Introduction

Climate change no longer falls within the realm of the hypothetical but has become an obvious and disturbing fact of life with effects that will be felt for many generations to come. A range of scientific studies, such as those by the IPCC\(^1\) or GEO4\(^2\), have confirmed tangible impacts for millions of workers’ communities and workplaces. Recurrent droughts, floods, and endemic and infectious diseases are but a few of the many effects or side-effects associated with climate change.

Yet we cannot be dissuaded into inaction by apocalyptic visions of the future. We are now at an important crossroads, still possessing the means for making decisions about the type of future that will be passed on to the generations that will follow. History will judge us by how we exercise the conscious options that we still have within our reach. Will we truly face up to this monumental challenge?

Trade unions want everyone to accept this challenge together, in solidarity and common action.

We firmly support the U.N. Secretary General Ban Ki-moon, who affirmed that “We can transform a necessity into virtue; we can pursue new and improved ways to produce, consume and discard. We can promote environmentally friendly industries that spur development and job creation even as they reduce emissions. We can usher in a new era of global partnership, one that helps lift all boats on the rising tide of climate-friendly development.”\(^3\)

We hereby issue a call for commitment. As representative unions from the North & South, we invite other actors in Bali to join in efforts to convince developed countries in undertaking serious emission reductions. It is no longer believable or acceptable to argue that growth or employment creation might be impeded. The rationale for postponement is no longer defensible.

The essential challenge for COP13 is to establish an ambitious mandate for engaging all countries into a stronger commitment to reduce greenhouse gas (GHG) emissions, bearing in mind the differentiated responsibilities and respective capabilities of developing countries and their need for international assistance. There is a growing awareness that developing countries – especially those that have or will become major GHG emitters need to be actively involved.

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1. The International Trade Union Confederation (ITUC) represents 168 million working men and women in 153 countries and territories and has 305 national affiliates. info@ituc-csi.org
2. The Trade Union Advisory Committee to the OECD (TUAC) represents 58 national trade union centres in the 30 OECD industrialised countries which together represent some 66 million workers. tuac@tuac.org
Here in Bali we aim to defend and support the most vulnerable, in the course of what we hope to be a ‘Just Transition’ process. Justice, rights, social protection and training are the hallmarks of such a process for a sustainable future. The rights of women and youth must be part of all starting points.

Trade unions hereby issue a call to action. As representatives of many millions of workers, we and they are part of the many solutions that are needed now; indeed, we pursue a dual commitment towards the environment and society. At every level – the national, the sector and the workplace – workers and trade unions continue to advocate a fairer, environmentally responsible society that respects human and labour rights.

As trade unions, we are confident that Bali will mark the beginning of a new and more ambitious process of social change, where our collective hearts and minds must aspire to save our planet, on the basis of solidarity and mutual respect.

We believe that the very nature of our social fabric can enable all of us to work together in achieving practical transformations. We solemnly call on governments and others to rise to the challenges and join this historic path.

Table of contents

Trade Unions support and ambitious Kyoto II agreement (#1-#7)
Going green: challenges & opportunities for mitigation (#8-#14)

- Employment effects of climate change policies
- It’s time for Green jobs
- And some sectors will face huge challenges

Adaptation: Addressing poverty, creating decent jobs, launching solidarity (#15-#26)

- Building global, national & local solidarity
- Positive impacts on economy, poverty reduction & employment

To enter the transition, AND TO DO IT FAIRLY (#27-#35)

- Why is a transition necessary?
- Protecting workers’ livelihoods
- Protecting the economic life of communities

Opening dialogue, reinforcing social partners’ capacities (#36-#40)
Financing climate policies (#41-#46)
The workplace: A field of action for climate change (#47-#54)
Technology options and social responsibilities (#55-#60)
Final remarks (#61-#62)

Trade Unions support an ambitious Kyoto II agreement

Trade Unions are convinced about the need to concentrate the world’s efforts to combat climate change under the United Nations Framework Convention on Climate Change.

1. Securing a new Post-2012 Kyoto Protocol is the most important challenge the world community faces. As trade unions, we are confident that Bali will mark the beginning of a new and more ambitious process of social change, where our collective hearts and minds must aspire to save our planet, on the basis of solidarity and mutual respect.

The ITUC General Council in June 2007 called for urgent need to tackle climate change as a priority for new trade union internationalism.

2. Trade Unions believe that the new agreement should limit the global average temperature increase to no more than 2°C, establishing a safe and sustainable pathway for global emissions reductions.

Consistent with this fundamental objective, trade unions urge Governments at the UNFCCC in Bali to follow the IPCC scenario for keeping the global temperature
increase to within 2°C and reducing 85% greenhouse gases by 2050.

The IPCC affirmed that there are very few years left for avoiding worst effects of climate change. The rapid shift required towards a global low carbon economy represents a massive challenge to workers and trade unions in developed and developing nations. Everywhere the necessary capacity for adaptation must be ensured, in particular in developing countries.

3. Following the principle of ‘common but differentiated responsibilities’, all countries need to play a part in the next Kyoto agreement, based on each country’s stage of economic and social development.

- Developed countries: should agree to further significant cuts in CO2 emissions in the near term: the outcome of the European Union’s commitment for a 30% cut (1990 basis) in CO2 by 2020, (subject to a new international treaty) can be a valuable benchmark for developed countries in making commitments, as a global emissions trading scheme will form the cornerstone of this strategy.

- Developing countries: the most advanced developing countries can progressively adopt GHG prevention, reduction, stabilisation or controlled increases, e.g. through targets on renewable energy use, carbon capture, addressing deforestation, and developing public transport systems.

4. Criteria for the burden share of emissions reduction. The share of the burden must be set in accordance with the principle of common but differentiated responsibilities and by taking into account equity criteria, based on each country’s emission sources (industrial or diffuses) and on its economic and social development.

- Diffuse sectors should be analysed on the basis of emissions per capita.

- Industrial sectors under the carbon market should be analysed through sectoral benchmarking or auditing, on the basis of CO2 emissions per tonne of product. This analysis should seek to promote best efficiency levels and Best Available Techniques (BAT).

- Development gaps between countries and the need for economic and social convergence need to be taken into account.

These elements should be adjusted by integrating other differences between countries e.g. population density, territory size (different transportation needs for larger territories) and the importance of carbon and labour intensive sectors in the energy system, etc.

5. Employment, social cohesion and just transition.

Any new agreement should address:

- effects on employment from climate-induced disruptions, i.e. displacement, migrations, unemployment in climate-sensitive sectors and climate refugees,

- effects on employment from the implementation of adaptation measures (i.e. investments in infrastructure or transformations in production), and

- effects on employment from the impacts due to mitigation efforts.

