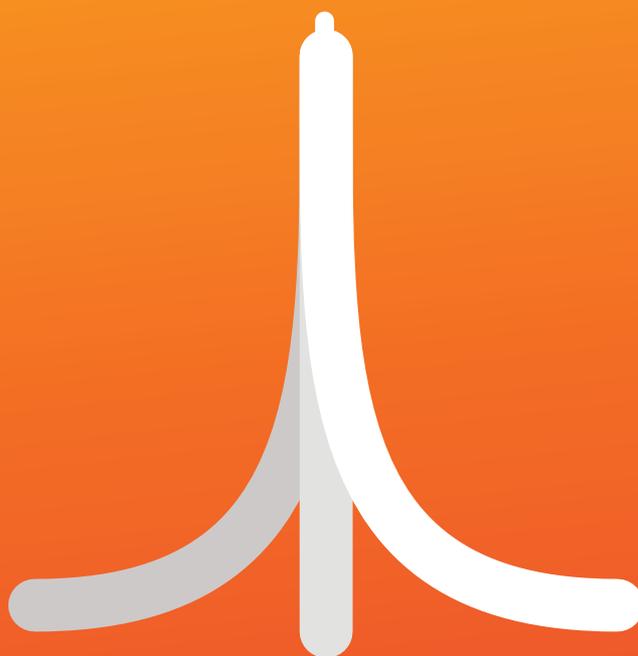


Trade unions' Topline demands for COP21



1

Raise Ambition and Realise Job Potential of Climate Action

The Paris Climate agreement must ensure Governments take concrete steps to reduce emissions even further before and beyond 2020, in line with an equitable 2°C pathway. They must also agree on a robust mechanism of periodical review for raising ambition over time.

2

Deliver on Climate Finance and Support the Most Vulnerable

The Paris Climate agreement must provide clarity on the way developed countries will fulfil their commitment to mobilise 100bn USD by 2020 to secure sufficient resources for adaptation. It should also identify means for increasing this amount post 2020.

3

Commit to Securing a Just Transition for Workers and Their Communities

The Paris Climate agreement, in its OPERATIONAL section, must include a commitment to “Just Transition” measures. This is essential to support the challenge of industrial transformation in all sectors, in particular jobs and livelihoods for workers in emission-intensive industries.

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Our condolences to the families, friends and the French people for the tragic loss of life and grave injuries suffered in the Paris attacks on 13 November 2015.

ITUC Frontlines Briefing: December 2015

Foreword

Climate Justice: COP 21 Special Edition

Unions know there are no jobs on a dead planet. And many trade union delegates to COP 21 can describe the loss of lives and livelihoods their countries have already experienced.

Climate impacts hit working people first, and with extreme weather events, changing seasons and rising sea levels, whole communities stand on the frontlines.

In order to stabilise the climate, we need to make profound changes to energy systems, and therefore to all economic sectors. Our members are involved in every aspect of this challenge, from activists campaigning for action on climate to workers organising in new industries and in fossil fuel production.

For the ITUC this means that we will not leave anyone behind. We demand the guarantee of social dialogue that will ensure that there are plans at national, industry and enterprise level for a 'just transition'.

Workers have a right to know:

What are their governments' plans to decarbonise their economy and protect jobs and pensions;

What their employers' plans are to decarbonise the workplace and to protect jobs; and,

Where their pension funds are invested.

A Just Transition will include:

- Wage safeguards and job security for workers involved;
- Skills development and redeployment with decent work alternatives;
- Pension guarantees and other social protection measures to support people through the transition; and,
- Investment in community renewal including the construction and services associated with renewable energy.

We have had to fight to have critical language on this issue in the operational section of the draft Paris agreement and we will have to monitor this closely during the discussions in Paris. We emphasised this as we presented our three topline demands to Minister Fabius, the French Foreign Minister who is the President of COP 21 at the recent Trade Union Climate Summit in Paris.



