia's carbon dioxide emissions arise from energy creation, most notably 30% from coal-powered electricity generation, 19% from agriculture and 14% from transport.

The AEU believes Australian Governments (Federal, State/Territory and Local) must, therefore, play a significant leadership role in shifting practices, attitudes and policies towards a sustainable future.

Australian Governments have a role, to be responsible for sustainable public infrastructure and service provision and, to economically intervene to reverse climate change. A market approach to policy change will not work. They must also establish a regulatory framework for other investors to ensure these goals are met.

A failure by Governments to invest in public infrastructure contributes to:

- an over-reliance on private car and truck transport at the expense of public transport,
  - water shortages and the failure to embrace water recycling and minimisation of water wastage,
  - a failure by coal-fired power stations to significantly reduce carbon emissions or to be provided encouragement to invest in a transition to renewable energy, and
  - inadequate provision of energy efficient eco-friendly buildings including affordable housing.

Now is certainly the time for unions to be addressing the economic situation globally and demand a new world order, both for environmental sustainability and social justice.

The AEU therefore supports calls for a "Green New Deal" to create jobs through alternative energy development and energy saving and conservation.

A Green New Deal calls for environmentally responsible investment designed to create jobs in the short-term, including for youth and women, and to reduce greenhouse gas emissions in the medium term.

Most importantly there is a need to combat the explosion of inequality in income distribution that lay behind global financial instability. Industrialised countries need to immediately assist developing countries with technology transfer and climate change adaptation.

A new system of economic governance must tackle the crisis of distributive justice that has blighted the global economy. It must ensure more balanced growth in the global economy between regions, as well as within countries, between capital and labour, between high and low income earners, between rich and poor, and between men and women. (ITUC, 2008)

The AEU will engage with the broader union movement (through the ACTU) to develop a national green employment strategy that meets international best practice standards on decent work and measurably reduces greenhouse gas emissions. Such a national strategy should identify unsustainable industry and consumer demand levels, and address their employment implications. Any national green employment strategy/industry policy should be inclusive of the public provision (through TAFE) of green skills training and retraining which includes sustainability education in all training packages and VET offerings. The AEU will lobby governments to ensure industrial relations law facilitates bargaining about environmental claims by industrial parties.

#### Aboriginal perspectives on holistic land systems

The wisdom of accumulated Indigenous understandings of the environment and ecosystems should be drawn on in education and the development of alternatives. It is fundamental that a human rights based approach to development should guide the design and implementation of local, regional, national and global climate change policies and projects.

*The United Nations International Expert Group Meeting on Indigenous People and Climate Change in particular argued “that State and other organisations incorporate into education systems traditional knowledge and the impacts of climate change on indigenous peoples” and “that States, the World Bank, the private sector and other relevant actors in emissions trading schemes must recognise and respect indigenous peoples; and rights and land tenure systems.” (Baird, 2008)*

Indigenous people must have genuine input with rapidly evolving climate change policy to ensure their human rights, economic rights and Native Title rights, are protected.

## **Context**

The AEU is committed to playing its part in responding to the challenge of climate change and to bring about sustainable living practices globally. Based on long standing sustainability principles, this policy broadly covers practices in educational institutions, unions and encourages collective and individual action by AEU members.

The AEU is adamant about the urgency of action to arrest climate change and as the political responses to this challenge are ever evolving and hopefully progressing, matters pertaining to specific government policy toward climate change mitigation, the abandonment of non-renewable energy, the development of renewable energy and the rejection of nuclear energy are dealt with by AEU Federal Executive statements and positions arising from this policy.

## **Definitions**

See Appendix 1.

## **Cross Reference**

This policy subsumes the AEU Environment Policy 1990 and should be read in conjunction with the AEU Curriculum Policy 2007.

## **Positions Arising**

- AEU Position on Mitigation of Climate Change

## **Policy Inclusions**

Within the public education system, our own union and in partnership with the union movement and communities the AEU shall implement practices which are consistent with this policy.

