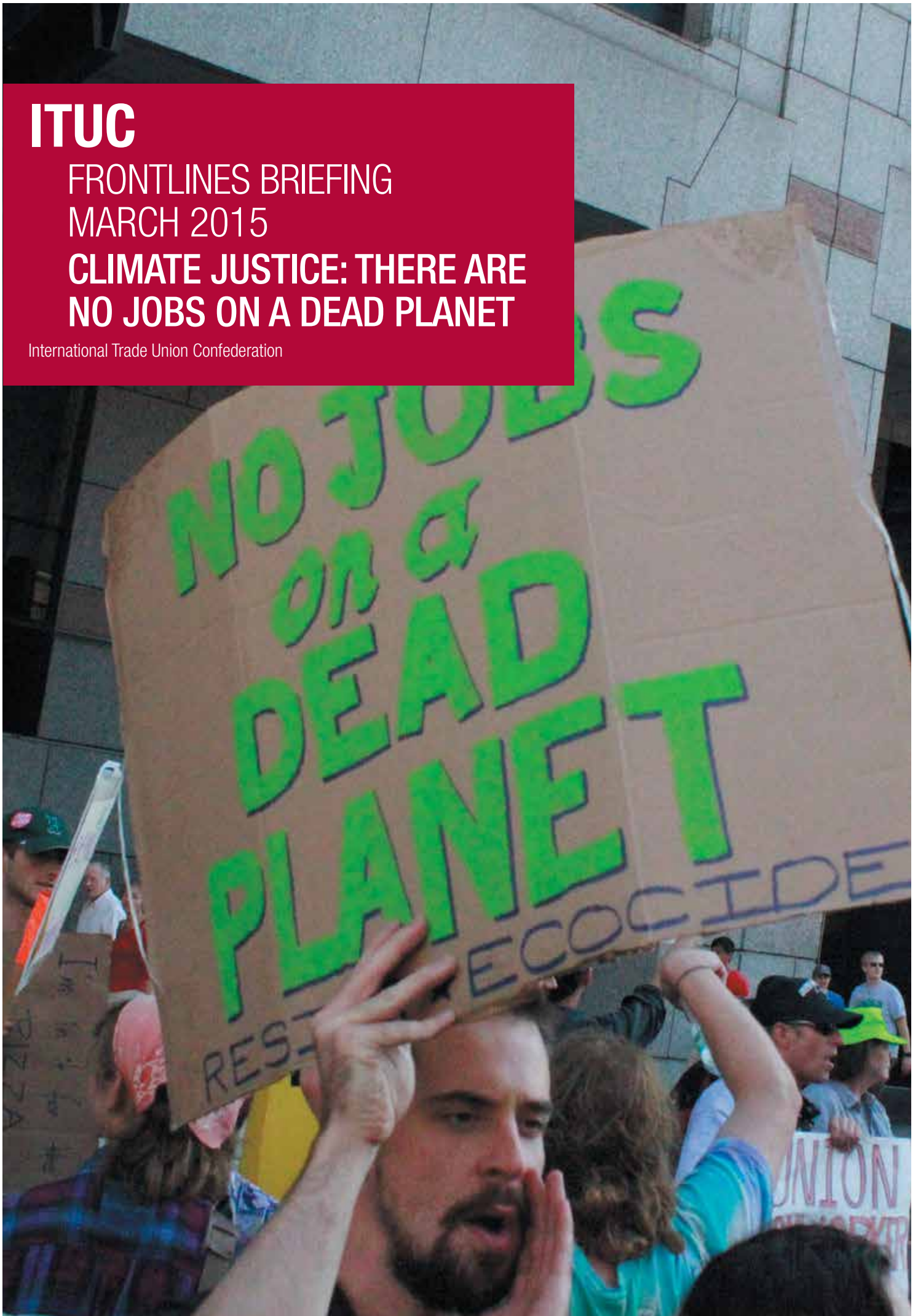


ITUC

FRONTLINES BRIEFING
MARCH 2015

**CLIMATE JUSTICE: THERE ARE
NO JOBS ON A DEAD PLANET**

International Trade Union Confederation



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ITUC FRONTLINES BRIEFING

CLIMATE JUSTICE: THERE ARE NO JOBS ON A DEAD PLANET

March 2015

Introduction

There are no jobs on a dead planet

Climate action is a trade union issue. We have a vital role to play to protect jobs in existing workplaces and industries by demanding industrial transformation, to organise new quality jobs in the emerging green economy and to fight for the Just Transition measures that ensure we leave no one behind.

We must mobilise to hold our leaders to account for the commitments that will ensure a strong global agreement on climate change in Paris this year. If we are to reverse the current trajectory governments cannot continue to be cowed by vested interests and a corporate lobby that is trying to protect a broken system.

▲ In the United States, hurricane Sandy left 150,000 workers displaced and employment was overall reduced by 11,000 workers in New Jersey alone in 2012.

Credit: Michael Fleshman/flickr

The science is in

We know the science is unequivocal. Without urgent and ambitious action we will face a temperature rise of 4°C or more this centuryⁱ and irreversible changes in our climateⁱⁱ.

Economists have spokenⁱⁱⁱ. The financial damage caused by global warming will cost the world far more than previously estimated.

The world's people want their governments to deal with the pollution that is causing climate change. According to the ITUC Global Poll, 73 % of people want governments to do more to limit pollution causing climate change^{iv}.

2015 is the year governments can choose a pathway for a zero carbon future.

We have a fighting chance to limit the temperature rise to 2°C or less but if we don't act fast, that window will close.

We are out of time

Climate catastrophes and extreme weather – cyclones, floods, drought, fires, melting glaciers, season changes, threats to agriculture and more – are increasing and hurting working people now.

Lost jobs

In the United States, hurricane Sandy left 150,000 workers displaced and employment was overall reduced by 11,000 workers in New Jersey alone in 2012^v.

In Bangladesh, Cyclone Sidr disrupted several thousand small business and adversely affected 567,000 jobs in 2007^{vi}.

Typhoon Hagupit, that hit the Philippines in December 2014 affected around 800,000 workers, with their source of livelihood damaged or displaced overnight^{vii}.

But within fifteen years we will face an even more serious impact across the board. This will destroy more communities and will destroy jobs. The disruption will be socially and economically destabilising beyond anything we have witnessed to date.

We have the policy

The ITUC wants the world's governments to agree on climate action and give us a fighting chance to limit the temperature rise to 2°C.

▼ Typhoon Hagupit, that hit the Philippines in December 2014 affected around 800,000 workers, with their source of livelihood damaged or displaced overnight.

Credit: Pio Arce/Genesis Photos - World Vision

KEY CONCEPT #1

Industrial Transformation – A workers right to know

Science tells us we need to urgently stabilise carbon emissions at 44 Gigatonnes (Gt). Business as usual gets us to 59Gt by 2020. It doesn't add up. All our economic sectors must change. We demand to be part of the industrial transformation needed, which will be enabled by sustainable investments and universal access to breakthrough technologies. **Workers have a right to know how their employers will get to a zero carbon future.**

KEY CONCEPT #2

Just Transition – A stake in our future

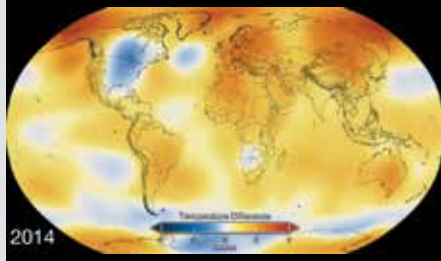
We have played our role in UN negotiations and won commitments to 'Just Transition'. **Workers must be involved in the design of their future** through dialogue, consultation and collective bargaining. We want to see the transition happen on the ground, including through investment in new green jobs, skills, income protection and other necessary measures implemented with adequate funding for transforming local economies, and securing support for the poorest and most vulnerable nations.