Trade unions' topline demands for COP 21

1. RAISE AMBITION AND REALISE JOB POTENTIAL OF CLIMATE ACTION

The Paris Climate Agreement must ensure governments take concrete steps to reduce emissions even further **before** and **beyond 2020**, in line with an equitable 2°C pathway, and agree on a robust mechanism of periodical review for raising ambition over time.

2. DELIVER ON CLIMATE FINANCE AND SUPPORT THE MOST VULNERABLE

The Paris Climate Agreement must provide clarity on the way developed countries will fulfil their commitment to mobilise US\$100 billion by 2020 securing sufficient resources for adaptation, and identify means for increasing this objective afterwards.

3. COMMIT TO SECURING A JUST TRANSITION FOR WORKERS AND THEIR COMMUNITIES

The Paris Climate agreement must affirm the commitment to secure the jobs and livelihoods of those involved in emission-intensive sectors by adding strong references to the need for a “ just transition which creates decent work for workers” in the operational part of the Paris deal.

Minister Fabius in reply said: “Paris is a turning point for our planet... The role of trade unions will be absolutely decisive. To reach an agreement in Paris there needs to be a mobilisation of all of society’s forces. For today, in aggregate, national plans to cut carbon emissions are leading us towards 3 degrees [Celsius] of global warming by the end of the century.”

The Minister candidly acknowledged that trade unions are on the front line of industrial transformations that lie ahead, whether in coal mining, power generation or industrial sectors. Yet in retraining and new job creation, “unions are also in a great position to be part of the transformation that workers are facing.”

Indeed, for unions the job potential is critical. There are jobs in all industries and services.

With the endorsement of the UN Sustainable Development Goals and a Climate Agreement, the pathway for zero carbon/zero poverty can be built. Unions are already focussed on the work that is

required to secure the industrial transformation beyond Paris, and the Trade Union Forum on Climate and Jobs (3-6 December) will see discussions on the work to date and the issues to be faced..

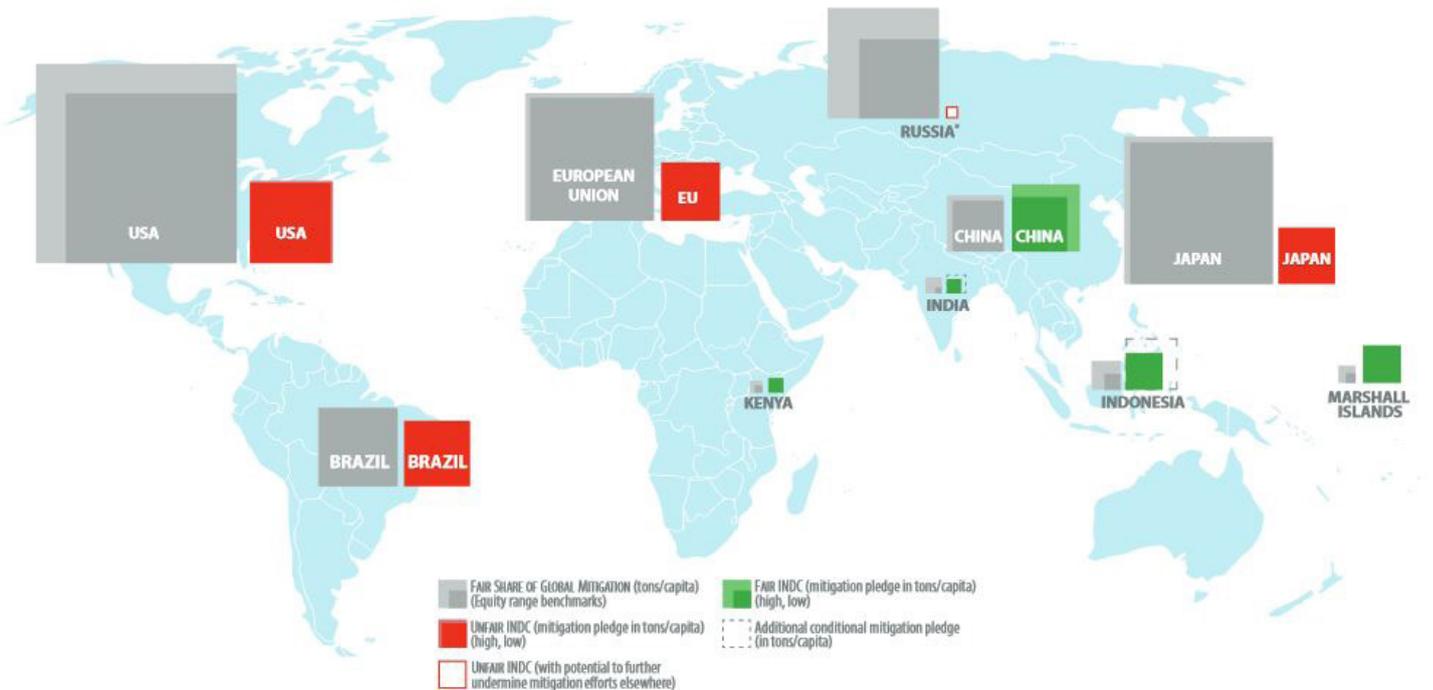
The union climate summit consensus was that this is the most significant challenge the world will face in the next 30 years, but it will take all of us. Without urgent action we will lose the war on climate change with horrendous consequences for all working people and their communities as Minister Fabius said in referring to the current refugee crisis: “If we can’t act on climate change, can we imagine what that would mean for migration? We would have to add zeros to that number.”