## **Curriculum**

Education Departments and education institutions should resource and support the development of education professionals who can deliver curriculum which educates students to protect and manage the natural and built environments [which] requires an integrated approach: a sound system of government regulations, scientific and technical knowledge, international relevance, a capacity for research and development, effective communication, community participation and responsible behaviour across all sectors of the community and government. Engaging students and staff in planning and actions for sustainability creates a sense of personal responsibility that will carry into their interactions in the workplace and the broader community.

Environmental education should be part of a socially critical curriculum which assists students to:

- learn about the environment and responsible ecological citizenship;
- develop skills to investigate and solve issues in the environment;
- acquire attitudes of care and concern for the environment;
- adopt behaviours and practices which protect the environment; and
- understand the principles of ecologically sustainable development and the science behind global warming;
- Incorporate Indigenous perspectives.

The AEU believes that environmental education should be central to any development and delivery of a National Curriculum. The AEU supports a rigorous and world class national curriculum which is futures oriented and will assist students to address major national and global challenges, including emerging environmental challenges. It should include cross curriculum perspectives such as cultural sensitivity, engaged citizenship and a commitment to sustainable patterns of living.

Further, educational institutions should be expected to:

- identify and address those outcomes which are specific to environmental education in the syllabuses;
- integrate the teaching of environmental education topics and issues to support outcomes in other syllabuses;
- use the opportunities provided by special events and school community actions to enhance those student learning outcomes related to environmental education.

Education Departments need to work with education unions to develop a whole system perspective of greening education delivery, curriculum and workplaces. Departments must adequately resource education programs/curriculum about the challenges of climate change in Early Childhood, Schools and TAFE and Adult Provision sectors. As part of this students should be provided active learning experiences including, but not limited to:

- school based environment improvement programmes;
- camps, excursions, etc.
- festivals;
- thematic approaches.

Public education must be at the forefront of any plan to create an environmentally sustainable future. It has a key role in helping both students and the community understand both the issues and how both individual and collective behaviour affects the environment. The integration of sustainability issues into education and training is essential. Apart from programs in schools, the pivotal role of TAFE and universities in providing relevant courses, skills development and research, especially in the emerging low-carbon energy technologies, must be recognised and funded accordingly.

The curriculum we deliver, the environments in which we work and live and our own behaviours should reflect the following principles:

- Water
  - Secure all water in its rivers, streams and groundwater as the common property of Australia, to be managed as a common good and not traded as a profitable commodity;
  - Deliver viable supply and reuse systems to all communities, city and country, and the environment, without harm to independent ecosystems and the community;
  - Ensure that water is managed efficiently and effectively for community use today and conserved for future generations; and
  - Respect Indigenous knowledge of water conservation and its importance to their culture.
- Air
  - All life on earth requires and deserves quality air free from gaseous, aerosol or particulate pollutants which are present in the air in low concentrations but which may be a hazard to human, plant or animal life;
  - Ozone Depleting Substances and Synthetic Greenhouse Gases needs to be abandoned from human manufacture;

- Consumers are provided information on fuel quality standards in place for petrol, diesel, biodiesel and LPG to allow for the reduction of pollution from engines.
- Earth/Land/Oceans/Waterways Management
  - Sustainable land and oceans/waterways management requires the maintenance of the following key components of the environment:
    - biodiversity: the variety of species, populations, habitats and ecosystems;
    - ecological integrity: the general health and resilience of natural life-support systems, including their ability to assimilate wastes and withstand stresses such as climate change and ozone depletion; and
    - natural capital: the stock of productive soil, fresh water, forests, clean air, ocean, and other renewable resources that underpin the survival, health and prosperity of human communities.
  - Land and oceans/waterways should be managed for multiple benefits, such as agricultural production, biodiversity conservation, water quality, soil health and supporting human life. To ensure long-term sustainability, land and oceans/waterways managers need to consider economic, social, spiritual and environmental factors.
- Biodiversity
  - Biodiversity is the variety of life: the different plants, animals and micro-organisms, their genes and the ecosystems of which they are a part. Australia and her seas and oceans/waterways is one of the most biologically diverse locations on the planet. It is home to more than one million species of plants and animals, many of which are found nowhere else in the world.
  - Human social and economic institutions must operate within the ecological limits of the planet.
  - Conserving biodiversity is also fundamental to both quality of life and economic well-being, both now and into the future.
  - Social, economic and political systems and institutions must nurture the health of the biosphere, and local ecosystems within it, to maintain their diversity, resilience, adaptive capacity and capacity for ecological sustainability and social justice.
  - Forests worldwide must be protected. Forests play a critical role in global warming by storing carbon. Deforestation accounts for significant levels of carbon dioxide emissions when forests are burned or cut down causing their carbon to be released into the atmosphere.
  - Oceans and seas and waterways worldwide must be protected from destructive human intervention. Human intervention and activity in the oceans and seas has had a detrimental effect on these fragile ecosystems. Fish stocks and fisheries have been depleted, acidification of the oceans and seas has resulted in coral bleaching and the destruction of reefs and mining and exploration has polluted the oceans and seas causing irreparable damage to these fragile ecosystems. Practices such as whaling and shark-finning must be abandoned.

