Confronting the climate crisis:

TIME TO ACT

LIKE THE OCEANS WE RISE
Public Services International is an independent, democratic global trade union federation of more than 700 trade unions representing 30 million workers in 154 countries. PSI brings the voices of public services workers to the UN, ILO, WHO and other regional and global organisations. PSI defends trade union and workers’ rights and fights for universal access to quality public services.

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As the final draft of this toolkit was being completed, the world was confronted by the coronavirus pandemic. Irrespective of political persuasion, governments worldwide (albeit with notable exceptions) took drastic measures to reduce the spread of the virus, to care for the infected and to cushion the economic impacts. People accepted confinement and other barrier measures as best they could, and health workers, along with other essential workers in the public and private sectors, risked their lives every day. We saw satellite pictures of cities without smog as pollution-inducing activities were halted, and the price of oil fell to negative numbers due to the lack of demand and lack of storage. Global carbon emissions could drop by 5% in 2020.

Despite the hardships caused by the pandemic, it does compel us to ask: why we are not taking the same level of urgent actions to deal with the climate crisis? We have had more than 25 years of climate warnings, yet the crisis has only worsened. In all likelihood the world will recover slowly from the current pandemic, but the same cannot be said with respect to the climate crisis.

The metaphor of the boiling frog is appropriate: the pandemic was akin to putting a frog in boiling water, whereupon it immediately jumped
out (governments jumped out with drastic measures). However, the climate crisis is akin to putting the frog in warm water, slowly turning up the temperature, so the frog doesn’t notice, and eventually dies. Although the evidence is before our eyes, our governments and the largest private interests refuse to act decisively to avoid the most dangerous threat to humanity. By the time the water boils, it will be too late.

Much of the world’s current economic systems are unsustainable and genuinely harmful to the future of the planet. We need to alter our production and consumption patterns. The ideology of comparative advantage and economic efficiency that underpins the system of global supply chains was revealed to have failed miserably during the pandemic. Nor can we forget that the environmental costs of those supply chains remain externalised. Many of the goods and services that are essential to our lives can no longer be left to the whims of the market. Governments must rebuild capacity and assume responsibilities ceded to the market since the Thatcher/Reagan years.

It is our job to help imagine what a post-pandemic world can look like, to prepare the discussions with our members, to raise issues and propose solutions. And we will need to mobilise, in our communities, with allies, to make the changes that people and the planet need and deserve.

If we act decisively, now, we can prevent the worst of the climate crisis.

It will mean changing our production and consumption habits. It will require not only immediate and massive government investments, but also significant new powers for governments to regulate national and global economies. Just as in the coronavirus pandemic, the market is incapable of leading us out of the climate crisis. We will need strong democratic governments and multilateral institutions that work for all people, not just for wealth and privilege.

There is much talk about no return to ‘business as usual’ after the pandemic. But the main market actors – the global financial institutions and corporations and their allies in government and elsewhere – will fight tooth and claw to preserve their dominant positions in a world characterised by high carbon emissions, massive inequality and cheap labour.
This toolkit seeks to help trade unions discuss the climate crisis with their members and in their communities. It is timely in that the end of the pandemic is the moment to push for structural change. We may well be facing a ‘now or never’ opportunity to mobilise our members, to build alliances and together push for the changes we need.

The transition from our current carbon-intensive societies will neither be easy nor quick. However, we can anticipate a just and equitable transition which includes robust social protection measures based on global solidarity with all people. A planet where people are guaranteed universal access to quality public services. A globalisation that is not a race to the bottom in wages and working conditions, but that is based on human rights and equity for women and men, for countries north and south.

Time is short. Trade unions must prepare to act decisively to defend not just their own members, but their vision of a better society. We need bold leadership and broad engagement as we seek to build societies that value people and planet over profit.
This text has been developed to act as a tool for leaders and educators in public service trade unions to build capacity on the issue of the climate crisis. Why it is important for public services trade unions to mobilise on climate change issues is the key concern of this toolkit. This section acts as a guide.

Climate change is a crisis that is facing us with increased urgency every day. Yet, a few years ago the issue was generally ignored, with many thinking we could defer our problems to be dealt with later.