“Without the right action, climate impacts could push more than 100 million additional people into poverty by 2030.”

World Bank, Managing the Impacts of Climate Change on Poverty

Yet, government ambition is still too low. The graph shows the gap in emissions.

WHO HAS COMMITTED TO THEIR FAIR SHARE OF GLOBAL CLIMATE ACTION?



So let's monitor commitments during this COP and expose, demonstrate and lobby against positions that are inadequate concerning ambition.

We also expect their support and commitment to a just transition and of course let's mobilise for rallies in Paris and many other cities around the world.

Sharan Burrow

General Secretary,
International Trade Union Confederation
Twitter @SharanBurrow

"Since the 1980s the number of registered weather-related loss events has tripled; and inflation-adjusted insurance losses from these events have increased from an annual average of around \$10bn in the 1980s to around \$50bn over the past decade.

The challenges currently posed by climate change pale in significance compared with what might come. The far-sighted amongst you are anticipating broader global impacts on property, migration and political stability, as well as food and water security."

Mark Carney – Governor, Bank of England

During the conference: What you can do

Join a rally 28-29th November



Stand out in the crowd and wear your green hard hat to show unions want action on climate.

Decorate your hard hat with union logos and stickers to make them stand out.

You can download climate messages from the ITUC website for your hard hat.

Join the union rallies in London, Sydney, Washington, Berlin, Johannesburg, Lima.

Or find your city (www.globalclimatemarch.org) and organise a union crowd and get them in green hard hats decorated with your union stickers.

Don't forget to bring along your union's banners and rally for climate.

Share your rally photos on Twitter #unions4climate

Watch your government

Monitor the contributions of your government.

Expose public, demonstrate and call union members to support climate action and the jobs that can be generated

Raise your voice against their low ambition and any opposition to commitments.

Prepare for 2016

Send a letter immediately following the COP to demand dialogue on just transition to both your government and employer.

Climate events and the trade union space in Paris

The International Trade Union Confederation (ITUC) in cooperation with Global Unions and the French national trade union centres is organising a space where trade unions and trade union-related organisations will present their experiences and share, debate and plan with other actors (governments, social and environmental movements, enterprises, UN and

regional agencies) their climate-related actions. Two days of the trade union forum will take place in the civil society space in Le Bourget ("Génération climat"), and two days will be organised in the Climate Forum in Montreuil, where the French Coalition 21 will organise debates for civil society.

Why is Climate Justice vital?

Climate Justice: There are no jobs on a dead planet

Climate action is a trade union issue. Unions 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.

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 century¹ and irreversible changes in our climate².

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.

Economists have spoken³. 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 change⁴.

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, tsunamis, floods, drought, fires, melting glaciers, season changes, threats to agriculture and more – are increasing and hurting working people now.