- Energy
  - Energy generation is no longer reliant on fossil fuels and non-renewable sources;
  - Public and private investment in the research and development of renewable energy sources is guaranteed;
  - Public and private investment in the provision of renewable energy sources is guaranteed;
  - Corporate and individual energy consumption is mandated to be carbon neutral;
  - Nuclear energy is understood as an unviable energy source due to the unsolved issue of waste and the consequent legacy of risk for future generations;
  - The issue of Peak Oil indicates that we need to reduce our reliance on oil as a major energy source as a matter of urgency.
  
- Human Rights
  - Respect for and preservation of the unique body of cultural and environmental knowledge possessed by Indigenous people particularly in relation to the resources of the natural environment, which is in turn linked to their land right, economic rights and human rights; and
  - Provision for the just relocation and support for climate refugees.

### **Work practices**

In acknowledging the need to develop environmentally sustainable practices, the AEU believes it is the responsibility of state/territory governments and departments to ensure that environmentally responsible practices are followed in all education work places.

Consequently the AEU calls for all workplaces to develop and implement environmentally sound policies and practices. It is the responsibility of employers of AEU members to ensure that:

- a. Environmentally responsible practices are followed in all work places. Education sites should be embarking on sustainable practices which tackle waste management, recycling, energy efficiency, water collection and reuse systems, use of renewable energy technology and the minimal use of (and coupled with appropriate disposal of) toxic substances;
- b. Programs to develop and implement environmentally sound work practices are adequately resourced;
- c. Appropriate environmental staff professional development programmes are developed and implemented for all participants in AEU workplaces;
- d. Well resourced workplace environmental committees are established with representation from union members, school leadership, parents and students to ensure that the workplace and curriculum reflect the implementation of this policy;
- e. There is capacity for a coordinated approach of sharing local (school-based or institute/industry) programs, whether by the establishment of new networks or the cooption of promotion into existing community/industry networks' functions;

- f. Work places support local business and products to build stronger community networks and reduce transport related energy costs;
- g. New or upgraded educational facilities are built according to acceptable Environmentally Sustainable Design standards. These standards should be included as part of the departments' facilities schedule and should include provision for the installation of renewable energy measures such as photovoltaic cells and wind turbines, and landscaping as part of the overall design and cost;
- h. There is recognition in planning and maintenance that schools cannot be built to a standard set of codes which results in the construction of 'one size fits all' buildings; Departments move away from a modular building format and adopt a more flexible design for schools based on climate and other environmental concerns; and
- i. A system-wide approach regarding the purchasing and installation of environmentally friendly equipment and technologies in order to achieve economies of scale is developed and that processes be streamlined.

In the vocational education and training system, the AEU should work with Government and institutions so that:

- i. Departments responsible for education and the environment, together with industry councils, training authorities and the unions should work to promoting sustainability through the national training system by embedding competency standards for sustainability into high impact national industry training packages;
- ii. Vocational education and training providers provide professional development to educators delivering sustainability training inclusive of material for learning and assessment, case studies and professional learning and training programs;
- iii. Institutions have a capacity to influence industry and communities through education, with the provision of funding incentives for the implementation of whole-of-organisation approaches to sustainability encompassing campus management and curricula.