Tipping Points – Global Risks

2014 was the hottest year on record

Credit: NASA



NOAA and NASA declared 2014 the hottest year in 134 years of record keeping. The planet has experienced almost 30 years – 358 consecutive months – where combined global land and ocean temperature was above average.^{viii}

\$14 billion on climate related health costs

Credit: Shutterstock



The estimated costs of six climate change related events in the United States in the last decade came to \$14 billion dollars and involved 21,000 emergency room visits, nearly 1,700 deaths, and 9,000 hospitalisations.^{ix}

Export earnings

Credit: Oxfam



By 2080, between 65% and 100% of land currently used for coffee production will become unsuitable for production. In Uganda alone, coffee exports represent almost 30% of foreign currency earnings.^{x xi}

Tipping Points – Global Opportunities

Cutting emissions pays for itself

MIT researchers looked at three policies achieving the same reductions in the United States, and found that the savings on health care spending and other costs related to illness can be big—in some cases, more than ten times the cost of policy implementation.^{xii}

The challenge of industrial transformation is both an imperative and an opportunity for unions to demand dialogue, to organise, to bargain for and to lead the changes to work and skills acquisition that will be required.

We demand a just transition

This transformation must be supported by Just Transition measures. We have played our role in UN negotiations and fought and won commitments. Now these commitments must be made real and included in the Paris agreement in December 2015.

This means that carbon dependent communities and workers must not be forced to bear the costs of change. We will fight for adequate funding of this transition, as well as for the poorest and most vulnerable of nations to be able to cope with the impacts of climate change.

In the first of a series of three Frontlines briefings on climate justice in 2015, we set out the road to the COP 21 climate conference in Paris and the industrial transformation and Just Transition required to make the changes to our economies.

The next briefing will consider the commitments from countries submitted to the UNFCCC ahead of the Paris talks and

the financing and investment needed to transform our economies and secure jobs.

2015 is an opportunity for the trade union movement to work on three tracks to secure jobs and our planet:

- A strong global agreement on climate change negotiations in Paris which paves the way for a jobs and investment boom and for preventing climate catastrophe in our communities.
- National contributions and commitments by governments from which we can negotiate more ambition.
- Climate action in workplaces and industries with workers and unions through dialogue, consultation and collective bargaining.

We have a shared future

We have a right to a seat at the table as we act to stabilise the world's climate by moving toward a zero carbon emissions future.

*Sharan Burrow, General Secretary
International Trade Union Confederation*

2. The science is in

The science is unequivocal. The changes that humans are causing to the atmosphere through carbon emissions are jeopardising the biosphere's regulatory systems, potentially beyond repair. These must be reversed now through bold decisions in economic, industrial, social, environmental and technological policy.

Impact

Greenhouse gas emissions and the global temperature rise of 0.8°C since 1880 have already caused serious impacts, with changing climate patterns observed all over the world.

Natural disasters are occurring with increasing intensity: around 4 million people

were displaced and 16 million people affected by Typhoon Haiyan in the Philippines in 2013; 6,000 people were killed by the Indian monsoon in 2014; in the same year, \$2 billion and thousands of jobs were lost due to drought in California.

2°C Temperature Rise Limit

Based on scientists' assessments, politicians agreed to limit the average temperature increase to 2°C compared with preindustrial levels. This ceiling is not exempt from controversy, as it will still mean irreversible damage to ecosystems and societies.

Small island developing states and African countries are at the forefront of this

danger. In order to protect them it would be safer to limit temperature increases to 1.5°C. In order for this to be possible, greenhouse gas emissions concentrations should not go beyond 350 parts per million (ppm). However, the most recent research suggests we have almost reached 400ppm in 2015^{xiii}, which implies that the 1.5°C increase has been "locked in" to the Earth's atmospheric system.

What a 2°C increase means

Melting glaciers will be a danger for Andean cities.

90 % of Andean glaciers will be lost.

World coral ecosystems will be reduced to 10 % of pre-industrial levels.

Crop yields could decrease by up to 30 % at 1.5–2°C in Middle, East and North Africa.

The worst is that the 2°C scenario, catastrophic as it is, is not the one followed by current policies. Unless ambitious policies are implemented, current trends will drive us to an average increase of 4°C or more by 2100.

What a 4°C increase means

A 4°C average will mean increases of up to 10°C for the Arctic, more than 6°C for the Mediterranean area and the US, and up to 7°C for parts of Africa and the Amazon.

Melting of Greenland ice sheet.

A sea-level rise of 0.5 to 1 meter by 2100, with several meters more occurring in the coming centuries. Sea level rise will be larger than the global mean at low latitudes, such as in vulnerable locations in the Indian Ocean. Many coastal cities will be completely flooded.

80% increase in frequency of the strongest tropical cyclones.

Rainfall will decrease by up to 60% in Central Asia and North Africa.

MALAWI

No work underwater



Credit: Geof Wilson

Climate change leads to more extreme weather events around the globe. Flooding can be disastrous. Houses can be destroyed, lives can be ruined, and for working families it often means a difficult time of rebuilding in the aftermath.

Climate change is not the only cause of floods. Other ill-considered human activities play a role as well. But if more intense rainstorms hit a region because of climate change, there will simply be more water – and catastrophic floods will become regular events.

The impacts of climate change in Malawi are manifested in various ways, such as intense rainfall, changing rainfall patterns, floods, droughts and prolonged dry spells. The latest episode, which led to more than 100,000 displaced people, is confirming this sad trend.

"This devastation is suffered first by the poorest in our communities. Not only we are confronted with death and material losses in flooded zones; even when rains stop, working people cannot reach their jobs, or their workplaces shut down, depriving them of their income, and submerging them even more into poverty". Pontius Elijah Kalichero, Malawi

The carbon budget is running out

Despite these dire warnings, action to prevent climate change to date has been slow. The scientific community has given governments and society a timely new tool: “the carbon budget”.

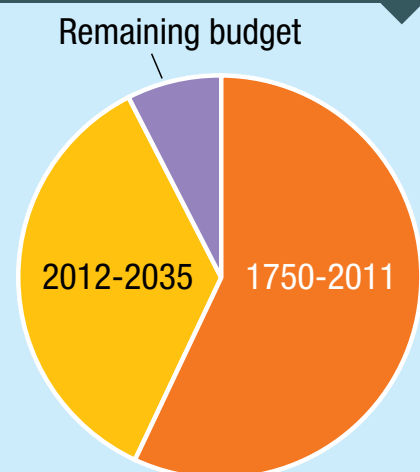
Governments and citizens are used to thinking about important issues in budgetary terms, which set out how much we have and how much we can spend. The carbon budget applies to all mankind, and it has to last as long as the particles we emit remain active in the atmosphere.

The latest reports – the Fifth Assessment Report from the IPCC (AR5)^{xiv}, the Emissions Gap Report from UNEP^{xv}, and the World Energy Outlook from IEA^{xvi} – have endorsed this concept.

The budget uses the 2°C limit as a climate policy objective. Therefore, it indicates that the maximum CO₂ which should be present in the atmosphere to maintain increases up to this limit is 3,670 Gigatonnes of carbon dioxide (Gt CO₂)

In our current state, we have less than 1,000 Gt left^{xvii}.

Carbon budget for 2 C



Source: International Energy Agency, World Energy Outlook 2013

At the current rate of emissions this global budget we have left of 1,000 Gt will last 20 to 30 years. If we do not slow our rate of carbon emissions, it will be consumed very soon – within the lifetime of many people living now.