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.

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 time and again despite opposition. Now these commitments must be in the Paris agreement in December 2015 and turned into national and workplace action.

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.

We have a shared future

Whatever the deficits in a global agreement we must work to raise ambition in every nation.

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.

Key concept #2

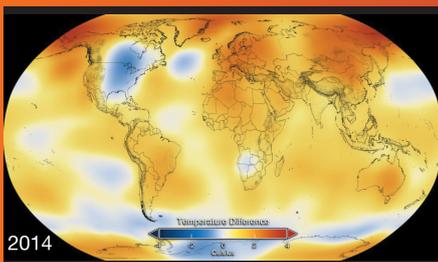
Just Transition – A stake in our future

We have played our role in UN negotiations and won commitments to a 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

2015 is virtually guaranteed to be the hottest 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.⁵

\$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.⁶

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.⁷ By 2050, 3% of Africa's land will no longer be able to grow maize.⁸

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.⁹

We have three demands for COP 21

- Raise ambition and realise job potential of climate action
- Deliver on climate finance and support the most vulnerable
- Commit to securing a Just Transition for workers and communities

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 2015¹⁰, 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. An 80% increase in frequency of the strongest tropical cyclones.

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

Case Study

CGT France: Unions rebuilding the wood sector in the Aquitaine²⁷

In 2008, the French wood sector was weighed down by a six billion 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 road-map for safeguarding 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.

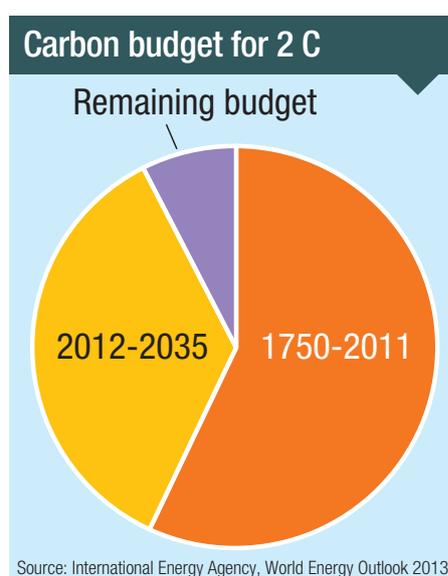
The carbon budget is running out

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)¹¹, the Emissions Gap Report from UNEP¹², and the Global Energy Outlook from IEA¹³ – have endorsed this concept.

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.

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 neutral¹⁵ 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 production¹⁶.

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 on that year¹⁷.

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.

In the past couple of months governments have put forward *Intended National Determined Contributions* to the UNFCCC. These country commitments will be the foundation of their national climate action plans.

Research shows that even if these commitments were realised, we would still be in a pathway to 3°C temperature increase. More ambition is therefore needed.

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.

Case Study

SEWA India: Biogas stoves to prevent deforestation

The Self-Employed Women's Association (SEWA) in India has brought together more than one 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."



Credit: Creative commons/Flickr

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. However, in a few years 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 assistance¹⁸. 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.

"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



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.

Case Study

Peru: Melting glaciers threaten water, energy and food

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 2030¹⁹.

"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.



Credit: Oxfam International

Case Study

Fiji: Rising sea levels mean rising unemployment

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



Credit: 350.org



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.

The Just Transition challenges

Ambition is still too low

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

A Civil Society Equity review of current country contributions shows that the ambition of all major developed countries fall well short of their fair shares, which include not only domestic action but also international finance.

Those with the starkest gap between their climate ambition and their fair shares include:

- Russia: INDC represents zero contribution towards its fair share
- Japan: INDC represents about one tenth of its fair share
- United States: INDC represents about a fifth of its fair share
- European Union: INDC represents just over a fifth of its fair share

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.

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

Jobs, industrial transformation and a 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 2070²⁰.

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.