6. Employment transitions should be studied and anticipated so as to guarantee social justice. Accompanying measures (including the promotion of decent and green jobs and social protection systems) need to be designed along with mitigation and adaptation measures.

Trade unions propose to place employment, income and pro-poor measures at the centre of the discussions. Employment impacts should be incorporated as a variable in all scenarios.

7. Trade unions propose the establishment of tripartite social dialogue processes in each country and at sectoral levels to anticipate effects and the transitional measures needed, after taking into account social protection coverage. A good example of this is the Spanish establishment of social dialogue tables for the implementation of the Kyoto Protocol and the National Allocation Plan (See page 12).
8. The IPCC Fourth Assessment Report has drawn attention to the dangerous and irreversible consequences of uncontrolled climate change. The effects on the economy - including on employment - will be catastrophic if ambitious measures are not taken to reduce GHG emissions. While employment protection has often been used by certain developed country governments as a reason for not engaging in GHG emissions reductions, emerging evidence indicates that climate change mitigation has positive net employment effects. Trade unions believe that climate change represents a potentially positive opportunity to create jobs on the basis of a sustainable and fair society.

9. Recent estimates based on five different scenarios\(^4\) suggest slightly positive net growth in world employment in the long term, when job losses due to climate change policies are measured against those that might be created. At the same time, however, employment losses are expected to occur in certain specific industrial sectors and regions. Overall, significant employment opportunities will grow due to green production, especially through renewable sources of energy such as wind, wave, tidal and solar power, as well as through the use of biomass, energy conservation and clean coal technology. The Apollo Jobs study\(^5\) presented a comprehensive scenario of policy and programme support in which a US federal investment of $300 billion is made over 10 years in four categories: increasing energy diversity, investing in industries of the future, promoting high performance buildings, and rebuilding public infrastructures. In this scenario, supporting renewables alone is projected to create 459,189 jobs in the US, while the total investment is projected to yield over 3.3 million jobs. Another study shows that as many as 800,000 jobs would have been created in Europe and 235,000 in Germany alone by the end of 2006, particularly within the renewable energy sector. In Germany 400,000 new jobs by renewable energies are expected until 2020.

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\(^4\) OECD, Environment and Employment: an Assessment. Environment Directorate, OECD, 2004

Observatory on renewable energy & employment (ISTAS)

In recent years Spain has become an actor for developing renewable energy. New enterprises and jobs are being developed. To better analyse issues of renewable energies, the social dimension and impacts on employment, the trade unions created the: “Reference Centre on Renewable Energies and Employment” as part of ISTAS (an institute for occupational health and environment created by one of the trade union centres – CC.OO.). The Reference Centre promotes and develops renewable energy options and is an ‘observatory’ on these, as linked to employment, social and professional skills’ issues. It promotes policy options with institutions, sectors and enterprises.

10. Whereas developed countries must now prioritise GHG reduction leading to employment creation, developing countries can mainstream sound environmental policies in their poverty reduction strategies and development policies. For example, positive employment effects of energy efficiency regulations in buildings could be designed as part of a job creation strategy in emerging economies, contributing to a reduction in CO2 emissions. In the same way investments in systems of public transportation could create decent jobs, reduce social exclusion and CO2 emissions at the same time.

11. A key challenge for COP will be to promote research that yields a true picture of long term net employment effects through sector-by-sector and regional employment studies. The joint trade union study undertaken for the European region described below illustrates how concrete steps can be taken to better understand and plan positive change. COP13 should encourage similar studies for other regions.

European Unions Assess Employment and Climate Change Synergies

This study carried out by the ETUC, SYNDEx, Wuppertal Institute and ISTAS, looked at the potential repercussion on employment of a reduction of around 40% in the European Union’s CO2 emissions by 2030 as a consequence of climate policies. They looked more specifically at four sectors (energy production, energy-intensive industries, transport and building) in 11 EU countries. The study shows that:

- Employment in the energy production sector is sensitive to energy-saving policies. However, the jobs created from the development of energy savings options would outweigh the number of jobs at risk in the coal sector.

- In energy-intensive sectors, the risk of job relocation outside Europe and carbon leakage EU climate policies is real if the EU implements ambitious and unilateral emissions reductions. The risk can be mitigated with an industrial policy combining public aid for R&D training programmes and a ‘border adjustment mechanism’ on imports not covered by climate change regulations.

- In the transport sector, there is a huge potential for job creation in transport through alternatives to road vehicles, but challenges for the automobile sector and road freight.

- The building and construction sector represents a major source of employment, but it has to tackle the challenges of training its workers in sustainable building and innovation and recruit a sufficient qualified workforce.

The study comes to the conclusion that the net result in employment would be slightly positive. It points to the need for clear and foreseeable climate policies, substantial public investment in R&D, renewable and combined heat & power (CHP) energy, public transport systems and renovation of buildings, as well as well designed economic instruments taking into account the impact on low income households and energy intensive industries. The authors call for ‘Employment transition programmes’, with adequate funding and negotiated with the social partners, in order to anticipate, minimise and mitigate the negative social consequences for workers of adaptation and mitigation policies.

It’s time for Green Jobs
12. As defined by the ILO, Green Jobs are ‘decent jobs’, with high labour standards and working conditions but also with high eco-efficiency and low emissions. Trade Unions support and call on governments to promote such employment opportunities, as they hold the promise of providing good conditions and incomes that can stimulate growth and help safeguarding our climate.

These ‘green jobs’ are already mushrooming. They can be found in sectors such as renewable energy production, in energy efficiency services and equipment manufacturing, in mass transportation, in smart urban growth, in the reclaiming of brown-field sites and in recycling.

However, coherent policies have to be undertaken to enhance their potential. Because green employers are not naturally good employers, trade unions remain committed to fostering the living conditions of workers, be it in old or new sectors. In sectors such as forestry or agriculture for example, stable and decent wages can ensure proper living conditions and contribute to the protection of natural resources.

German Trade Unions advance on Energy Planning & Conservation

A very significant experience was developed in Germany, where the national trade union centre DGB with the German unions are collaborating with government, environmental NGO’s and employers’ federations in a programme to renovate buildings, contributing to climate protection whilst creating sustainable jobs.

The Alliance for Work and Environment aims to renovate 300,000 apartments, create 200,000 jobs, reduce 2 million tonnes per annum of CO2 emissions and lower heating bills for tenants, landlords, and the State by about US$4 billion, through reduction of unemployment costs and increased income taxes, etc. These effects are also predicted in a study of a joint project: “The renovation of a building – A chance for climate protection and the labour market” conducted by Greenpeace Germany and the German Trade Union IG BAU. The immediate objective is to improve insulation of buildings, advanced heating technologies, and use of renewable energy, such as photovoltaic or solar thermal systems.