PERU

Melting glaciers threaten water, energy and food

Credit: Oxfam International



Glaciers are ancient rivers of compressed snow that creep through the landscape, shaping the planet's surface. They are the Earth's largest freshwater reservoir, collectively covering an area the size of South America. In recent decades glaciers have begun melting at rates that cannot be explained by historical trends. Simulations project that a 4°C rise in temperature would cause nearly all of the world's glaciers to melt.

Continued and widespread melting of glaciers during this century will lead to floods and water and food shortages for millions of people. Peru has already lost 22% of its glaciers, and projections indicate it could lose up to 37% by 2030^{xxii}.

“More than one and a half million people in the Santa River's valley, in the Ancash region, depend on the glaciers for their water, energy and food. Climate change is putting them under threat today. Landslides, avalanches and floods exceptional a few years ago, are becoming sadly normal. Those who do not believe climate change is happening they should come to Peru and witness it with their own eyes.” Juan Pedro Chang, Peru.

Climate change has stopped being just a problem for future generations. Climate is the challenge of the current generation.

Carbon neutrality – a big part of the solution

According to the UNEP, in order to remain below 2°C and make sensible use of the carbon budget we have left, the world needs to become carbon neutral^{xxiii} during the second part of this century.

In the best case scenario carbon neutrality has to be reached sometime between 2055 and 2070. But this is only taking into account one of the greenhouse gases – CO₂.

Other gases, such as methane, nitrous oxide and fluorinated gases, must also come to net zero emissions by the end of this

century. This means addressing complicated issues such as methane from agriculture and livestock, including emissions from rice and veal meat production^{xxiv}.

The challenge is no longer to timidly and progressively reduce emissions, but rather to lay the foundation for a zero carbon future.

Government commitments are in deficit

Existing government pledges for the period before 2020 will limit the amount of carbon in the atmosphere to 52-54 Gt of carbon dioxide.

However, the science shows that in order to be effective these reductions must reach 44 Gt of carbon dioxide in that year^{xxv}.

FIJI

Rising sea levels mean rising unemployment

Credit: 350.org



Current emission trends, which will very likely put us beyond the 2°C temperature increase threshold, will have catastrophic impacts in many countries. Coastal zones will be permanently flooded, including small islands states in the Pacific where working families are already threatened by the risk of losing their homes and being displaced.

"Our islands are shrinking, our people are being asked to relocate and abandon their lands, culture and homes. Fijians that were used to living on agriculture are now moving to the city and adding their number to the list of unemployed.

We can do very little to curb the emissions that are causing the problem, and despite this we are at the frontline of the impacts. We want to keep our lands and homes, our jobs and our rights, our families and our culture." Agni Deo, Fiji

And current discussions, which focus on climate action after 2020, might lead to even more delays. The clear gap between the responsibility and capacity to act

and current pledges, in particular in the developed world must be signalled and condemned. As we approach the Paris climate conference, governments will put

forward Intended National Determined Contributions to the UNFCCC. These country commitments will be the foundation of their national climate action plans.

Workers and their unions have an important role to play to ensure governments significantly increase their commitments and to ensure the social dialogue to generate industry plans for decarbonisation which include jobs and employment targets.

Avoiding catastrophe

It is still possible to avoid surpassing the 2°C target, and it will continue to be possible for the next few years, but soon the window will close and our chance to maintain global warming at a manageable scale will be gone.

The solutions exist. They have been tested and are beneficial for the economy, health and job creation. They include massive investments in renewables and clean technologies, getting the best we can get out of energy efficiency, transforming agriculture, and protecting the forests.

The cost of inaction is greater than the cost of action

Preventing global warming is the cheap option. In 2025 climate change impacts could cost developing nations \$150 billion annually – double the current flows of official development assistance^{xxi}. The clean energy transition is underway. It is now up to governments to speed up the transition so that we stay within safe grounds when it comes to climate change and to make it fair.

The only way forward for responsible governments is to pursue the goal of limiting emissions to keep the average global temperature increase below 2°C, and the only way forward for responsible citizens is to push them to do it.

“ I have witnessed many incidents where the children became the worst victims of environmental disasters caused by climate change and these kind of things. It has resulted in displacement of the parents, and eventually the children are compelled to become child labourers or even child prostitutes or child slaves because they lose their traditional livelihood. ”



Nobel Peace Laureate Kailash Satyarthi, India

3. The road to Paris

In December 2015, leaders will gather in Paris for the climate conference COP 21. The summit has the opportunity to choose a pathway for a zero carbon future with an agreement which will come into force in 2020.

Negotiations ahead of the Paris Summit are underway. While Paris on its own won't get us to a zero carbon future, it can be the moment when governments choose the right direction.

Country commitments: Intended Nationally Determined Contributions

Under the U.N. Framework Convention on Climate Change (UNFCCC), countries committed to create a new international climate agreement by the conclusion of the Paris Climate Summit in December 2015.

During previous climate negotiations, countries agreed to publicly outline what actions they intend to take under a global agreement and these commitments will feature in the Paris agreement.

Between March and October 2015 countries will set out their country commitments, and submit them to the UNFCCC.

These country commitments are known as Intended Nationally Determined Contributions (INDCs). They represent a different negotiating technique than that used previously, and offer a bottom up approach to negotiating a global agreement.

They will signal the level of ambition that countries are putting on the table before the Paris Summit, but the content they could offer from emission pledges, adaptation measures, financing and the format that each of the plans will take is not known.

National action plans are expected to be announced from the EU and United States by March; China and Australia by mid-year and Japan later in the year. No exact timetable has been announced and

governments can choose if and when they make their commitments public.