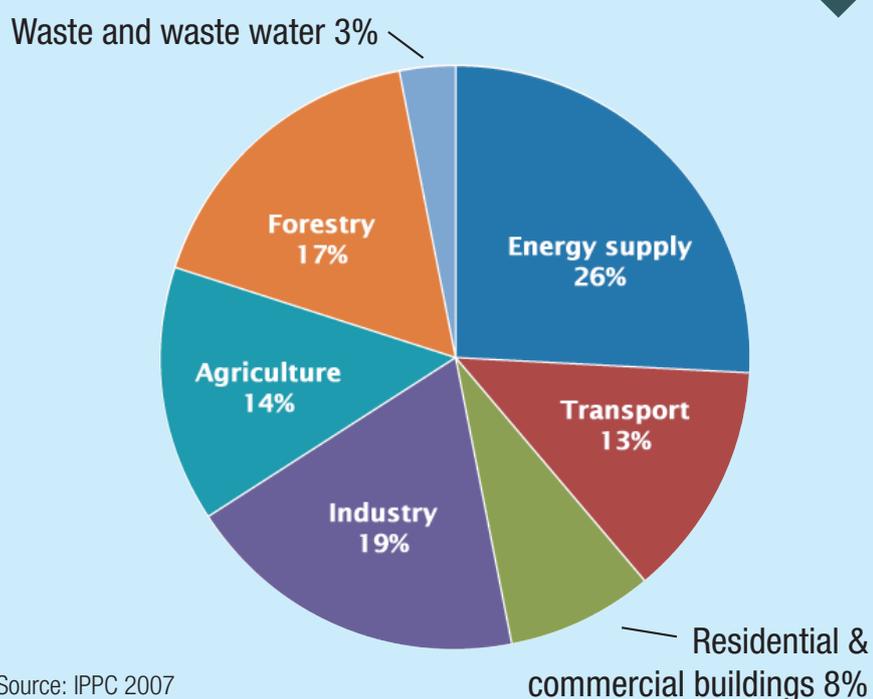
Investment in infrastructure by 2030 is predicted to be between US \$50 trillion²¹ and US \$90 trillion²². With infrastructure requirements in transport, energy, water systems and the built environment, this could be up to \$6 trillion dollars per year on average over the next 15 years. This means jobs.

A 2010 study by the Millennium Institute²³ 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.²⁴

And while all sectors hold opportunities for transformation the key to the transformation of our industries and our communities is energy – reliable renewable energy.

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



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 decade²⁵.

Our health matters

The New Climate Economy Report, *Better Climate: Better Growth*²⁶, 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 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.

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.

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 secure 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 secure 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?

Case Study

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 program. 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."

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.
- mission 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.

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

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.

The investment shift

Developed country governments committed in 2010 to mobilise US\$100 billion per year by 2020. Current pledges are around \$US10 billion per year, with just five years to go to meet the target.

Governments must not walk away from this commitment.

There is a moral imperative for those who pollute and for those who can bear the costs to help those who have the least responsibility for causing the problem. Furthermore, financing mitigation costs in developing countries is not an option but a condition to guarantee the planet's safety.

These contributions, which need to be based as much as possible on mandatory contributions from developed countries' national budgets, must be additional and must not compete with development assistance budgets.

The trade union movement opposes a transfer of funds from fundamental issues such as poverty eradication, employment creation, education or improving labour conditions.

That said it is critical to ensure coherence between the to-be-adopted post-2015 goals and climate protection objectives, as poverty eradication or decent work for all would remain a dream if climate change is not prevented, and the international community cannot afford contradictions between those agendas.

For unions it is imperative that additional public sources of finance are developed, such as a Financial Transactions Tax (FTT) so that it can contribute to funding climate action.

Institutional Investors and Pension Funds

The United Nations Development Programme (UNDP) has suggested that by 2015 financing requirements for adaptation in developing countries could amount to US\$86-\$109 billion per year to adapt to a 2°C temperature increase.

Emission reduction costs are expected to be in the range of \$140-\$175 billion per year by 2030. The International Energy Agency has also indicated that the world needs a trillion dollars a year between 2012 and 2050 to finance a low-emissions transition. It is clear that the US\$100 billion commitment will not be enough.