Thousands of new jobs were anticipated in the construction, heating, sanitary and air-conditioning sectors, as well as in building services. Financing for the programme is provided by the German government, which will spend less than US$1.8 billion in a 5 year period. In addition, a total of US$8 billion will have been made available through credits at favorable rates of interest.

"The EnergySavingFund for Germany". The EnergySavingFund supports private, commercial and public energy consumers to save energy, not by cutting back but by the efficient use of end-use energy. Altogether, the programmes of the EnergySavingFund have a positive net impact on employment amounting to about 1 million person-years until 2030. Each served petajoule of end-use energy provides additional new jobs amounting to about 103 person-years. The idea is: pre-financing of energy efficiency activities will be refinanced by the saved energy costs.

And some sectors will face huge challenges

13. Trade unions are aware that certain sectors will suffer from efforts aimed at mitigating climate change. Sectors linked to fossil fuel energy and other energy intensive sectors will be profoundly transformed by emissions reduction policies. This includes industries such as steel, iron and aluminium but also energy intensive services, such as road transport.

As an example drawn from a study by the European Trade Union Confederation (ETUC), we expect losses in the European coal sector and the oil refining industry. The closure of coal plants is expected to have particularly important effects on employment in coal mining.

14. While trade unions accept that changes in some sectors are necessary, we propose the adoption of a range of Just Transition measures to prevent hardships to workers that arise from such transformations. Transition policies should primarily focus on energy-intensive sectors and help to reskill the workforce through training and education programmes. In our example, while there is some scope for coal plant workers to be retrained for vacancies in cogeneration or gas plants, other aspects need to be taken into account, such as the fact that these vacancies will not appear in the same geographical location. Special attention should be given to the economic diversification of areas where plants are
expected to close, so that the local community does not depend on one workplace.

**Adaptation: Addressing poverty, creating decent jobs, launching solidarity**

**Building global, national and local solidarity**

15. We know that, even with immediate and drastic cuts in emissions, our climate will undergo dramatic change. The magnitude of this change will depend on mitigation policies. Our capacity to respond to these changes and reduce our vulnerability to climate change depends on our ability to undertake urgent adaptation policies.

Trade unions consider, with others, that our capacity to adapt is primarily related to income and capabilities. While everybody experiences negative climate impacts, the most vulnerable will experience them more severely, and this will be the case in developed and developing countries. Poor people often lack the resources, information or access to services which allow them to anticipate the effects of climate change.

16. Poor people in developing countries will suffer from a double burden: First, the majority of developing countries are in tropical and sub-tropical regions, which will predictably be more seriously affected by the impacts of climate change: Africa, Asia, Latin America and the Small Island States have all been identified as regions of concern.

Secondly, developing countries are often less able to cope with adverse climate impacts: poverty exacerbates, and is exacerbated by, the impacts of environmental change. People living in these countries are highly dependent on climate-sensitive resources, have low adaptive capacity and, in the case of the poorest inhabitants, already struggle to cope with current extreme weather events and climate variability.

17. These impacts feed the vicious circle of poverty, by adding more negative effects for the development of developing countries. Environmental events generate huge amounts of stress for poor households: droughts, resource depletion and floods, among others, are either at the source of or reinforce the already critical social and economic situation (i.e. resource depletion aggravates unemployment, which reinforces migration subsequently contributing to the loss of human resources and endangering rural economies).

Current international cooperation is clearly insufficient given the size of the problems facing developing countries. As a global problem, climate change requires that the international community prioritise global solidarity.

18. Governments have a very important role in ensuring that sound adaptation policies are undertaken starting with the provision of public responses and investments, as well as regulations and policy guidelines and economic and
institutional support to the private sector and civil society. Other aspects of adaptation, such as major infrastructure decisions, will require greater foresight and planning, and some, such as knowledge and technology, will be of global benefit.

Trade unions call on governments and society to show solidarity with those who are most vulnerable. International solidarity must be strengthened and include aid for emergencies and disasters as well as funds for quick adaptation programmes. National solidarity is related to increasing investment for securing the livelihoods of the poorest, through the development of social protection, poverty reduction strategies, and decent jobs programmes. One of the big challenges in this realm is governmental enforcement and capacity in many poor or emerging countries. Democratic governance will from now on also describe a government’s response to climate change.

19. Quality public services and strong public sector leadership at all levels of government must be at the heart of the global response to climate change. As the Stern Review reminded us, climate change represents the biggest market failure in history. We cannot rely on those same failed market mechanisms to get us out of this crisis. Investments in water, health, transportation, housing and other essential infrastructure urged in this statement should reverse the destructive trend of privatisation and deregulation, and should be public and democratically accountable. Similarly, we must significantly strengthen public investments in research and development on new clean and renewable energy technologies, climate science research, and disaster response. Public-public partnerships for technology transfer in the utilities sector, for example, should be encouraged and financially supported. Public procurement contracts should include specifications for labour and environmental sustainability standards.

20. How is international solidarity translated into policies and actions?

- Technology transfer is essential. Unfortunately, real commitments to development and to the transfer of climate-friendly technology are lacking. Measures need to be taken to ensure the accomplishment of the Convention’s mandate and efforts made to better adjust the proposed clean technology options to the actual needs of the people in developing countries. Trade unions believe technology transfer must ensure the development of research and innovation and improve installed capacity in developing countries, as these are sources of sustainable growth and jobs.

- Directing financial flows for adaptation: Water, health and infrastructure have been identified as the most vulnerable sectors and those where investments urgently need to be made. Such investments need to take account of other realities as well, e.g. the growing incidence of HIV/AIDS and other diseases which are reducing the capacity to properly deliver such services. In this context, long term financial flows should be directed towards developing countries, in order to better adapt to climate change (See our proposals on financing climate change policies in #41-46).

Trade unions call for honouring the commitments made at Monterrey and Gleneagles for a major increase in development aid to assist poor countries and for greater accountability of governments to properly deliver on their commitments from one year to the next.

A commitment to eradicate poverty and promote equality necessitates concrete steps to incorporate the social dimension in the implementation of the Clean Development Mechanism (CDM), Joint Implementation (JI) and Emissions Trading (ET). This requires, inter alia, the development of social indicators and other tools that reflect broad societal values and norms. Workers’ involvement is essential to ensure that projects fulfill sustainable development criteria. In addition, the participation of workers from developing countries hosting CDM projects is crucial to guarantee sustainability. The Government of Belgium, along with Belgian trade unions, has shown how these flexible mechanisms can be made to support social and employment policy.
Belgium’s CDM and JI Projects Include Social Criteria & Trade Union Involvement

Under the current rules for the 2008-2012 year period, Belgium must reduce greenhouse gas emissions by 7.5% (compared to their 1990 levels). To do so it has incorporated a set of social criteria within the terms of its call-for-tenders to purchase greenhouse gas emission quotas, thereby following recommendations of a technical committee composed of government, trade union, employer and NGO representatives. Through the implementation of the flexible mechanisms policy makers must truly seek a balance between economic, environmental and social impacts.