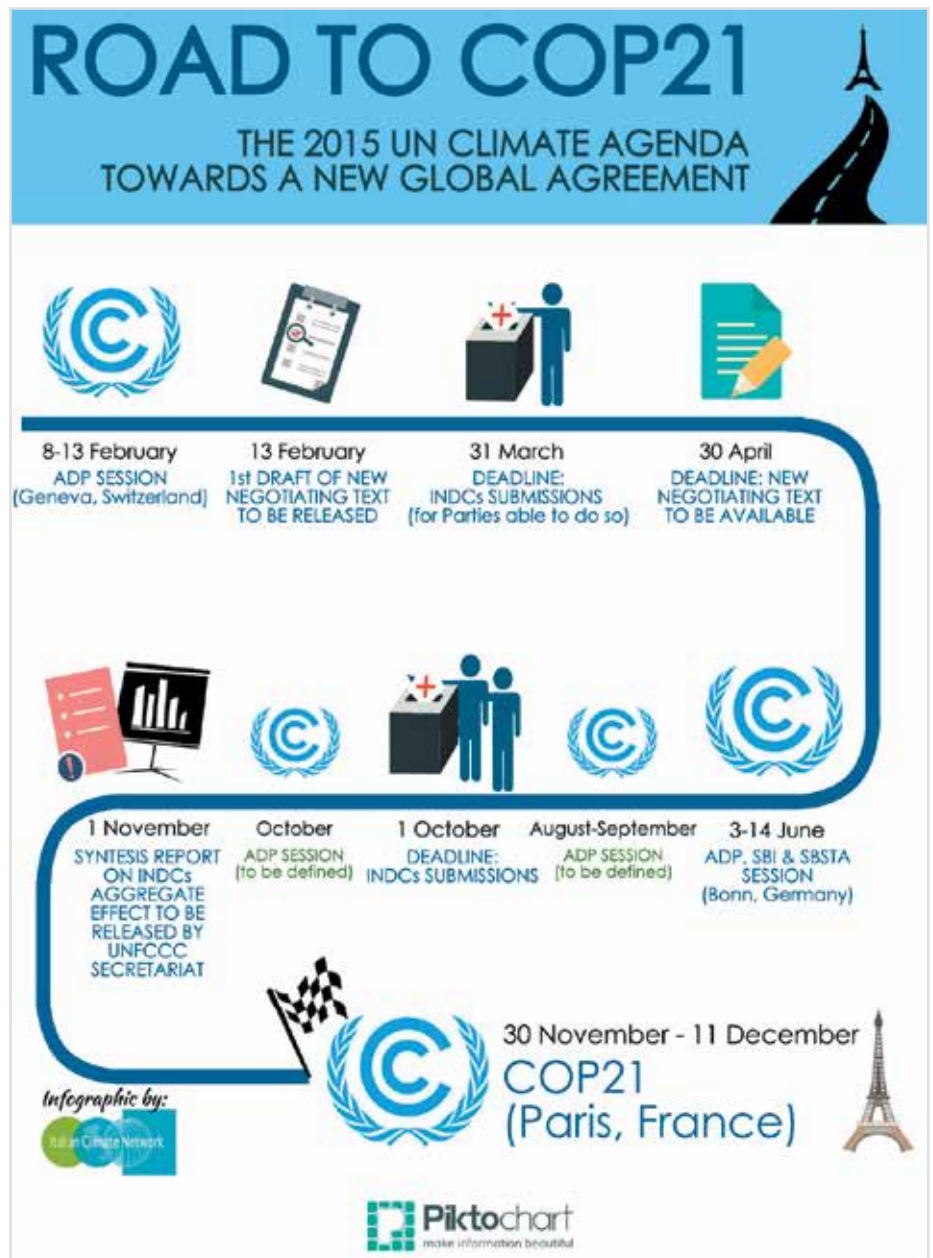
These country commitments and national action plans are a global offer from which trade unions can negotiate increased ambition and ensure that workers and their unions have a seat at the table in the industrial and economic transformation required to make them a reality.

A global agreement

Negotiations are underway for a global agreement. In the first of four global negotiations before the Paris Summit,

held in Geneva in February, an 86-page draft document was agreed by all governments as the basis for the negotiation. The draft negotiating text contains options going from the weakest to the most ambitious possibilities. It includes rather bold ideas, such as a strengthened mechanism for increasing ambition over time, a long term goal aiming at the near-elimination of greenhouse-gas emissions by 2050 or 2100, or the use of a carbon budget approach for sharing the effort of emission reductions.

Governments will start negotiating on



this draft negotiating text by mid-year, and trade unions can play a critical role in holding governments to account for supporting an agreement that puts the world on course for a sustainable future with decent jobs.

The Paris Climate Agreement: what is needed, what can happen, what we should do?

Current emission pathways are leading to 57Gt of CO₂ equivalent emissions by 2020, when we know we should not go beyond 44Gt by 2020 to still have a chance to remain under the global average temperature rise of 2°C.

If the ambitions that have already been announced by the US, the EU and China were applied to all countries, we would be heading for a +4°C warming scenario.

Governments are still rushing into new fossil-based investments, when in order to remain within the 2°C range, a third of oil reserves, half of gas reserves, and more than 80 % of current coal reserves should remain unused.

The watering down of references to the need for each country to do its fair share on climate action, and the resistances we will face for adopting references to Just Transition (creating decent work opportunities and protecting workers in the transition) in current negotiations could be seen as an affront to those who believe in climate justice.

The political cost of failure for leaders is still too low.

In this context, the climate conference planned in Paris in December 2015 must achieve at least three ambitions.

Fair framework

It must establish a framework for international climate action that is fair in the distribution of efforts (particularly when it comes to emission reductions and financing) and set an objective for long-term climate action to reduce greenhouse gas emissions so that the likelihood for temperature increasing

more than 2°C is reduced. Many have expressed this with the call for zero carbon emissions.

Doing more

It must establish a process for requesting increased efforts from governments presenting emission and financing targets below their responsibilities and capacities, which will put the system on track towards the 2°C target.

Just Transition

It must commit to developing Just Transition policies so that workers are accompanied in the transformation needed of all sectors and jobs towards new decent work opportunities, social protection and new skills, among other policies.

How likely is it that these objectives will be met in Paris?

The past United Nations Framework Convention on Climate Change (UNFCCC) Conferences have cast dark shadows on the Paris Conference.

In Warsaw, civil society, social movements and trade unions walked out en masse after facing clear attempts to backtrack on many of the above topics. In Lima last December we witnessed how the “lowest common denominator” was preferred in order to reach agreement – no matter how much it would contribute to climate change.

Trade unions, workers and citizens as a whole must rise to the challenge.

Unless large scale mobilisations of people emerge this year and the critical years to come, while we still have a chance to reverse the trend leading us to catastrophe, there is little hope governments will change their behaviour by simply attending an international conference.

There are too many powers benefitting from the status quo. The wealthy corporate lobby, with its outdated business model, continues to block progress at the domestic level. Workers and their unions have to have a more robust engagement to balance those influences.

The political cost of failure for leaders is still too low

Success in Paris goes far beyond what can be achieved as an UNFCCC outcome or in the text of an agreement.

A success in Paris needs to be measured against our collective capacity to make climate change everyone’s issue; to connect it with the need for an alternative economic model, which respects rights and promotes prosperity for all while securing a safe and healthy planet for future generations; to show that far from being a punitive agenda, the fight against climate change is supportive of calls for labour rights, social protection, gender equality, sustainable industrial transformation and other major fights the labour movement has engaged in since its inception.

Politicians in the UNFCCC will be judged severely on their capacity to put the economy at the service of social progress – and low climate ambition is a social-progress killer.

For the labour movement, climate change is a challenge that puts everything we care about, equality, rights, and prosperity, at risk.

It is a challenge that needs us to be involved in shaping a transition where workers are able to decide their own future.

UNFCCC Timeline ^{xxiii}

Rio de Janeiro, 1992, UN Framework Convention on Climate Change adopted:

All governments agreed to take action to reduce greenhouse gas emissions, and coin an innovative approach for the UN system - while there is a common commitment to act, there are different capacities and responsibilities between countries.

Kyoto December 11, 1997 Kyoto Protocol Adopted:

The third Conference of the Parties (COP) achieves a milestone with adoption of the Kyoto Protocol, the world's first greenhouse gas emissions reduction treaty. It establishes an emission reduction goal for a first period of commitment (2008-2012) then distributed among developed countries (a 'top-down' approach). The US will be the only country not to ratify it.

Copenhagen December 2009:

World leaders gather for the fifteenth Conference of the Parties in Copenhagen, Denmark, to design the climate framework to guide action after the end of the first commitment period of the Kyoto Protocol. No consensus is reached on the way forward, notably on the way to share the effort of emission reductions between developed and developing countries. Developed countries pledge up to US \$30 billion in fast-start finance for the period 2010-2012 and announce for the first time their commitment to mobilise US \$100 billion for climate finance by 2020 (in a mix of public and private funds).

Cancun December 2010:

The sixteenth Conference of the Parties results in the Cancun Agreements, agreed on the creation of a certain number of institutions inside the Convention to assist developing nations in dealing with climate change, such as the Green Climate Fund. It confirmed the "bottom-up" approach to emission reductions and for the first time, it adopted language on the need to secure a Just Transition which creates Decent Work and quality jobs.

Durban December 2011:

At the seventeenth Conference of the Parties, facing strong disagreements on the immediate emission reduction targets that should be taken, governments decide to postpone the entry into force of the new climate framework which would be adopted by 2015 for the period beyond 2020, leading to the launch of the Ad Hoc Working Group on the Durban Platform for Enhanced Action or ADP.