Today, everywhere we look there is widespread concern. Impacts of climate change are being felt across the globe in very real and damaging ways. Hotter temperatures and heat waves are causing more frequent wildfires; unpredictable rain patterns are leading to longer droughts and increased flooding with major effects on food security; and more extreme weather events (such as cyclones) are causing major disasters around the world.
Climate events versus climate change

Differentiating between climate events (hurricanes, wildfires, droughts, floods etc) and climate change is important. Climate events have always existed, but increases in the severity and frequency of climate events are symptoms of human-induced change to the climate system. For example:

- Cyclone Idai which hit Mozambique, Malawi and Zimbabwe in March 2019 was the largest cyclone ever recorded in Africa. Hurricane Dorian (August-September) was the strongest on record to hit the Bahamas.
- Wildfire (forest fire) intensity has increased in the last two decades. Wildfires are not new, but there are now more fires, the fires occur over greater areas and burn for longer than before. In the Western United States, 50% more fires have occurred in the last 20 years, than in the 50 years between 1950 and 2000. In the first four months of 2019, the UK recorded more wildfires than in any year ever before.
- Heatwaves are becoming more common and more intense. June 2019 was the hottest month on record worldwide. That same month, temperature records were set in the Czech Republic, Slovakia, Austria, Andorra, Luxembourg, Poland, France and Germany. Australia recored the hottest year on record in 2019. For Africa, as a whole, 2019 was the third warmest on record (after 2016 and 2010). Between 2010 and 2019, India saw the hottest decade on record since data was first collected in 1901.
Local government workers must deal with floods, with environmental problems arising from climate change, and with the need to put in place measures which help communities adapt to climate crisis.

Health workers must deal with the increasing disease burden caused by climate change as well as with problems of malnourishment as food insecurity grows.

Workers throughout public services must respond to climate-induced movements of people.

All levels of government have a vital role to play in dealing with climate change – it is the public sector that must lead and ensure reductions in greenhouse gas emissions economy-wide (in both the public and private sectors). It is the public sector that must deal with the consequences of climate crisis.

This toolkit has been developed to:

» assist in educating trade unionists at all levels – from rank-and-file members, to shop stewards/workplace representatives, officials, and leadership

» help unions elaborate the role of both public services workers and public services trade unions in specific contexts to respond to and confront the climate crisis.
The toolkit is structured in sections. It provides basic information, but also points to a range of other resources to draw on for more information.

The sections are organised as follows:

- **Section 2** explores the extent of the climate crisis facing us and looks at the risks from climate change.
- **Section 3** helps us to understand what causes climate change.
- **Section 4** examines climate change and its implications for public services. What role should the public sector be playing in relation to the consequences of climate change, as well in relation to reducing greenhouse gas emissions?
- **Section 5** highlights international developments in relation to climate. What are the UN initiatives? What are national governments doing?
- **Section 6** looks at the different sectors where PSI members are employed and explores in depth the implications of climate on those workers.
- **Section 7** suggests actions for public services trade unions.
- **Section 8** sets out different educational activities that leadership and educators can draw on for training on climate change.

### Global warming or heating? Climate change or crisis?

In 2019, The Guardian, one of the most widely read English language newspapers in the world, issued a new editorial policy on climate change. Included in the policy were instructions for journalists to use:

1. “climate emergency” or “climate crisis” instead of “climate change”
2. “climate science denier” or “climate denier” instead of “climate sceptic”
3. “global heating” not “global warming”
4. “greenhouse gas emissions” is preferred to “carbon emissions” or “carbon dioxide emissions”

The newspaper noted: “Climate change is no longer considered to accurately reflect the seriousness of the overall situation. Global heating is more scientifically accurate. Climate sceptics, in the face of overwhelming scientific evidence, deny climate change is happening, or is caused by human activity, so ‘denier’ is more accurate.”

**SOURCE:** The Guardian (UK) 16 October 2019
Even with global heating of 1.5° Celsius above pre-industrial levels, there will be massive impacts on the physical world and on how our societies and economies function. Climate change is deepening already existing global inequality as people struggle to deal with intensified droughts, floods, extreme weather – which lead to declines in health, food insecurity, increased urbanisation and hunger. Where many states already struggle to meet the democratic obligation of a decent life for all, the climate crisis puts severe pressure on the capacity of states to protect and enhance human rights. Given the scale of problems, the notion that the private sector will act for universal public benefit is a dangerous illusion. We need to strengthen the ability of states to deal with the impact of climate change.