To be accepted, project proponents must respect the principles of the OECD’s Guidelines for Multinationals, the eight basic Conventions of the ILO Declaration on Fundamental Principles and Rights at Work, and ILO Conventions 155 on Occupational Health and Safety and 169 on Indigenous and Tribal Peoples.

Employment rates, quality and skills development must also be factors for observation. Proponents must show compliance to labour standards and ensure access to essential services, including energy. They must develop a plan for monitoring the environmental, social and economic impact of the project. Where pre-financing of projects is desired, trade unions must be involved in a monitoring process that fosters worker involvement and trade union action in non-Annex I countries. The experience shows that compliance to extensive criteria does not pose significant hurdles to the tendering process. See: www.climatechange.be/jicdmtender/

Positive impacts on economy, poverty reduction and employment

21. Adaptation to climate change offers the opportunity to commit with new paths for economic development; a development that puts people at the centre, and respectful of workers’ rights and the environment. Regional, sectoral and local research is needed to better understand the effects that adaptation measures might have on the economy, poverty reduction and employment. Nevertheless, we can safely say that adaptation strategies, by improving societies’ and economies’ capacity to react and adapt to climate change, do not in essence have a negative impact on livelihoods or employment.

While climate change will negatively affect agriculture, forestry, ecosystems, health and human settlements, in particular in the Southern hemisphere, accompanying adaptation measures could be made to yield positive effects on employment, or at least reduce the severity of the negative ones.

Adaptation could also provide positive opportunities for sectors at risk and might even help to improve worker education and income. One example of this is Lesotho’s National Adaptation Action Plan in which all adaptation measures are analysed according to their impact on employment creation and on poverty reduction, such that the country only chooses those with positive outcomes in these two areas. This is to be commended for all countries since unemployment reduction is a top priority for fighting poverty.

Adaptation measures vary by sector, but all of them should include provisions for workers whose jobs are at risk from changes in production needed to prepare our society and economy for the impacts of climate change.

22. How can adaptation prevent job losses? Only by adapting vulnerable sectors can we secure an economic and sustainable perspective. Some examples from sectors:

In the agriculture & forestry sector (where climate change is expected to reduce yields and damage crops, erode soils and increase livestock deaths, particularly in the South) adaptation policies need to focus on expanding non-farming activities, and farming crops capable of facing greater variability in weather conditions as well as heat resistant plants and tree species. The challenge of water shortage requires new irrigation technologies. This, combined with agrofuels promotion would trigger investment but increase prices of agricultural products. Parts of the farming sector will require substantial shifts in public assistance, which alone could ensure stable food production. Furthermore, such policies will help limit the negative impacts of climate change on economic activity and
thus on employment. In addition, trade unions re-affirm the need to apply the precautionary principle when dealing with genetically modified organisms.

With regard to human health, climate change is expected to have its more serious impacts on older and vulnerable people. In addition it will decrease workers’ productivity by increasing mortality and morbidity of certain diseases. Rising temperatures will also worsen working conditions of workers who carry out their activity outdoors (building workers, agriculture workers and road workers, for example). These effects will severely impact on health and social care services’ capacities. Adaptation policies need to improve legislation regarding occupational health and safety and/or expand health services to the most vulnerable groups. This can yield positive results for employment and income in affected communities.

In the tourism sector, the vulnerability of workers can be reduced by policies that focus on the development of different tourist activities or promotion of economic diversification.

23. How can adaptation create jobs? In the agriculture & forestry sectors, the expansion of non-farming activities, the establishment of tree nurseries, reforestation projects and the promotion of local technologies are examples of policies that can help to adapt to climate change and create numerous job opportunities. The last two initiatives are well known for their potential to empower poor people, in particular women, and give them the opportunity to participate in the formal economy and increase the family income.

Building & Wood Workers’ International develop their forestry programme

Close to 500 million people around the world rely on forests for their livelihood. Therefore, there is an urgent need to achieve a balance between poverty reduction and development needs and the sustainable use of the world’s forest resources. The Building and Woodworkers’ International (BWI) carries out a number of initiatives in Sustainable Forestry Management (SFM) together with its affiliated unions in Ghana, Burkina Faso, Kenya, Uganda and Mali.

The first steps were taken in 2000 to promote sustainability of forestry, taking account of its economic, environmental and social aspects. Tree nurseries, herbal groves, bee-keeping and non-timber forest products were organised or promoted to enhance income generation and reduce poverty. Wells have been installed for easy access to clean water by communities. Workers have been trained to improve health and safety and for their awareness of environmental aspects of forestry and certification. Local communities, companies active in the industry, environmentalists and workers’ representatives have been involved in conservation and protection of watersheds and vital habitats through the planting of local and exotic tree species.

BWI is actively strengthening the capacity of trade unions in forest certification that aims at strengthening social standards, inclusive of ILO core standards and integrated with Sustainable Forest Management (SFM). The results show the success of broad-based and inclusive dialogue and planning.

Afforestation in Ghana. In Ghana, eighty percent of the forests were cut down over the past fifty years. The Timber & Woodworkers’ Union of Ghana (TUC) leads its own afforestation project in order to soften the social, ecological as well as national economic consequences of the lack of wood resources for the forest and timber sector.

The Social Society – Sustainable Development Foundation supports this project.

The existing afforestation area in Kokoago, Brong-Ahafo, will now be extended by a further area for sustained forest management. The project secures the future of the Ghanaian timber industry, maintains the natural eco system, generates income for the trade union and extends the skills and knowledge of the trade union members in sustainable forestry.

24. Job opportunities will appear in the health sector if adaptation strategies are seriously implemented by governments. As health needs rise because of the increased risk of diseases, new employment opportunities in the health sector will appear. Greater worker training and
protection from new potential risks are necessary.

New jobs will appear in the building sector, as a consequence of infrastructure investments, such as coastal defences, flood protection, drainage containment, road adaptation, etc. Buildings, infrastructure and homes will have to be better adapted to climate change, and political decisions that promote these strategies, including buildings’ retrofitting, will lead to new job opportunities.

25. Adaptation offers the possibility for renewing development strategies, by adding an environmental component and securing funds for investing in indispensable sectors such as health, water and infrastructures, very much linked with poverty and vulnerability. Trade unions call on governments to grasp this opportunity to improve people’s livelihoods in a sustainable manner.