Doha December 2012 & Warsaw December 2013:

The UNFCCC entered into a process of dilution of references to principles enshrined in the Convention (such as the differentiated responsibilities and capacities of governments when facing climate change, or the need for equity in sharing the effort) and when the moment came to ratify the second commitment period of the Kyoto Protocol, only a few countries joined, with open rejections to the procedure from Japan, Canada and Australia. The continuous decreasing level of ambition led to a massive civil society walk-out in Warsaw.

Lima December 2014:

Major differences on the way in which countries will be treated in the new climate framework, as well as the place critical issues such as climate finance, adaptation, loss and damage will have in it led to a delay in the agreement on the draft negotiating text that should be used for Paris. The need for ambitious action before 2020 has also been put in a stand still.

Paris December 2015:

A new global agreement aimed at bringing together all countries into a long-term framework for reducing emissions and support poor countries in the transformation of their economies towards sustainability and resilience has to be agreed and come into effect in 2020. Strong signals on immediate actions to tackle climate change are also expected.

4. Leave no one behind in a zero carbon future

Unions will fight to leave no one behind in a zero carbon future.

Climate change is a trade union issue.

There are no jobs on a dead planet.

We have a vital role to play to protect jobs in existing workplaces and industries by demanding industrial transformation, to organise workers in new decent jobs in the emerging green economy and to fight for the Just Transition measures that will ensure we leave no one behind.

Jobs, industrial transformation and Just Transition

Industrial transformation is an imperative. The industries of today are the foundations for the industries of tomorrow but the next 15 years will be critical. It cannot be business as usual. The opportunities for jobs are significant. But so too are the challenges.

In order to have a likely chance to stay within the 2°C limit, our balance of emissions (knowing that some will be absorbed by forests and oceans) should reach zero between 2055 and 2070^{xxiv}.

By this time a billion more people will live in cities, which already generate around 80% of global consumption, use around 70% of energy production and hold responsibility for the same amount of emissions. This means jobs, but entire sectors must transform their carbon footprint to ensure these cities are sustainable.

All jobs must be greener jobs as all sectors must transform their carbon footprint.

Outside of the cities, agriculture and

forestry hold the key to feeding the world's people and sustaining the natural environment. This also means jobs.

Restoring just 12% of the world's degraded agricultural land could feed 200 million in this time period.

Slowing and even halting deforestation and increasing reforestation is possible and will increase land and water productivity while reducing carbon emissions. This means jobs.

All our sectors have a role to play.

Jobs in energy, transport, construction, industry, agriculture and services - all sectors hold opportunities

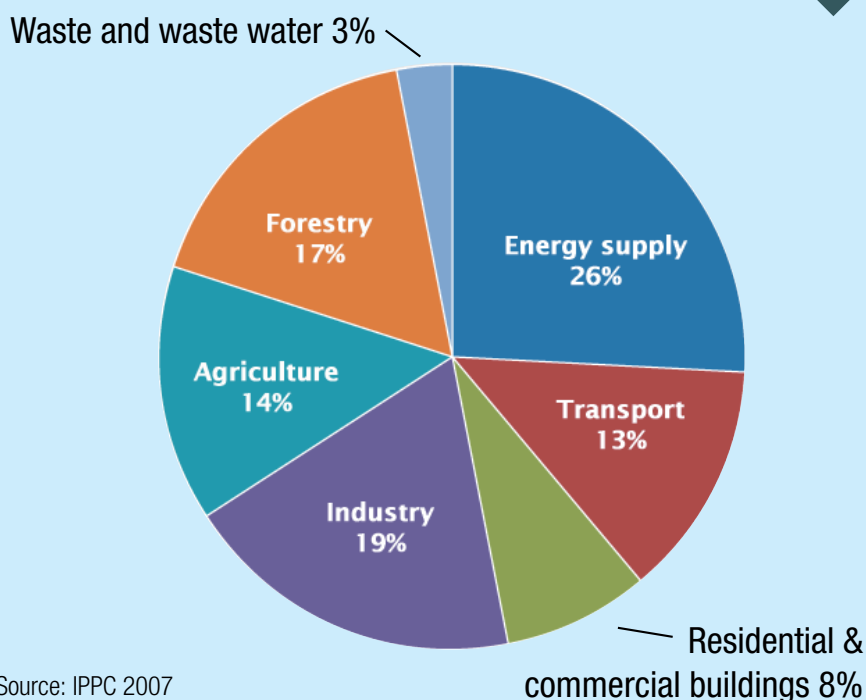
Investment in infrastructure by 2030 is predicted to be between US \$50 trillion^{xxv} and US \$90 trillion^{xxvi}. With infrastructure requirements in transport, energy, water systems and the built environment, this could be up to \$6 trillion dollars per year on average over the next 15 years. This means jobs.

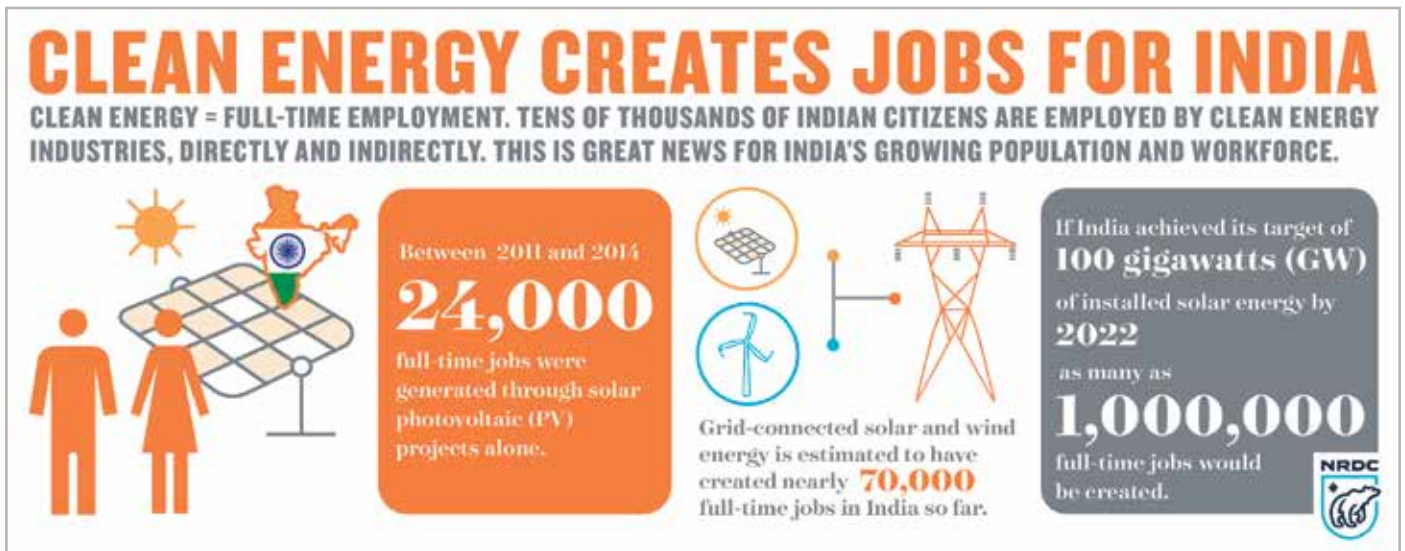
A 2010 study by the Millennium Institute^{xxvii} for the ITUC showed that if just 12 countries invested 2% of GDP each year for five years in major sectors this could generate around 48 million jobs.