AEU Branches and Associated Bodies, recognizing their role as an employer and a business with corporate responsibility for sustainability, commit to developing an action plan with an aim to change union practices to reduce the carbon footprint. This will be done by implementing strategies identified by participating in environmental audits to:

- assess and reduce greenhouse gas emissions from energy use and travel practices;
- improve energy efficiency;
- increase the use of renewable sources of energy;
- participate in ecologically sustainable and socially responsible investment; and
- require sustainable purchasing policies of the AEU building and its practices.

## **Education and action**

The AEU's overarching aim is to encourage the connection of workers to build a clean economy that will be safe and prosperous for future generations.

An holistic approach to decision making is required for a community to be sustainable. In particular the interconnected nature of social, economic and environmental issues needs to be recognized and acted upon.

Community education for sustainability should be based on transformation and change, education for all and lifelong learning, systems thinking, critical thinking and reflection, participation and partnerships for change.

Individual union members should be encouraged to take action to live sustainably and to take action professionally and politically to secure environmentally sustainable workplaces/education institutions, community education and engagement, and Government action.

To facilitate this level of environmental engagement the AEU Branches and Associated Bodies will:

- foster networks of community and student education action groups;
- develop links with environmental organisations to promote the need for education and action in relation to climate change and emission reductions;
- encourage AEU sub-branches to elect an environment representative or team to develop solutions to environmental issues at the local level (with particular engagement and support by Principals across regions) and to share solutions through AEU publications;
- raise environmental issues with AEU members through its publications and forums to promote awareness, debate and action;
- promote lifestyle changes in areas of household practices, transport, sourcing local produce, ecologically sustainable and socially responsible investment;
- work with the AEU Federal Office and other unions, through the ACTU, to foster social partnerships with community groups, business and the research community to advance initiatives to tackle global warming.

# Appendix 1

## Definitions

### **Environmental Sustainability**

Environmental sustainability ensures that:

1. All species, people and cultures have intrinsic worth.
2. The earth community is a democracy of all life with humans having a duty to protect earth's ecological processes.
3. Diversity in nature and culture is the essential material for sustainability, health and for peace, and must be defended.
4. All people have a natural right to sustenance, with resources vital for sustenance needing to remain part of the global commons, not commodified and privatised.
5. A sustainable and just society is based on living economies and economic democracy which protect people and ecosystems, are equitable and work for the common good.
6. Living economies are built primarily on local economies which are diverse, decentralized, vibrant communities where the creativity and full potential of all humans is nurtured.
7. A living democracy is based on principles of inclusion and ecological and social responsibility. It strengthens political and economic power at the local, enables participation and delegates to higher levels of government only where that is the most appropriate level of decision-making and resource allocation (the principle of subsidiarity).
8. A sustainable and just society cherishes peace and diversity (including diversity of identities, cultures and religions).
9. Living cultures are life nourishing where all human and non-human life is respected, where people live within nature's limits, and in which there is planetary consciousness.
10. Sustainability requires globalising peace, justice, care and compassion.

[Source: Shiva, V. (2005) *Earth Democracy: Justice, Sustainability and Peace*, South End Press, Cambridge, MA, USA.]

### **Climate Change and Global Warming**

Climate change is a change in the statistical distribution of weather over periods of time that range from decades to millions of years. It can be a change in the average weather or a change in the distribution of weather events around an average (for example, greater or fewer extreme weather events). Climate change may be limited to a specific region, or may occur across the whole Earth.

In recent usage, especially in the context of environmental policy, climate change usually refers to changes in modern climate (see global warming).

Global warming is the increase in the average temperature of the Earth's near-surface air and oceans since the mid-20th century and its projected continuation. The Intergovernmental Panel on Climate Change (IPCC) concludes that most of the observed temperature increase since the middle of the 20th century was caused by increasing concentrations of greenhouse gases resulting from human activity such as fossil fuel burning and deforestation. The IPCC also concludes that variations in natural phenomena such as solar radiation and volcanoes produced most of the warming from pre-industrial times to 1950 and had a small cooling effect afterward. These basic conclusions have been endorsed by numerous scientific societies and academies of science in the major industrialized countries.