26. Trade unions believe climate justice cannot be achieved without gender justice. Principles of gender equity must be adopted at all stages of the international climate change strategy, from research to analysis, and in the design and implementation of mitigation and adaptation strategies, because climate change is not gender neutral. Women are generally more vulnerable, representing the majority of the world’s poor and powerless. They are also more dependent for their livelihoods on natural resources that are threatened by climate change. The 2004 Asian Tsunami killed four times as many females as men, for example. Women are a potential source of innovative adaptation strategies and must be empowered to take a central role at all decision making levels on climate change, including within unions such as those in the utilities sector.

To enter the transition, AND TO DO IT FAIRLY

27. Our introductory remarks about the linkages between mitigation, adaptation and the world of work are intended to build support among governments, businesses and other members of civil society for creating transitional measures that safeguard the livelihoods of workers and their families, as well as economic activity in urban and rural communities.

28. These transitional measures, regrouped under the concept of ‘Just Transition’, are essential to fuel mass support for climate change policies, as employment concerns have regularly been put forward as a reason for not undertaking climate change policies. Trade unions believe that by anticipating, exchanging and collectively deciding on measures, it is possible to set a fair path for a socially just & environmentally responsible society, both in developed and developing countries.

29. Transitional needs in a context of GHG emission reductions imply an analysis of the real consequences of climate change policies, down to the micro-level with its potential losses for the most vulnerable actors. In the case of changes in production, workers are the most vulnerable, along with communities that could lose their main economic activity. When changes in consumption are going to be required, the most vulnerable will be poor consumers who will need to pay high prices for services such as electricity or fuel. An in-depth analysis and identification of vulnerable sectors, communities and individuals will contribute to pertinent and timely decision-making.

30. In the context of adaptation, transition mainly implies helping workers to incorporate new job opportunities, to build social protection systems and promote significant economic diversification. This could create new job opportunities, re-qualify workers, and fight unemployment in communities.

31. Governments should be encouraged to ratify ILO Employment Policy Convention No. 122 and be guided by its Recommendations in devising steps for effective employment transition.

32. Trade unions believe that transitional measures should be envisaged as opportunities for improving our societies, by adding democracy and social justice to environmental decision-making. In addition, these policies induce possible social and economic accompanying benefits.
Protecting workers’ livelihoods

33. Transitional measures are needed to protect workers from the unexpected consequences of climate change measures.

**Training** (vocational training in new sectors & re-training for workers in declining sectors). Several studies have identified economic sectors that will experience major changes regarding mitigation and adaptation policies. Trade unions know that in some cases, the only means of ensuring workers a decent and sustainable life will be by preparing them for new jobs, through new qualifications and training opportunities. These should be anticipated as workforce training is a mid- to long-term strategy.

**Social protection**, including health coverage. Access to an adequate level of social protection is recognised as a basic right for all individuals in the Philadelphia Declaration, in subsequent ILO declarations and in a number of international labour standards. It is also widely considered to be an instrument for the promotion of human welfare and social consensus on a broad scale, and to be conducive to and indispensable for social peace and thus improved economic growth and performance. Yet in many countries, especially developing countries, the reality falls extremely short of these ideals (i.e. conventional systems of social security apply to less than 20 per cent of the labour force in most developing countries, and to less than 10 per cent in much of sub-Saharan Africa). For a vast number of workers, losing a job or getting sick means an immediate lost of income and eventual health benefits, thereby plunging into poverty to join the ranks of the destitute.

“Social protection is the tool modern societies have developed to deal with the vulnerability of some sectors of their population. Social protection systems must run in parallel to adaptation efforts as they can diminish vulnerability to climate change and strengthen the social security systems, especially in developing countries”.

As stated by the ILO, social protection needs to adapt in order to deal with contemporary issues, and climate change is without doubt an important one among these.

**Social dialogue and freedom of association.** In the context of climate change, the main goal of social dialogue – which depends upon the existence of democratic workers’ and employers’ organisations that can represent the views of their constituents - is to promote consensus-building and the democratic involvement of the main stakeholders in the world of work. Successful social dialogue structures and processes have the potential to resolve important economic and social issues, encourage good governance, advance social and industrial peace and stability, and boost economic progress.

Social dialogue can address climate change conflicts as it:

- advances towards a sustainable development model and a sustainable productive system.
- promotes economic growth and development, through innovation and technological capacity.
- improves the economy, through better employment creation as a feature of social cohesion.
- promotes awareness about climate change and greater involvement of social partners and sectors affected by change.
- prevents, anticipates and addresses social effects, especially competitiveness and employment.

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6 ETUC Study on Climate Change and employment, 2007; IPCC Fourth Assessment Report, WGII
7 ILO Declaration of Philadelphia on the aims and purposes of the Organisation.
8 ILO Report of the Director General on Decent Work
9 UNEP – Sustainlabour – ITUC training guide on Climate Change
34. Other transitional measures are needed to ensure the continuity of economic activity in given regions affected by climate change or by climate change policies. This is the reason why trade unions call for economic diversification policies along with mitigation and adaptation (See full trade union submission on this issue at: http://unfccc.int/adaptation/sbsta_agenda_item_adaptation/items/3994.php )

35. Trade unions propose the following means for addressing economic diversification in vulnerable sectors in mitigation (energy-intensive industries, road transport, among others) and adaptation (climate-sensitive sectors, such as agriculture, fisheries and tourism):

**Co-governing change.** Governments have to create and institutionalise information exchange and dialogue with actors from the sectors that will be affected by climate change or measures to deal with it in order to better anticipate effects and better accompany the transition.

Local and regional information-gathering processes should promote social dialogue involving affected actors as a building-block for better understanding their needs in relation to economic diversification. Analysis of the winners and losers and measures to reduce hardships would be necessary. Neither mitigation nor adaptation policies should aggravate poverty or vulnerabilities.

**“Fuelling” change.** Governments need to provide incentives for “new activities”. On the adaptation side, solidarity is needed from developed countries through the provision of funds, but also through the creation of frameworks to channel new outputs from developing countries.

Clearly, the conversion of existing activities into new economic sectors implies serious investments from the private sector. However, governments need to set the path for these transformations, as the private sector will wait for signals before taking action. Trade unions call on governments to undertake rapid measures in the sense of financing economic diversification policies. This represents the only guarantee to ensure that the livelihoods of the most vulnerable groups are protected and improved.

**Targeting change.** Governments should focus on targeting economic activities, such as technology transfer, workforce and employer training, and research and development. A focus on green jobs could multiply benefits.

Funds for economic diversification need to be directed to pilot projects, education, research and development, and identifying green job “niches”.

Agreed options need to measure the quantity and quality of the jobs created; this will multiply benefits for the economy and the environment. Trade unions call on governments to enhance poverty reduction and climate change adaptation through decent and green job creation, as these forms of employment contribute to sustainable economic growth and lift people out of poverty, the main path for reducing vulnerability to climate change.