The ILO has found that most studies show a positive net employment effect of policies facilitating climate transition. Net gains are up to 60 million jobs, combining economic growth with environmental improvement^{xxviii}.

And while all sectors hold opportuni-

Share of global greenhouse gas emissions, by sector (%)





Source: www.nrdc.org

ties for transformation the key to the transformation of our industries and our communities is energy - reliable renewable energy.

The estimates vary but the majority of current fossil fuel reserves will need to be left in the ground.

Opponents to alternative energy sources cite their cost, but there are hidden costs in our current energy dependence on fossil fuels – not to mention the hefty subsidies these businesses enjoy.

Clean Energy Powers Local Job Growth in India, by the Council on Energy, Environment and Water (CEEW) and the Natural Resources Defense Council (NRDC), found the project planning, construction, installation and operations required to meet the government's 2022 solar energy goal could generate as many as 1 million jobs in less than a decade^{xxix}.

Our health matters

The New Climate Economy Report, *Better Climate: Better Growth*^{xxx}, shows the severe impacts of pollution arising from traditional energy use and the increasingly urgent need to reduce it.

Pollution from energy use is responsible for as much as 5 % of the global burden of disease. Air pollution is linked to an estimated 7 million premature deaths each year, including 4.3 million due to

1 million jobs could be created in less than a decade to meet the Indian government's 2022 solar energy goal.

indoor air pollution, mostly from cooking and heating with solid fuels. Crop yields are also affected, with ground-level ozone reducing the yield of four major staple crops by 3 to 16 % globally, particularly in South and East Asia.

Valuing these impacts in monetary terms is not easy, but estimates suggest very high costs, often exceeding the cost of shifting to other energy sources that would significantly reduce CO₂ emissions.

Health will be a winner in the transition to a zero carbon economy, but so too will public budgets. Recent climate mitigation scenarios have estimated global average health co-benefits at US \$50 to more than US \$200 per tonne of CO₂ avoided, relative to baseline development. Translated into energy costs, these numbers have a dramatic impact

on the relative attractiveness of lower-carbon technologies.

We will leave no one behind

Despite the opportunities for jobs there will be significant challenges for some workers and their communities. The ITUC is determined that no-one be left behind and that the energy revolution be supported by Just Transition measures.

In addition to industrial transformation we must ensure that the energy costs for private households and companies remain affordable in the transitional phase. The burden must be distributed fairly, taking into account pressures on low-income households and energy-intensive industries where change will be felt most.

A price on carbon is necessary and inevitable, though revenues from this must be used to support the most vulnerable, including retrofitting households to be more energy efficient. Industries must pay and they should be encouraged to increase their research and development. Support mechanisms must also exist for smaller companies to adopt energy efficiency measures, technological change and co-generation possibilities.

As unions, we want a clear vision of future industrial and energy options and the impact on workers. It is our job to

fight for a transition that is just. In sectors where job losses are unavoidable, social partners (unions and employers) need to develop binding transition strategies well in advance that offer new opportunities to employees and actively shape structural change.

Unions represent workers employed in the energy and fossil fuel sectors and in other areas that will be affected. And while companies make the necessary changes to compete in the green economy, we must recognise the fears of people who believe they will lose their jobs. These workers are the backbone of many communities and they must be guaranteed a future. Redeployment, the chance to further develop their skills and make a contribution in new sectors and of course secure pensions must be an integrated package of guarantees.

The challenge for unions is to be part of the dialogue that drives investment, shapes industries for sustainability and ensures decent work. Social dialogue, consultation, collective bargaining - workers have a right to be involved in the design of their future.

Transforming business and industries: A workers' right to know

All industries must use technologies and processes that contribute to a zero carbon economy. All workers have a right to know what their employer is planning to ensure their jobs are secured through this transformation.

Unions will support dialogue in existing industries and organise workers in new industries.

The formula for decent work includes mature industrial relations, just wages, safe and security work, and respect for workers' rights including dialogue.

Social dialogue is an essential ingredient and should start with questions such as:

What is your business plan to reduce emissions?

What technologies will I need to learn to use?

What investment is planned for research and development, worker education and technological change?

How can the workforce and their unions contribute to change how work is organised?

Will labour and resource productivity be shared?

Will our collective agreement secure an agreed pathway?

What elements in our collective agreements do we need to add?

We demand a just transition

This transformation of sectors and industries must be supported by Just Transition measures. We have played our role in UN negotiations and fought for commitments. Now these commitments must be secured and made real and included in the climate agreement in Paris.

This means that carbon dependent communities and workers must not be forced to bear the costs of change. We will fight for adequate funding for the poorest and most vulnerable of nations.

We have a right to a seat at the table as we act to stabilise the world's climate by moving toward a zero carbon emissions future.

Innovation and access to technology

It is widely accepted that a carbon price must be accompanied by a dramatic increase in investment in energy related research and development by the mid-2020s.

The scale of the challenge can only be mastered if current and future clean energy technologies replace the existing high CO₂ -emitting systems on which our societies rely. There are already technologies that allow for CO₂ emission cuts in many sectors, such as power generation, transport, heating/cooling, and agriculture, and there will be more.

Workers have a right to be involved in the design of their future.

Universal access to technology

Due to intellectual property rights associated with patents, trade secrets and copyright, new inventions and breakthrough technologies are often very costly and their deployment is slow. Therefore, despite the great potential to reduce greenhouse-gas emissions and improve living standards, many effective technologies are not yet globally available and are very expensive.

This problem could be solved in a number of ways – for example by establishing a worldwide license pool that guarantees universal access to technologies. This could be achieved, if the United Nations for instance purchased licenses from the technologies' inventors and then made them available to countries that could otherwise not afford them. The money needed for license purchasing could be taken from carbon pricing revenues or from a global climate fund.

In line with this The New Climate Economy Report *Better Growth Better Climate* recommends technology pools.

However practical the demand to share technologies, if not globally negotiated, and considering demands for equity, it may be a struggle similar to that undertaken to gain access to generic medicines.

It will be a fight we have to have.

4.1 Just Transition & Decent Work in the UNFCCC negotiations

What is Just Transition?

“Just Transition” describes the transition towards a low-carbon and climate-resilient economy that maximises the benefits of climate action while minimising hardships for workers and their communities. Needs will vary in different countries, though some policies must be applied everywhere. These include:

1. Sound investments in low-emission and job-rich sectors and technologies. These investments must be undertaken through due consultation with all those affected, respecting human and labour rights, and Decent Work principles.
2. Social dialogue and democratic consultation of social partners (trade unions and employers) and other stakeholders (i.e. communities).
3. Research and early assessment of the

social and employment impacts of climate policies. Training and skills development, which are key to support the deployment of new technologies and foster industrial change.

4. Social protection, along with active labour markets policies.
5. Local economic diversification plans that support decent work and provide community stability in the transition. Communities should not be left on their own to manage the impacts of the transition as this will not lead to a fair distribution of costs and benefits.

Just Transition in the UNFCCC 2015 Agreement – Making the agreement stronger and more ambitious for working people

Many of these policies must be applied at the national and local level. Nonetheless, a political message sent to working

people from the most authoritative climate change negotiation will give more arguments to those fighting for ambitious action. It will also reassure workers on the domestic processes that will be designed to successfully transform the world of work.