In 2018, the Intergovernmental Panel on Climate Change (IPCC) released a special report assessing the impacts of global heating of more than 1.5°C above pre-industrial levels. We are already at one degree above pre-industrial levels, and at the current pace, we will reach 1.5°C somewhere between 2030 and 2052. This is not far away – at most just over 30 years away, within the lifespan of our children. Even with a temperature increase of 1.5°C, the risk to ecosystems and society as a whole moves from moderate to high risk.

The IPPC report made very clear that limiting global warming to 1.5°C will take a lot of commitment and effort and will result in massive
changes in the economy and society more broadly. The report emphasises that to achieve the necessary reduction in emissions, countries must decarbonise their economies as a whole, not just in some areas. It will require a major shift away from a capitalist economy built on the exploitation of fossil fuels and other natural resources. According to the report, in order to keep the temperature increase to 1.5°C, net greenhouse gas emissions will have to be reduced 45% by 2030, and reach net zero by 2050.

“The pathways limiting global warming to 1.5°C with no or limited overshoot would require rapid and far-reaching transitions in energy, land, urban and infrastructure (including transport and buildings), and industrial systems.” —IPCC, SR15 Summary for Policymakers

The report points to the importance of keeping the temperature increase to 1.5°C, rather than 2°C (which is the temperature increase identified in the 2015 Paris Agreement). This is in order to avoid even more ex-
It is clear that we are now in a very serious situation – trade unions, environmental activists and organisations have begun to talk about a climate crisis, rather than climate change, as a way of highlighting the seriousness of the situation.

We have seen increasing mobilisation around the climate crisis. It is no longer something that only environmental organisations are involved in. There has been a sharp rise in the number of young people, from school pupils to young workers who are taking up struggles around climate change and climate justice.

Young people like Greta Thunberg from Sweden, Ridhima Pandey from India, Kaluki Paul Mutuku from Kenya, who is part of the African Youth Initiative on Climate Change, Nina Gualinga, an indigenous activist from the Ecuadorian Amazon, and Autumn Peltier, a clean water and climate advocate from Canada. They are part of a global movement against the climate crisis, who recognize that major changes need to be made in how economies and societies are organised. September 2019 saw people worldwide in marches and protests in one of the biggest global actions demanding climate justice from governments.
The IPPC SR15 report points to many consequences of increased global warming. These include increased food insecurity, desertification and land degradation. All of these impacts will have severe social and economic consequences. For instance:

As desertification and land degradation impacts on people’s livelihoods and ability to survive off the land, we are likely to see more migration of people seeking arable land elsewhere, or moving to the cities to try and make a living. This is likely to lead to increased conflict as people migrating to new areas come into conflict with those already living in those areas; and as rapidly increasing urbanisation puts massive pressure on cities.

A 2019 study by the International Institute for Applied Systems Analysis (IIASA) showed that there is a link between increasing water scarcity, drought and migration. For instance, as water scarcity impacted on the rural areas of Syria, increasing numbers of people moved to the urban areas to survive. This led to problems in the cities of rapidly increasing populations, high levels of unemployment and increasing inequality. Weak government responses contributed to political unrest and
conflict, which ultimately forced millions of people to flee Syria.

It is those already at risk and vulnerable who are going to be most affected by climate change and its consequences, and yet they have contributed the least to greenhouse gas emissions. In countries where there are high levels of unemployment and inequalities, the ability of communities to adapt and survive is seriously affected – both in rural and urban areas.

A 2019 report by the UN Special Rapporteur on Poverty examining the impact of climate change on poverty, noted that even if current greenhouse gas emission reduction targets are met, “tens of millions will be impoverished, leading to widespread displacement and hunger.” Climate change will worsen an already existing crisis of high levels of unemployment and poverty in many countries.

The report argues that not only will the climate crisis impact on food, housing and water, but it will also put immense pressure on governments and democratic institutions and governance as a whole. And yet,
the report argues, governments are not sufficiently aware of the impact that climate change will have on human rights and are therefore not doing enough to deal with those impacts.