**Opening dialogue, reinforcing social partners’ capacities**

36. Dialogue with civil society must include trade unions in the decision-making process for successful climate change adaptation and mitigation. Mechanisms for participatory decision-making on climate change must be set at the international, national, sectoral and workplace levels.

37. Effective participation can flourish by recognising worker rights at the workplace with respect to production decisions. COP13 must take heed of the WSSD in calling for the integration of country support of the International Labour Organisation’s (ILO) ‘Declaration on Fundamental Principles and Rights at Work’, and promote the implementation of the international labour standards to which this Declaration refers.10

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10 The ILO Declaration on Fundamental Principles and Rights at Work is an expression of commitment by governments, employers' and workers' organisations to uphold basic human values - values that are vital to our social and economic lives. The Declaration covers four areas: Freedom of association and the right to collective bargaining (enshrined in ILO Conventions 87 and 98); the elimination of forced and compulsory labour (enshrined in Conventions 29 and 105), the abolition of child labour (enshrined in Conventions 138 and 182), and the elimination of discrimination in the workplace (enshrined in Conventions 100 and 111). See:
38. We call on governments to create or strengthen laws or regulations that ensure labour rights, employment rights and participation, e.g. time off for training or to carry out environmental duties, or support for environmental representatives’ paid leave where applicable. (Additional rights are indicated in #50 below).

39. Good practices involving workers and trade unions must be actively encouraged by governments and information about these shared among country delegations. The Spanish good practice below provides a good example of effective worker and trade union participation on climate change decision-making.

http://www.ilo.org/dyn/declaris/DECLARATIONWEB.INDEXPAGE
Spanish Government, Unions & Business Create Tripartite Climate Change Plan

In 2005, a trend-setting agreement to institutionalise joint oversight of national compliance to the Kyoto Protocol was adopted by the Spanish government, along with the leading trade union and business organisations in the country. Both the Confederación Sindical de Comisiones Obreras (CC.OO.) and Unión General de Trabajadores (UGT) are party to the agreement, along with the national government and the two leading business organisations in Spain. The agreement creates a platform for tripartite social dialogue on climate change, bringing the Parties together through an umbrella ‘Dialogue Table’ that undertakes responsibility for monitoring and assessing issues to guide national compliance.

The agreement aims to “prevent, avoid or reduce the potentially adverse social effects that could result from compliance with the Kyoto Protocol, in particular those related to competitiveness and employment.”

In 2007, the second round of the Social Dialogue Tables was held with representatives of the Spanish trade union confederations and business organisations along with environment, labour and industry Ministries. Seven follow up Dialogue Tables were then organised, one for each industrial sector, for the purposes of reviewing the mandatory GHG emissions’ reduction in the NAP. A first meeting for the residential, commercial and transport sector was organised, which was the first time that government, trade unions and business representatives met to find solutions for the sector’s GHG increase.

Within its framework programme on climate change, employment and income, the ILO launched a study on the Dialogue tables to document and analyse:

- the role and functioning of the dialogue tables as institutions as well as
- the specific challenges and opportunities faced in the various sectors of the economy and the steps proposed or taken by the dialogue tables in response.

The study, undertaken by Sustainlabour, is at its final stage and will soon be released.

40. Support for capacity building amongst workers and trade unions must seek full workforce engagement in climate change initiatives, particularly through training and education. Trade unions are a significant provider of education and training around the world. Opportunities should be taken to raise the awareness of employees and their representatives about climate change through union-based education programmes, especially as it is well known that the effects directly spill over into the home and community. We call COP13 to encourage and reinforce these trade union efforts.

UNEP & Sustainlabour launch training programme for workers

Sustainlabour and UNEP have started a two-year programme on Labour and the Environment for Africa, Asia and Latin America. The programme is supported by the Spanish Government and aims to contribute to building capacity among trade unions on sustainable development areas, one of them climate change. One of the first actions is the elaboration of a training guide on climate change in which unionists will find comprehensible information on climate change and its impacts and, more specifically, effects on employment and trade union actions on climate change.

During 2008 the following activities will be held: a global train the trainers’ session, a regional training session in Asia and a second one in Latin America.

The training aims to build capacity around issues such as:

- climate change and its consequences: mitigation, adaptation, economics of climate change, international governance of climate change, effects of climate change on employment;
- effects of adaptation on employment: measures to advance adaptation and creating green decent jobs, regional and sectoral examples, how to anticipate - maximising positive effects, minimising negative effects;
- effects of mitigation on employment, measures to advance mitigation and creating green decent jobs, opportunities for synergies: mitigation and cleaner production, how to anticipate - maximising positive effects, minimising negative effects
- how to ensure the participation of trade unions in decision-making on climate change strategies/policies: how can workers and trade unions initiatives in the workplace contribute to the reduction of emissions, what are we doing - trade union action practical examples.

Financing climate policies

41. We are now at the beginning of the process of establishing the real costs for mitigating GHG emissions and adapting to climate change. Mitigation costs might seem huge, even if experts consider they are small in comparison to the eventual costs of inaction. In addition, as most of the efforts should be undertaken in developed countries, in which mechanisms exist to promote research, innovation and investment, governments should be able to re-direct financial flows towards these investments. Attention should be given to the need for promoting long-term and non-speculative investment flows as investments in, for example, low-carbon technologies need a long-term horizon for investment recovery.

42. Trade unions highlight the role of public services in areas such as education, public health and transportation, and access to energy to cover basic needs, among others. All these are essential for contributing to fair and efficient climate policies (efficient climate policies will require a highly qualified work force, researchers, and engineers; public transport helps reducing GHG and increases access to mobility for the poor). Trade unions consider that a fair and redistributive tax system is a principle source of funding for quality public services. Governments are able to share costs of services between rich and poor and to develop infrastructure to build a country's wealth and capacity. The frequent requirement that governments privatise public services in order to receive aid or loans can limit government choices and deny their right to invest in the long term through quality public services.

43. Trade unions are extremely concerned about financial and investment needs in adaptation. Successive reports have estimated that the investment needs (most of them having to be undertaken in the developing world) would amount to tens of billions of dollars or euros.

Water, health and infrastructure have been identified as the most vulnerable sectors and those where investments need to be made urgently. In developing countries, these sectors have been suffering from both public and private under-investment. Public funding did not succeed in giving millions of citizens access to essential services (those which are also going to suffer the most from climate change). Many reasons explain this including lack of resources (limited tax revenues, reduced development assistance flows), as well as poor governance (discretionary policies regarding public goods). A review of private involvement in these sectors in developing countries paints an even more negative picture (including reductions in access to services for the poorest). The short-term orientation of private financial flows make these sectors less interesting, and when investments exist, inequitable profit-oriented behaviour is to be anticipated, as services such as water supply and health are in essence not-for-profit.