The incentives for investors to push for a green finance agenda are straightforward: it's about money and return on investment. It's about risk and the unbelievable reality that green economy investment is still less than 2% of investment portfolios. That's not a long-term prospect for securing our jobs or our retirement savings.

Institutional investors, including workers' pension funds, can help foster the transition to a low-carbon economy. In general terms there are three ways for institutional investors to support a zero carbon economy.

- Be transparent: we have a right to know where our retirement savings are invested and report on the carbon footprint that the investments cover.
- Increase investments in and exposure to clean energy and efficiency assets.
- Engage with companies to demand a decarbonisation of their activities and, as a last resort, consider divestment from specific companies and/or projects whose carbon footprint would prove to be unsustainable.

Governments can take measures to promote more active regulation of and involvement of institutional investors on climate action, including through public support to green bond issuance and to investment funds – on the basis that strict rules of conditionality apply to prevent “greenwashing”.

For the ITUC, pension funds alone could direct as much as US\$200-\$300 billion annually in climate change projects and allocate up to 5% of their portfolios over a four-year period with no substantial regulatory changes.

Financing mitigation costs are a condition to guarantee the planet's safety.

Importantly, governments can deliver stronger climate commitments and stronger policy coherence which together would provide institutional investors with sufficient confidence to invest in climate action in the long-term. That said, institutional investors can already make a difference if they support clean investments.

The role of institutional investors, including workers’ pension funds, in helping transition to a low-carbon economy and mitigating the impact of climate change has become a central policy concern for unions.

We need a new business model – for the workers in global supply chains, for the investments made in companies that are increasingly making jobs more insecure or where companies refuse to bargain for a fair share and for climate. All jobs need to become decent jobs. Rights matter, workers matter and climate justice matters.

Case Study

Brazil



Matilde Ramos is part of a cooperative called “Recicla Ourinhos”, founded in 2010. With around 100 people, the cooperative recycles 250 tons of recyclables a month. It is an environment service, but it also creates jobs.

The future of the recycling industry, and its capacity to deliver decent jobs and protect the planet depends on allowing workers in the sector to organise and get

more rights to earn a decent living, protect their health and get a fair share of the wealth they generate.

“This is where I started collected recyclable materials. I have been a waste picker since I was five. When we worked informally at the dump, we had no rights. Now, we have a fixed income. We make more than the minimum wage. We get our rights through a contract with the city council.” Matilde Ramos, Brazil

Watch the waste pickers tell their own story at www.equaltimes.org. Credit Inara Chayamiti

Blog: Back to the future - our journey to zero carbon, zero poverty world

On 21 October 2015, we began to live in a world that was briefly imagined in the 1989 film *Back to the Future II*.

The iconic date, captured in a sequel to the time travelling adventure story gave a vision for the future with flat screen video calls and wearable tech. It's a world that some people see around them today.

Anticipating the world ahead of us enthralled millions of movie fans worldwide, who marked the date with fanfare.

The hope and anticipation of a better future for our children and grandchildren is what drives economic and social progress.

This week, at the UN Global Goal Summit in New York City, political leaders activists business leaders will converge to chart a course for our future to avoid the catastrophic effects of poverty and climate change. Will they make progress and prepare for a better future that we can imagine?

We know there are no jobs on a dead planet, and we are already witnessing the loss of lives and livelihoods. Many communities are already devastated by poverty. Increasingly that poverty is born of the greed of a global trading system. Sixty per cent of global trade now re-

lies on production in supply chains – a model of growth that depends on massive hidden workforces with low wages, long hours, insecure work and low-cost overheads that create unsafe work and environmental damage.

When our wealthiest companies can't or won't pay \$177 a month in Cambodia or \$110 in Bangladesh this is just greed.

When Rina in the Philippines, who sews luxury lingerie, can't tell her 12-year-old son whether she will be home to cook him a meal or say goodnight because of forced overtime, this is an act of inhumanity born of greed.

Growing inequality is exacerbated by the companies who simply treat workers as commodities and our governments are covered by their demands to perpetuate this model of greed.

The ITUC global polling shows us we have the support of the world's people. Sixty-two per cent of people want their governments to do more to tame corporate power.