According to the report it is likely that climate change will:
- increase inequality, impact on the social fabric that binds societies together, and lead to increased conflict. It is very possible that this increased conflict will find expression in increased nationalism, xenophobia and racism;
- erode women’s rights and intensify gender-based violence;
- divert resources from health and housing;
- impact negatively on children’s rights including their right to quality public education;
- undermine dignity, autonomy and basic democratic rights.

These reports, and many others, make it clear that the climate crisis is not just a side issue to be dealt with at some point. Unaddressed, the climate crisis will deepen poverty and inequality around the world, undermine human rights, and harm democratic governance and the ability of states to govern effectively.

This is the context which has led many people who are active in climate justice movements to call for: “system change, not climate change.” This call is a recognition that in order to make changes that are sufficiently ambitious to reduce greenhouse gas emissions, and to deal with the extent to which climate change is deepening existing poverty and inequality, drastic changes are going to be needed in the economy as a whole.

There needs to be a decarbonisation of economies across the world, led by the state. In the context that has been described above, if we leave it to the private sector, human rights will be further eroded, and the poor and vulnerable will be further marginalized.

“If climate change is used to justify business-friendly policies and widespread privatisation, exploitation of natural resources and global warming may be accelerated rather than prevented.”
—Philip Alston, UN Special Rapporteur on extreme poverty and human rights
how human activity causes climate chaos and global heating

Throughout history, there have been changes in weather patterns and extreme events such as droughts and floods. However, since the end of the 19th Century, human economic activity, focussed at first in Europe and North America, has led to massive increases of greenhouse gases in the Earth’s atmosphere. This change in the composition of the atmosphere has intensified climate variations worldwide, leading to global heating with more extreme and more unpredictable climate events.

The origins of the forces driving climate change today began around 300 years ago in Europe with industrialisation. This was a turning point in capitalism, which we live with to this day: the ever-intensification of inputs, technology and capacity for the purposes of production. What drove the possibility for this intensification was, first, massive increases in the use of coal in the 19th Century and then rapid expansion of the use of oil (especially in refined forms like petrol/gasoline and diesel) in the 20th Century.

Climate scientists say we are now living in the anthropocene era; this means that climate change is primarily the result of human activities.
The main greenhouse gases

- Carbon dioxide (CO$_2$) – this is emitted in any activity which uses fossil fuels like gas, coal and oil/petrol; from making cement; from burning wood; from clearing land for agricultural use.
- Methane (CH$_4$) – “fossil” the extraction processes in obtaining oil, coal and gas release methane; “biogenic” emitted from landfill sites when waste decomposes; permafrost melt; from water storage reservoirs (dams) and flooded rice paddies; livestock (goats and sheep) digestion processes.
- Nitrous oxide (N$_2$O) – released by the burning of fossil fuels and wood.

These activities include:

- the burning of fossil fuels – when we use coal, gas and oil, this releases carbon dioxide into the atmosphere
- the industrial use of products derived from oil, like plastics and chemicals, further releases carbon dioxide
- intensive land use; commercial agriculture drives deforestation (leading to losses in capacities of carbon dioxide absorption) and concentrated farming of cattle creates further green house gases (carbon dioxide release during feed production and movement by animals over land, methane is released from the cattle).

Greenhouse gases have always been a normal part of the Earth’s atmosphere – without these gases, all the heat from the sun’s rays would be reflected straight back into space and we would freeze (our planet would look like Mars). When greenhouse gases are in the right ratios around the earth, a livable climate is created for all to survive.

Why do we sometimes talk about carbon emissions when carbon dioxide is not the only greenhouse gas?

Different greenhouse gases impact on global warming differently. To be able to compare the warming impact of these different greenhouse gas emissions, a common measure is used, called the carbon dioxide equivalent (or CO2e). Using this measurement, it is possible to talk of the concentration of greenhouse gases in the atmosphere and provides a way of comparing the concentration of greenhouse gases now and in the past. Currently, concentrations of CO2e are about 40% greater than two centuries ago, and are at the highest level in 800,000 years.
But the intensification of commercial production has upset the balance of greenhouse gases. Vast amounts of coal and oil have been burnt for the expansion of the capitalist economy. More and more land has been turned over to the production of commercial crops, animal feed and the farming of animals for meat. Huge quantities of waste are not recycled.