11Stern Review on the economics of climate change, 2006, HM treasury, UK; Haites, Erik – Estimates of investment and financial flows for mitigation in 2030, 2007; Smith, Joel – Preliminary Estimates of additional investment and financial flows needed for adaptation in 2030, 2007; Margaree consultants; Friends of the Earth, Climate Change – the costs of inaction, 2006
12 Public Services International Research Unit, PSIRU. http://www.psiru.org
13 Quoting a recent publication, "public authorities, development banks, donors and others should reconsider privatisation and liberalisation policies in water supply/sanitation and electricity distribution/generation. There is a well-known and established alternative available through public sector provision that avoids the risks of corporate strategies producing damaging social and environmental consequences (Hall, 2001; Gabriele, 2004). Public operators have of course experienced their own problems, due to flaws in the institutional framework (lack of accountability of individual managers, staff or politicians), but not through an
44. Is the consensus regarding the need to set adaptation policies going to reverse this trend? Trade unions believe that this will not happen automatically. Pro-active policies need to be undertaken to direct long-term investment flows to these sectors. Democratic governance, the reinforcement of domestic fiscal systems, clear support from IFIs for public expenditure, all appear to be potential paths for achieving sustainable investment flows in these sectors.

45. Trade Unions support a process whereby the UNFCCC works with civil society to identify impacts of trade policies and agreements at the WTO and elsewhere on measures required to combat climate change, and ensure that where there is a clash between such trade policies and the imperative to take action on climate change, that governments at all levels will have the policy space to prioritise climate change. For example, international patent protection regimes such as TRIPS must not be allowed to impede cooperation to ensure that developing countries have access to existing and new climate change technologies.

46. Publicly funded research, innovation and development have to be prioritised and well-funded, as today it suffers from a long period of disinterest and underinvestment.

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inherent inability of public operations to be effective, efficient, and equitable as well as environmentally sound. Policy should be based on developing sound institutional and operating principles, including transparent and participatory systems of accountability, rather than on privatisation”. David Hall and Emanuele Lobina / Natural Resources Forum 28 (2004) 268–277
The workplace: a field for action on climate change

Norwegian Trade Unions launch a Climate Strategic Plan

The Norwegian Confederation of Trade Unions (LO Norway) climate strategic plan defines areas, processes and objectives for trade union involvement in the reduction of greenhouse gas emissions. It calls for transformation of technology and changes in production and consumption patterns. The plan introduces challenges and potentials in various areas, i.e. environmental technology, carbon based energy sources, renewable energy, energy intensive industries, flexible mechanisms, transport, tourism, consumption and purchasing, waste, local and regional administration, and social partners’ collaboration at the workplace.

LO intends to raise awareness for climate actions in Norway by involving and inspiring unions and individual members in a joint initiative. The plan underlines the need for political courage, adequate means, and a general change of attitude among people. It identifies areas where there are potentials for considerable reductions in emissions, and urges the Government to initiate various short term and long term measures. LO calls for a broad national recognition of the challenges ahead. All citizens should contribute, the cost should be equally shared, and the ones with little resources should not be affected.

LO considers the climate challenge as symptomatic of broader issues related to global sustainable development. Through a general awakening on these issues, LO sees the possibility that the quality of life of people will be improved in many respects.

47. Worker support for climate change policies will be strengthened if employment and livelihood issues are placed at the centre of policy and decision-making. This is important, firstly, because it will lead to a reduction of greenhouse gases at the production level and throughout product lifecycles. Since workplaces use up energy and other resources and generate waste, it is crucial that clear workplace targets for energy efficiency, waste minimisation and GHG reduction (especially CO2) be linked to sectoral and national carbon reduction and waste reduction strategies. Since three-quarters of all greenhouse gases come from manufacturing, energy production or supply.

48. Secondly, the results of such efforts yield sizeable ripple effects to the personal and community consumption patterns of workers.

49. There is a need also to promote a preventive approach in relation with workplaces’ preparedness for climate change, backed up by clear government policy and regulation and workplace negotiation. Climate change and vulnerability to extreme weather events should be mainstreamed in all sectors and a pro-active adaptation strategy needs to be undertaken from now on.

In Spain for example, Comisiones Obreras (CC.OO.) is working in ‘Mobility plans’ at the enterprise level and in industrial zones. Reductions in the use of automobiles, public transportation improvements, introducing buses linking the workplace to the nearest train station, and bicycle promotion are some of the main proposed measures. Paid public transportation for workers in collective agreements is under study. CC.OO. also undertook training sessions for ‘mobility managers’, union representatives responsible for negotiating and following-up plans and measures at the enterprise or local level. In addition a proposal has been made to the government to make enterprises with more than 200 workers establish mobility plans.

50. Such strategies will not only translate into greater support for mitigation efforts, but also in the better application of...
adaptation measures, including disaster relief. The following preconditions are required to ensure countries’ effective compliance with Kyoto Protocol rules and measures:

- **Right to participate**: Workers have the right to participate in decision-making processes relating to environmental concerns in their workplace, exercised through trade union representatives on joint health and safety committee or elected workplace safety and health representatives, or through new environmental committees.

- **Right-to-know**: Workers have the right to be aware of the environmental hazards in the workplace as these are identified and evaluated and information concerning these hazards is communicated to employers and employees through labelling, material safety data sheets and employee training. This standard currently applies to chemical manufacturers or chemical importers, but needs to be expanded to include climate change-related issues, i.e. the right to know about workplace emissions, technological choices, and plans for energy saving, use and efficiency.

- **Whistleblower protection**: A worker may not be held liable or be disciplined for reporting workplace practices that are honestly believed to pose an environmental risk.

- **Right to refuse dangerous work**: A worker may not be held liable or be disciplined for refusing to perform work that he/she honestly believes may pose an immediate or serious threat to his/her or other workers’ health.

- **Right to refuse work which harms the environment**: A worker may not be held liable or be disciplined for refusing to do work that he/she honestly believes may pose an immediate or serious threat to the environment.

51. To facilitate the implementation of such principles a broad range of industrial relations issues requires examination, especially the 2.3 million collective agreements that are currently in force. These represent the basis of a long tradition of employer-trade union cooperation in joint formulation and administration of workplace rules, many of which can readily serve as possible tools for workplace action on climate change.

52. At the same time, linkages between workplace action and international instruments that deal with environment (e.g. the Aarhus Convention on Access to Information, or the Rotterdam Convention on the Prior Informed Consent) and others that contain environmental provisions (e.g. ILO Conventions that deal with chemicals and occupational safety) need to be explored and developed.

53. The effect of focusing on workers, work and their communities could lead to the creation of a new workplace culture for climate change. A good illustration of the steps that can be taken to foster such a development is described in the following example of good practice from the U.K.