Precedents for adopting Just Transition language in the UNFCCC

There are precedents for including these kind of commitments in global climate agreements. Since COP16 in Cancun, parties to the UNFCCC have expressed their support for Just Transition language, which was adopted for the first time in Decision 1/CP.16:

1. Under section I, *A shared vision for long-term cooperative action, paragraph 10, governments* ^{xxxi}

“10. Realizes that addressing climate

IG Metal Germany: Building a movement for transformation

The German trade union movement is using the country's co-determination system to push for action on climate transformation of industry, job-creation and decent work. The system provides workers with statutory workplace representation through “Works Councils”, alongside union organisation. The North-Rhine Westphalia (NRW) state branch of the German trade union centre DGB is organising events with hundreds of workers from different sectors to drive innovation and progress to a low-carbon future.

The first event in 2012 looked at the chemical sector, bringing together workers, managers and researchers to map pathways for decent work and industrial transformation. This included reaching a target at the Currenta chemical services firm to help reduce CO2 emissions by 200,000 tonnes per year.

Research institutes across NRW are also involved in the programme. With 600,000 potential jobs in the renewables sector, technical institutes are supporting the DGB's demand that these should be good quality jobs. These institutes are engaging in policy discussions on the fair distribution of the

costs of transformation and ensuring that the drive for energy efficiency reaches into commercial and residential buildings, as well as industry.

At the Edelstahlwerke steelworks in Witten, the union is involved in channelling ideas and proposals from the workforce into its drive for energy efficiency. A similar “clean car” process is underway at the Kirchhoff Witte company, which supplies the auto industry.

Meanwhile, unions and management at the

Krombacher brewery in Kreuztal have a common commitment to ensuring decent work, resource-efficient production, and a positive legacy for generations to come.

DGB NRW President Andreas Meyer-Lauber: “Ghandi said that the world has enough for people's need, but not enough for people's greed. We need economic transformation – there's no way around it.”

Credit: www.upertal



change requires a paradigm shift towards building a low-carbon society that offers substantial opportunities and ensures continued high growth and sustainable development, based on innovative technologies and more sustainable production and consumption and lifestyles, while ensuring a just transition of the workforce that creates decent work and quality jobs.”

2. Under mitigation, in the context of the economic and social consequences of response measures:

“Recognizing the importance of avoiding or minimising negative impacts of response measures on social and economic sectors, promoting a just transition of the workforce, the creating of decent work and quality jobs in accordance with nationally defined development priorities and strategies and contributing to building new capacity for both production and service-related jobs in all sectors, promoting economic

growth and sustainable development.”

References to Just Transition were confirmed in Durban at COP 17 as well. As a consequence, subsidiary bodies have dealt with the issue in workshops and parties have expressed their support for Just Transition as part of future discussions. However, this topic must be anchored in the new climate agreement so that Just Transition and Decent Work are recognised as more than merely “response measures”.

Adopting Just Transition language in the UNFCCC and the ILO

For trade unions, the adoption by the UNFCCC of Just Transition language will support further cooperation between the UNFCCC and the International Labour Organization (ILO) so that progress in the latter informs future UNFCCC discussions. In 2013, the ILO adopted conclusions on the need for a Just Transition in its International Labour Conference, and a Tripartite

expert conference will meet in October 2015 to assess the relevance of different ILO instruments in this context and whether further guidance is needed.

The content of UNFCCC discussions

Trade unions want the UNFCCC to recognise at the highest political level the importance of securing the livelihoods of those who will be at the frontlines of the coming economic transition. A Just Transition, facilitated by regular communication with the ILO, will ensure that an ambitious climate agreement also speaks to the common concerns of all people.

At the current Negotiating Text, as adopted in the Geneva Talks in February 2015, there are four references to Just Transition. Trade Unions call on governments to maintain that language in the ‘operational’ part of the agreement, and strengthen it, so that climate protection goes hand in hand with workers’ involvement in the transformation.

LIUNA, USA: Building renewables, building workers lives

Credit: LIUNA

The US Solar Industry employs over 170,000 workers, with 22 % increase in jobs growth in one year. Solar accounted for one in every seventy-eight new jobs, with pay above the median wage. The industry forecasts 35,000 new jobs in 2015 ^{xxxii}.

Laborers’ International Union of North America has been working in the renewable energy field for a decade, building renewable energy systems across the United States and Canada. Recent legislation in California which expanded on their renewable energy portfolio requirement has created thousands of jobs in construction including many opportunities for LIUNA members. The new renewable energy standard in California has given LIUNA members an opportunity to increase their work on renewable energy projects – putting more than 1,300 members to work to date and an additional 1,000 jobs are projected to be added over the next year.

Members in California are now helping build solar, wind, and geothermal power plants - doing a variety of traditional Construction Craft Laborer tasks including pouring concrete, digging footers, laying underground utilities, setting up racking systems



for photovoltaic modules as well as less traditional tasks like manufacturing the mirrors for concentrating solar power systems and assembling photovoltaic systems. Hundreds of new members will be joining the ranks in the coming months in order to meet labour needs and complete these important projects.

Some new members will be working as union members for the first time and will be able to nearly triple their pay, secure healthcare benefits and gain access to LIUNA’s free job training programs. As the alternative energy field grows, LIUNA mem-

bers are stepping up to new challenges and securing their careers in construction. This industry has big opportunities for workers in big and small sized companies ^{xxxiii}.

“I never thought I could go from suits and clothes to boots and a hard hat. I went from a minimum wage to a union job. We’re building 40,000 solar panels, it’s a career, not just a fly by night job. It makes me feel good knowing that I can show my kids and husband the solar panels that I built. It makes me feel good to know that I was part of it,” Jackie Macon Local 783 LIUNA.

SEWA India: Biogas stoves to prevent deforestation

Credit: Creative commons/Flickr

The Self-Employed Women's Association (SEWA) in India has brought together more than 1 million women from the informal economy to find sustainable, locally-adapted solutions to climate change.

"The poor are the most green because they have to innovate coping strategies, day-in and day-out for their survival, from whatever meagre resources are available within their own little surrounding," said Reemamben Navavaty, SEWA's Director of Economic and Rural Development. "Therefore I think they have the best of the strategies for green livelihoods."

For example, SEWA has introduced simple-to-run biogas stoves in poorer, rural areas. This has reduced deforestation from firewood, while the slurry from the stove can be used as fertiliser to boost cotton yields.



"Before I had the biogas stove we had to wake up every morning at 5am and go and collect firewood and not come back until 1pm or 1.30pm to make food," explained Kantaben Thakor from the state

of Gujarat. "During that time the children would go hungry and could not study and I could not take care of them properly."

CGT France: Unions rebuilding the wood sector in Aquitaine^{xxxiv}

In 2008, the French wood sector was weighed down by a 6 billion (Euro) trade deficit, even when the resource was available in the country. The Aquitaine region, with a long industrial history, was witnessing the disappearance of thousands of jobs as a result of the lack of investment, poor industrial strategies and the impact of two major wind storms.

Union struggles were focusing on safeguarding jobs on a case-by-case basis, but the absence of

an industrial plan for the sector, which could ensure its sustainability, was seen as the main threat to this critical 32,000-strong employment basin.

As a result, the CGT Aquitaine union, through its CERESA research centre, launched a three-year process of study, consultation and planning, which led to a multi-stakeholder assessment of the wood sector in the region. This "Etats Généraux de la filière bois" established a shared assessment of the challenges, opportunities and roadmap for safe-

guarding and growing jobs in the sector

Work took place on job profiles, careers and skills development, all in the context of the region's natural resource assets, potential future markets and public financing needs. The potential for supporting short supply chains and green products was also identified as a major opportunity.

The plans adopted describe the specific tasks to be taken on board by employers, public entities, unions and communities. A critical point is securing good working conditions and safety for those in the sector, therefore rising to the challenge of bringing sustainability as well as decent work.