Fifty-five per cent of respondents in France, Germany, the UK and the US believe most global companies can't be trusted to look after their workers and tougher laws are needed.

On climate 90% want to see leaders take action to protect the international community from climate change impacts with almost 80% wanting action in the next twelve months or less.

There is a different future we can imagine than the one that Rina and her son live today.

Imagine it is October 2100.

Climate at the turn of the twenty second century has stabilised with an average increase of two degrees Celsius.

While this has quite dramatically changed the pattern of life and livelihoods for many with even hotter temperatures, seasons that have permanently changed and the loss of low-lying lands, it has offered opportunities for others.

People who live in megacities depend on mass transit systems that are powered by clean energy. Our houses are smaller and connected through 'the Internet of things' to smart grids that predict patterns of energy use and reduce consumption of wasted energy.

Our commons, parks, green verges and forests have been expanded and make for easier breathing, less respiratory disease and longer life spans.

Our workplaces are also green waste centres where what can be reused is without question integrated into production and our daily lives. And workplace democracy has transformed our workplaces such that hours of work, safety measures and wages growth are determined by collective agreement.

Collective bargaining is underpinned by a minimum living wage that is a floor, and social dialogue is central to sharing resource productivity and protecting planetary boundaries. Social protection is valued with universal quality health, education, childcare and aged care all being a central tenet of a global deal which began a generation earlier.

Technology is shared as a common good and all nations share in global supply where there is no available produce within surrounding neighborhoods or regions.

The key to sustainability based on zero carbon and zero poverty was established in 2015 when the world's governments took decisions to act in concert to stop climate change, implement global sustainable development goals; and led by the G7 group of nations, the rule of law was established to mandate due diligence by corporations through their supply chains.

Forward thinking business leaders followed the example of the B Team and engaged in social dialogue with workers as we transformed our industries.

It took conviction, courage and activism, but by 2050 the world had achieved massive decarbonisation and effected a just transition for workers and their communities.

Coal is no longer burnt for energy and the majority of fossil fuel reserves will never be used, but the workers in these jobs who built the prosperity of previous eras were honoured and looked after and their sons and daughters and families have sustainable and secure jobs.

Renewable energy, reforestation and closing the loop on production and waste have made it possible to have a future that survives within planetary boundaries. Many of the industries of today are the industries of 2015, but unions fought for and won the protections to ensure a just transition. Consequently our children and grandchildren can look forward to jobs on a sustainable planet.

Nice dream or possible reality? I prefer to consider it the second.

We have enormous challenges to get there, but working people will not be starved of hope, we have the power to imagine a zero carbon, zero poverty future, and our leaders must have the courage to deliver it.

Sharan Burrow, General Secretary, International Trade Union Confederation

In Conversation:

Naomi Klein, Hassan Yussuff and Jerry Dias

Naomi Klein Author, *This Changes Everything*



“This existential threat means that we are on a hard science-based deadline and we cannot afford to lose – the fate of humanity hangs in the balance. If you want to know where ‘business as

usual’ leads, you need to cast your mind back to Hurricane Katrina hitting New Orleans ten years ago, because that was a glimpse of the future for anyone who cares to look. That’s what our current system is built to do. So you had a natural disaster, of the kind we’re going to see more and more of, colliding with weak and neglected infrastructure.

And we know that there is precedent for coming together in crisis and building a fairer society. We know that it happened in the midst of the great depression, we know that it has happened after world wars, and we know that labour has led that process of a just reconstruction.

So as soon as you decide to take emission reductions seriously, that means huge investments in transforming your energy grid, in energy efficiency, in public transit. And we know that that creates six to eight times more jobs than investments in the extractive sectors.

In Toronto in the city where I live, I’ve seen an example where workers who lost their jobs in auto parts facto-

ries have been the ones who are hired first to produce solar panels and wind turbines, because they were the ones who knew how this type of very advanced machinery works.

I think there’s so much fear associated with climate change that we think that if we really look at this issue, it would change everything about our daily work. And I see it really differently, I actually think that climate change supercharges so much of the work that the labour movement is already doing in the fights against free trade deals, in protecting basic labour rights and in fighting austerity.”