**Greening the workplace**

The TUC Greenworkplace project, funded by the Government's Carbon Trust, has supported trade union-led initiatives to cut energy use in 6 demonstration workplaces across the UK - Corus steelworks, Friends Provident (financial services), DEFRA (the Government’s environment Ministry), the TUC’s head office, Scottish Power, and the British Museum.

All projects supported unions to undertake staff surveys, 'green' open days, training for ‘Union Environmental Reps’, and support for negotiations with management. The level of engagement (numbers of volunteers to be ‘Union Environmental Reps’, etc) was considerably higher than that of solely 'management led' initiatives. This led to new bargaining structures such as joint environment committees being established, and formal agreements on working time spent on environmental project activities by ‘Union Environmental Reps’ being agreed or worked towards. The numbers involved were also higher than those who had got involved in other union initiatives, showing the potential for organising & recruitment.

Union Environmental Reps also conducted workplace energy audits, and developed new ways of communicating energy use understandably to the workforce. This resulted in
actual energy savings – for example the TUC halved its night-time energy use (and cut waste to landfill by 40%) and the British Museum reduced its electricity use by 7%.

54. Workplace programmes should encourage workers and their representatives to become involved with employers in identifying where performance can be improved. Joint target-setting, monitoring, record-keeping, and implementation should be encouraged as crucial aspects of management systems for the environment, or health and safety, in conjunction with collective agreements and other special partnership arrangements.

Where voluntary measures are implemented, joint monitoring and reporting procedures must be developed and implemented by workers and employers. Effective and appropriate inspection systems, combined with education for capacity-building, must be considered as a means of strengthening such initiatives and ensuring their authenticity.

Japanese trade union confederation RENGO undertakes its Eco-Life 21 Campaign

With a view to energy conservation, waste reduction and the wise use of paper products, the 6.5 million member Japanese Trade Union Confederation (JTUC-RENGO) in 1998 launched a series of initiatives under its “RENGO Eco-Life 21” campaign.

The “Eco-Style – no necktie, no jacket attire”: campaign takes place during its ‘Month of Action Against Global Warming’ (June/September) when the room temperatures in workplaces and homes rise to 28 degrees C and participants cool off by simply removing their ties and loosening their garments.

In its “Light-Dimming Action” campaign the lights are turned off for 2 hours during summer solstice. Furthermore, its “Eco Bags” campaign discourages the use of plastic bags and events are organised to raise public awareness about environmental issues, throughout Japan.

With the sizeable membership of RENGO, these actions have the effect of taking root beyond the world of work, in the long term rippling into the very fabric of society.

The launch of the Kyoto Protocol in 2005 has bound Japan by law to reduce GHG emissions to a level of 6% below that of 1990 during the first promised phase starting in 2008 throughout 2012. Although the current situation is quite tough, the 6% reduction being an international commitment for Japan to achieve, JTUC-RENGO is urging the government and the industrial sector to carry out practical, effective measures while continuing to work on “RENGO Eco-Life 21” involving communities and families.

Technology options and social responsibilities

55. Social, employment and environmental impacts of new technology or technology transfer must be addressed as a precondition to their promotion. Public funding for research and development in this area must serve to predict and prevent negative social and environmental impacts.

56. Innovation and technology transfers should take place within a framework of government regulation, procurement and investment. Government policy should set relevant targets and ensure that new technology actually serves to ensure compliance with its objectives. Capacity-building of workers must be a feature of technological change implementation.

57. Nevertheless, technological progress alone will not be sufficient to challenge climate change. A vast societal change, focused on behavioural changes and citizen commitment is needed.

58. Technology is already available today to avoid a carbon intensive future but needs to be deployed on a large scale. Progress can be achieved by applying policy instruments in combination with currently available technologies, such as:

- **Energy saving** through demand-side management, with an increased use of collective transportation, the development of energy services such as relighting, and retrofitting in housing;
- **Energy efficiency** through higher fuel efficiency of vehicles and machines, high efficiency building construction &
heating and more efficient power plants, combined with decentralised and micro generation strategies for households and small communities;

- **Investments in a mix of clean, green and sustainable energy sources**, with sustainable electricity and fuels, including wind, solar and geothermal power, some forms of biomass, microhydro energy, and especially for transitional purposes, clean coal, advanced technology vehicles including public transport, natural gas and **Efficient Combined Heat and Power plants (CHP)**, of various sizes according to demand for power and heat.

Swedish TCO Eco Labels Galvanise Trade Union Climate Change Actions

The trade union-associated TCO eco-label that appears on over half the computer monitors sold in the world today has now extended its reach to over 7000 products, cutting more than 25 million tons of climate-damaging CO2 emissions per year: [http://www.global-unions.org/pdf/ohsewpO_O2Ae2.EN.pdf](http://www.global-unions.org/pdf/ohsewpO_O2Ae2.EN.pdf) Originally developed in 1992 by the Swedish Confederation of Professional Employees (TCO), the TCO Development Unit was set up to handle the exponential growth of its labels and for the unique purpose of negotiating precise contracts with over 100 companies and manufactures to deal with what they refer to as the “4E’s”: Ergonomics, Ecology, Energy and Emissions. Many of the companies are well-known brand names such as Hewlett Packard, Fujitsu Siemens, Philips and Samsung: [http://www.tcodevelopment.com/](http://www.tcodevelopment.com/).

The TCO labels are now a visible trade-mark on computer monitors, printers, keyboards, headsets and office furniture as proof that key standards have been verified for the uses of chemicals, energy efficiency, radiation exposures, health and safety and ergonomics. With branch offices in Sweden, Taiwan, Austria, Germany and Norway, the Unit aims to step up the promotion of the labels among trade unions, workers and employers for workplace and personal decision-making, creating a ripple effect beyond measure for the environment and sustainable development.

59. **Renewable energy investments could create new jobs** by substituting often imported energy by domestically produced energy-efficient technologies and services, and by re-spending the energy costs saved as additional available income in other ways.

60. **Prior research and analysis must be the basis for developing or using new and emerging technologies in environmentally sound ways**, such as,

- **Carbon dioxide capture and storage** at power plants, hydrogen plants, and synfuel plants, and sequestering the CO2 in subsurface geologic reservoirs;
- **Sequestration of carbon in forests and soils** by reducing deforestation and increasing forestation and conservation tillage.

Final remarks

61. **Trade Unions highlight the importance of working in solidarity with civil society at all levels**. We are undertaking activities in alliance with many environmental, gender and social NGOs, local governments, consumer organisations and many others. We also note the particular importance of working with indigenous leaders and communities that are so often the first to be impacted by climate change and with the Major Groups of Agenda 21.

62. In the last decade, Global Unions have been involved in all the meetings of the Conference of the Parties (COP) to the UNFCCC. Our work is based on the belief that a commitment to ensure workers’ participation on decision-making and to put in place employment transition will realise workers’ potential in the struggle against climate change.