The available options are *mitigation* to reduce further emissions; *adaptation* to reduce the damage caused by warming; and, more speculatively, *geoengineering* to reverse global warming.

[Source: IPCC (2007-05-04). "Summary for Policymakers" (PDF). Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change.]

## **Carbon Neutrality**

Carbon neutrality, or having a net zero carbon footprint, refers to achieving net zero carbon emissions by balancing a measured amount of carbon released with an equivalent amount sequestered or offset.

The carbon neutral concept may be extended to include other greenhouse gases to reflect the fact that it is not just carbon dioxide (CO<sub>2</sub>), that is driving climate change, even if it is the most abundant, but also encompasses other greenhouse gases namely: methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFC), perfluorocarbons (PFC), and sulphur hexafluoride (SF<sub>6</sub>).

## **Carbon capture and storage**

Carbon capture and storage (CCS) is a plan to mitigate climate change by capturing carbon dioxide (CO<sub>2</sub>) from large point sources such as power plants and subsequently storing it away safely instead of releasing it into the atmosphere. Technology for capturing of CO<sub>2</sub> is already commercially available for large CO<sub>2</sub> emitters, such as power plants. Storage of CO<sub>2</sub>, on the other hand is a relatively untried concept and as yet (2007) no powerplant operates with a full carbon capture and storage system. When this technique is used with biomass, the technique is known as biomass energy with carbon capture and storage and may be carbon negative.

## **Carbon offset**

A carbon offset is a financial instrument aimed at a reduction in greenhouse gas emissions. Carbon offsets are measured in metric tons of carbon dioxide-equivalent (CO<sub>2</sub>e) and may represent six primary categories of greenhouse gases. One carbon offset represents the reduction of one metric ton of carbon dioxide or its equivalent in other greenhouse gases.

There are two markets for carbon offsets. In the larger, compliance market, companies, governments, or other entities buy carbon offsets in order to comply with caps on the total amount of carbon dioxide they are allowed to emit.

In the much smaller, voluntary market, individuals, companies, or governments purchase carbon offsets to mitigate their own greenhouse gas emissions from transportation, electricity use, and other sources.

Sources of carbon offsets include:

- Renewable energy
- Methane collection and combustion
- Energy efficiency
- Destruction of industrial pollutants
- Land use, land-use change and forestry
- Purchase of carbon allowances from emissions trading schemes

### **Emission Trading**

Emissions trading is a market driven approach to climate change mitigation. In a cap and trade scheme, the level of the scheme cap determines the environmental contribution of the Scheme: the lower the cap, a greater reduction in emissions is required.

There are other versions of emissions trading. An emission tax is a 'price' instrument. A third option is known as a 'safety valve' instrument. There are pros and cons cited for versions of emissions trading. The cap and trade is the most popular, despite criticisms overall.

A central authority (usually a governmental body) sets a limit or cap on the amount of a pollutant that can be emitted (and emissions target). Companies or other groups are issued emission permits and are required to hold an equivalent number of allowances (or credits) which represent the right to emit a specific amount. The total amount of allowances and credits cannot exceed the cap, limiting total emissions to that level. Companies that need to increase their emission allowance must buy credits from those who pollute less. The transfer of allowances is referred to as a trade. In effect, the buyer is paying a charge for polluting, while the seller is being rewarded for having reduced emissions by more than was needed.

### **Non-Renewable Energy**

A non-renewable resource is a natural resource that cannot be produced, re-grown, regenerated, or reused on a scale which can sustain its consumption rate. These resources often exist in a fixed amount, or are consumed much faster than nature can recreate them.

Fossil fuel (such as coal, petroleum and natural gas) and nuclear power are examples. Fossil fuels are non-renewable resources because they take millions of years to form, and reserves are being depleted much faster than new ones are being formed. The production and use of fossil fuels raise environmental concerns.

A global movement toward the generation of renewable energy is therefore under way to help meet increased energy needs.