Hassan Yussuff President, *Canadian Labour Congress*



“Climate change is our biggest threat to humanity, and as workers I think we have a central role to play in how we can combat that climate change. I think if we don’t take this seriously, fundamentally I think that it’s going

to be a very hostile world for us to live in.

The first thing that needs to be I think assured to my workers, should they have to lose their jobs or to make adjustment? They will have generous income support while they’re going through that period. It’s also important they be given the best opportunity to re-skill themselves.

We've had a government for the last ten years who have been climate deniers, so there's been no leadership from our national government as to the challenges that climate change poses.

Employers need to be more innovative in their workplace. All workplaces need to examine how they use energy, how they contribute to the challenges of course to climate change and more importantly, what are they going to do in working with unions and government.

This has been the tradition of our movement, it's always been the history of our movement, we've never been fearful of the future. So it's critical for our members to see themselves in this process as a necessary part of how we build a better world and a more sustainable world."

Jerry Dias
National President, Unifor



"Workers understand that we have really dropped the ball when it comes to taking care of the environment. We understand that it's just been a profit-driven economy, there hasn't been any thought at all about long term

sustainability. So workers get it and we're really concerned, we know we need to start making decisions today before we lose our planet.

Ok I never did buy the argument that somehow it has to be the environment or jobs, clearly it can be both. So there has to be a plan that includes both.

We need to have labour, community; we need to have employers, government, everybody talking about a green future.

As unions we've been dealing with those contentious issues for decades. Whether or not its lean manufacturing, speed ups, downsizing as a result of the introduc-

tions of new technology. We've been at the forefront with bringing our members along. So this is really about having discussions with our members, it's about talking to them, it's about empowering them. And we are going to continue to do this on the shop floor; we are going to continue to press government. And we're going to make sure that we have these discussions in union halls across the country."

Watch Naomi Klein, Hassan Yussuff and Jerry Dias at <https://www.youtube.com/watch?v=MRsTmV5q2Lo>

Call for Dialogue: Climate action requires just transition

We are in a race against time to stabilise the climate. Renewable energy, sustainable forestry and agriculture, emission-free manufacturing, construction, transport and services are needed to keep the temperature rise to less than 2 degrees Celsius.

A significant shift in the capacity to recycle and reuse is vital to create a circular economy that ensures our way of life stays within planetary boundaries.

Making the transition to zero carbon in our economies and societies is an imperative, but can only succeed if the transition is just.

Success needs governments to show leadership when setting ambitious climate goals but it also requires all of us – businesses, workers and their unions, civil society and communities to support change.

The transition requires dialogue and understanding of different needs at all levels. It requires an integrated approach to both climate action and the UN Sustainable Development Goals for inclusive development, with investment consistent with these objectives.

A just transition will:

- Invest in jobs - decent work opportunities in sectors which reduce emissions and help communities adapt to climate change;
- respect the contribution that workers in fossil-fuel industries have made to today's prosperity and provide them with income support, retraining and redeployment opportunities, as well as secure pensions for older workers;
- guarantee social protection and human rights;
- invest in community renewal to gain the hope and trust of regions and townships at the forefront of the energy transition, industrial transformation or climate impacts;
- support innovation and technology sharing to enable a rapid transformation of energy and manufacturing companies along with all other economic sectors And the involvement of workers and communities in the sectoral plans for transforming megacities;
- formalise jobs associated with rescue, restoring communities' and building resilience to climate disasters;
- be based on social dialogue with all relevant parties, collective bargaining with workers and their unions for workplace change, resource productivity and skills development with the monitoring of agreements which are public and legally enforceable.

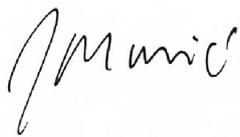
This is the most significant challenge the world will face in the next 30 years, but we must start now. We can lose the battle on climate change with horrendous consequences for all working people and their communities or we can act now to secure a stable climate with development and inclusive growth.

We, the undersigned support a call for a just transition.

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