Preliminary assessments of this experience show that trade union leadership on industrial transformation and revitalisation plans can make a difference for jobs and the environment. This encouraging initiative has inspired our union colleagues to continue the struggle to develop a second sector in the region: waste.



Credit: Jean-Pierre/flickr

5. Unions for climate action

Three Tracks to Paris

Throughout 2015 there will be a variety of opportunities to take part in the Unions for Climate Action Frontlines campaign, working with other organisations in coalitions and alliances, with members, employers and governments.

The ITUC Frontlines campaign has three tracks for workers and their unions.

1

Country Commitments

March – October 2015 Raise the ambition and negotiate a just transition

Over the coming months, all governments are due to present national action plans towards the Paris agreement. These commitments will be the building blocks of an ambitious agreement and will be submitted to the UNFCCC. Action plans from richer countries are expected to help make the global fight against climate change fairer, by including support for developing countries to make the shift in energy choices and improve resilience in the face of threats and damage from climate impacts.

Hold your governments to account to deliver these national actions plans, and have them reflected in national policies and legislation. Take your place at the negotiating table to secure a just transition for workers.

2

Paris Climate Agreement

1 – 11 June UNFCC Prep Meeting Bonn

June – National 2015 Lobby week of Action – The text of a draft global agreement

June National governments due to discuss draft Paris agreement

30 November – 11 December 2015 UNFCC COP 21 Paris

The UN's draft text of the Paris agreement is expected to be with national governments by April. Meet with your government and be part of the transformation of economies and secure jobs.

The ITUC will provide analysis on the status of the negotiations and key issues for your government. We need to protect the language we have in the text for just transition and decent work.

3

Trade Union Pledges – act today for secure jobs tomorrow

Trade union climate pledges

September 2015 – Trade Union Summit Paris

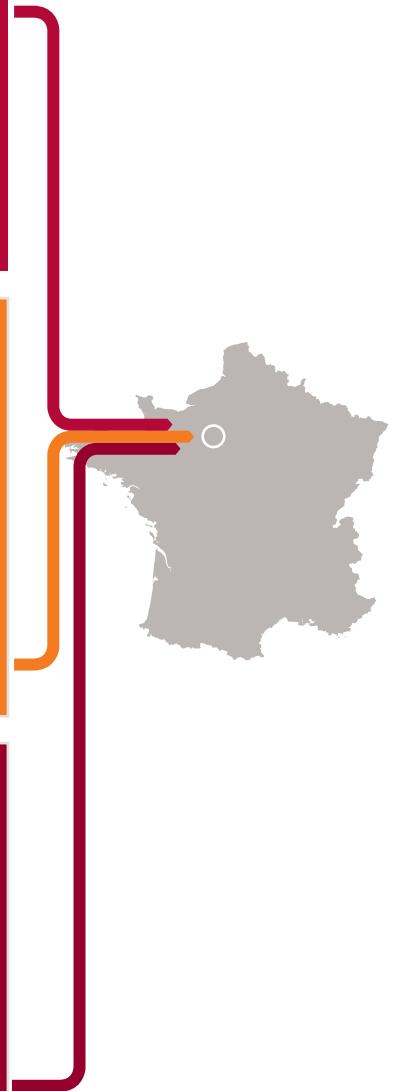
Make your pledge: Just as governments must make commitments to prevent climate change, so must workers and their unions.

Adding your union's voice to those calling for climate justice and a just transition towards a zero carbon future by will help create the movement needed to overcome the powerful corporate interests who want to avoid new regulations on emissions and maintain the status quo.

We know the system is broken and we need a fairer, just and more equitable global economy. Make a commitment and bring your pledge to the Trade Union Summit in Paris:

- A national goal of renewable energy
- The creation of green jobs or jobs in environmentally sustainable sectors
- An increase the ambition of your country's emissions reduction target
- A national objective for emissions reductions if your government is yet to make a public commitment
- A goal for energy efficiency
- A phase out of fossil fuel subsidies
- A shift in the investment portfolio of pension funds of at least 5 % towards climate investment
- A commitment to contribute to international climate finance

Workers and unions can sign up for climate justice at act.equaltimes.org/unions4climate



Report: Unions4Climate.

Reducing Emissions in the workplace and creating jobs

www.sustainlabour.org



Sustainlabour presents four case studies, which cover commitments from British, Spanish, Belgian and German trade unions.

Sustainlabour details union proposals on emission reductions and other climate-related policies and their impact on national contexts, economic perspectives and job creation.

It shows the support to climate policies which address job creation and focus on workplaces by giving specific responsibilities and functions to shop-floor stewards or workplace representatives. They are a way for developed country governments to take on more ambitious climate policies, through just transition.

The UK Trade Union Congress (TUC) calls for a zero-emissions electricity sector by 2030

- The TUC represents about 6.2 million workers nationwide.
- Higher emissions reduction: the intensity of carbon power generation in the UK is 500 grams of carbon per kilowatt per hour (g CO₂ / kWh) per year, hence the call is for the government to set this at between 50 and 100 g of CO₂ / kWh per year in 2030.
- How: This campaign accompanies job creation plans such as the “One million jobs” campaign
- What is the TUC doing?: The TUC is committed to coordinating 1,200 green trade union delegates to promote environmental initiatives in business. This number could multiply if recognised trade unions were given the right to appoint environmental union representatives.

The shared commitment of Belgian trade unions

- ACV-CSC, ABVV-FGTB and ACLVB-CGSLB are the country's main trade union confederations, representing about 3.5 million members.
- Emission reductions: calling on their government to commit to 40% reductions by 2030 and also a 40% improvement in energy efficiency.
- How: As before, by creating jobs - 60,000 new jobs in environmentally sustainable sectors by 2030 in Belgium under the “Climate4Jobs” campaign. As energy efficiency is one of the largest deficits in the country, they are calling for doubling the rate of current retrofitting in houses and commercial properties.
- What are Belgian unions doing?: promoting “eco-cheques” in companies for green procurement, training delegates and taking on a leading role in the country's climate coalition.

IGBAU: ambitious proposals from the German construction sector

- IGBAU is the largest German construction and agriculture trade union and has 330,000 members.
- Emission reductions: IGBAU is seeking much higher reductions than European governments have proposed to date: 45% renewables, 40% lower energy consumption (based on 2005 figures) and an emission reduction of 55% by 2030.
- How: IGBAU is calling for an investment of 2 billion Euros per year in building retrofitting to reduce energy consumption by 80% by 2050 (2 out of 100 buildings in Germany need to be renovated each year until the year 2050)
- What is IGBAU doing?: implementing sustainable procurement procedures and their offices' energy is supplied by Greenpeace Energy.

The Spanish Trade Union CC.OO.: committed to the climate and hungry for jobs

- The CC.OO is the biggest Spanish Trade Union and has more than 1 million members.
- Emission Reduction. CC.OO is calling for its country to push for the following European targets: at least 30% renewables, an energy efficiency objective of 40% and a minimum emission reduction of 40% by 2030.
- How: Creating employment. Spain's unemployment rate has reached unbearable levels - as high as 25%. CC.OO proposes to create 1 million jobs in the environmental sector between 2020 and 2030.
- They are also calling for a revolution in transportation. They are looking to increase national sustainable transport to 30% by 2020, which will reduce the sector's emissions by 16% compared with 2008 figures and create an additional 45% of jobs for the sector.
- What is CC.OO doing?: Committed to training company delegates. The Trade Union Environmental Institute has trained almost 20,000 delegates since 2006.

Endnotes

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- xix UNEP Emissions Gap Report 2014
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- xxi *ibid*
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Unions For Climate Action

2015 Timeline

The Science is in

Climate Justice Zero Carbon

Just Transition

No jobs on a dead planet