## **Renewable Energy**

Renewable energy is energy generated from natural resources such as sunlight, wind, rain, tides, and geothermal heat, which are renewable (naturally replenished). New renewables such as small hydro, modern biomass, wind, solar, geothermal, and biofuels are growing very rapidly.

There is debate as to whether resources such as timber (when harvested sustainably) or metals (which can be recycled) are considered renewable resources.

## **Energy Efficiency**

Energy efficiency is using less energy to provide the same level of energy service.

Efficient energy use is achieved primarily by means of a more efficient technology or process rather than by changes in individual behavior. Energy efficient buildings, industrial processes and transportation could reduce the world's energy needs and help controlling global emissions of greenhouse gases.

Energy efficiency and renewable energy are said to be the twin pillars of sustainable energy policy.

## **Peak Oil**

**Peak oil** is the point in time when the maximum rate of global [petroleum extraction](#) is reached, after which the rate of production enters terminal decline. The concept is based on the observed production rates of individual oil wells, and the combined production rate of a field of related oil wells.

## **Sustainable Development**

Sustainable development is development that meets the needs of the present without compromising the ability for future generations to meet their own needs.

## **Just Transition**

Developed countries must take the lead on emission reductions, and provide sufficient funding for adaptation if we want to have a chance for achieving sustainable development and social justice. Developing countries can change the nature of their growth if they are provided with the necessary funding and technology to undertake those measures.

A Just Transition is aimed at smoothing the shift towards a more sustainable society and providing hope for the capacity of a “green economy” to sustain decent jobs and livelihoods for all. It is:

### **In adaptation and mitigation policies**

- Early social and employment vulnerability assessments;
- Consultation with and active participation of all stakeholders including trade unions in design, policy and monitoring of climate change policies;
- Accompanying measures FOR COMMUNITIES under the “response measures” debate;
- Active labour market policies as part of the policy mix;

- Respect for the provisions in the Conventions embodied in the ILO Declaration on Fundamental Principles and Rights at Work (1998).

#### **In Finance**

- Orienting financing towards investments generating green and decent jobs and transforming traditional sectors into “greener” ones;
- Providing resources for financing economic diversification and just transition policies.

#### **In technology**

- Promoting workers’ education and training on climate friendly and climate-resilient technologies as part of capacity building strategies;
- Promoting social innovation strategies in order to facilitate behavioural and organisational change, along with sustainable deployment of technologies.

### **Green Jobs; Green Up-Skilling**

A green job may be in agricultural, manufacturing, research and development (R&D), administrative, and service activities that contribute(s) substantially to preserving or restoring environmental quality. Specifically, but not exclusively, this includes jobs that help to protect ecosystems and biodiversity; reduce energy, materials, and water consumption through high efficiency strategies; de-carbonize the economy; and minimize or altogether avoid generation of all forms of waste and pollution.

Green up-skilling is the process of undertaking further education and training to re-skill workers in existing jobs to ensure they can develop, manufacture, install, and operate new environmentally sustainable technologies.

### **Climate Refugees**

Although they do not fit the definition of refugees set out in the UN Convention, people displaced by the effects of climate change have often been termed "climate refugees" or "climate change refugees".

Sea level rises and rising global temperatures threaten food security and state sovereignty for many around the world. Higher temperatures are expected to further raise sea level by expanding ocean water, melting mountain glaciers and small ice caps, and causing portions of Greenland and the Antarctic ice sheets to melt.

In tropical and subtropical regions (and even in temperate zones where crops and livestock production play an essential role in a region’s economy) are highly susceptible to global temperature rise and in turn food security crises. Severe drought and hunger related deaths are causing unprecedented rates of migration from north to south, from rural to urban areas, and from landlocked to coastal countries.

The Australian Federal government and State governments were alerted in 2009 to the looming crisis for coastal Australia because of the effects of sea level rises, by a report tabled in Federal Parliament by the all-party House of Representatives Climate Change, Environment, Water and

the Arts Committee entitled *Managing our Coastal Zone in a Changing Climate: the Time to Act is Now*.