Too many greenhouse gases are now being emitted into the atmosphere, which leads to the atmosphere retaining greater amounts of the sun’s heat than normal. The result is that the temperature of the planet is rising rapidly. It is this global heating which is causing climate change that is impacting on food security, water resources, electricity supply and so on.

Carbon sinks are natural elements which absorb carbon. They include the oceans, the soil and vegetation. So when we cut down trees, or clear land so that we can use it for agriculture, we are releasing large quantities of carbon which they have been storing, and destroying natural carbon sinks.

The global average increase in temperature since 1880 has been about 1°C above pre-industrial levels. The 2018 IPCC report on the implications of temperature rises of 1.5°C estimates that we are likely to reach this between 2030 and 2052 if nothing changes. This is only 10 – 32 years away. We will feel the impacts, but our children and grand-chil-
Children will feel the impacts severely. The temperature increase that has already happened is enough to have a significant impact, causing:

- Rising sea levels as the ice caps melt
- Greater water evaporation which means a saltier sea, impacting on life in the oceans; compromised water resources, with less fresh surface water; greater water vapour in the atmosphere, which both traps more heat and results in heavier rains and snowfalls
- Less ice at the north and south of the planet to reflect the sun’s rays
- Melting and shrinking of glaciers and snow
- Changes in the ocean currents

All these changes sound small on their own. But they all have a knock-on effect which worsens their impact and makes the environment we live in more unstable, unpredictable, and less able to sustain us.

It is also important to remember that global heating does not have the same impact everywhere, all the time. Africa, for instance, will experience a higher temperature increase (on average one and a half times greater) than the global average because it is such a large land mass. This will have a major impact not only on Africa, but on the whole globe – it is estimated that a 1°C increase in temperature in Africa will impact on 65% of the maize growing capacity and an overall fall of 20% in food production.

**CO₂ concentration in the atmosphere**

In 2013, CO₂ levels surpassed 400 parts per million (ppm) for the first time in 800,000 years of recorded climate history. SOURCE: UK Met Office Hadley Centre
Scientists talk of **tipping points** - this is the point at which irreversible climate change takes place and extreme weather and high temperatures becomes normal. There are different estimates of what the tipping points are, with some scientists predicting it is only 40 years away. Part of the calculation involves estimating when the planet is no longer able to absorb any of the carbon that human activity produces (that is, when carbon sinks absorb no more carbon). This will result in more carbon staying in the atmosphere, which will accelerate global warming, resulting in a destructive climate feedback loop.

There are two sets of responses to the climate crisis – one is **mitigation** (which is about reducing emissions) and the other is **adaptation** (which is about dealing with the consequences of climate change).
Mitigation involves reducing the amount of carbon that is released in the atmosphere. This involves transforming to a low-carbon economy through measures such as:

- Shifting from coal- or oil-powered electricity generation to renewable, non-polluting energy
- Reducing or eliminating transportation systems dependent on fossil fuels and improving public transit service
- Changing production systems away from the use of carbon-based chemicals and plastics

Adaptation involves dealing with the effects of climate change. It involves communities becoming more resilient to climate change through measures such as

- Planting trees in areas where trees have been cut down for firewood or to make way for growing crops, and the soil has become eroded
- Improving the storm water drainage system to deal with floods
- Changing crops grown in a particular area because of changes in the weather

Different countries place different emphasises on mitigation and adaptation. For a country like the United States of America which is a large emitter of greenhouse gasses, the emphasis should be on mitigation; whereas for a country like Kenya, which contributes little to greenhouse gas emissions, but is badly affected by climate change, the emphasis is more on adaptation.
why climate change is important for public services unions

The impact of climate change is ever more obvious. Greater risks to human health, food security, water supply and sanitation have already been widely identified. This means that **world wide people will need more and new public services to cope** with these greater risks and changes in our environments. Without an expansion of universal public services – public service workers themselves will be placed under greater stress, service quality will inevitably decline, and the general population will suffer. Public services are already being reshaped in the context of climate change – if unions are absent from these changes, workplace conditions will be eroded, and public service workers will bear the burden of greater work intensification and precarity.

The climate crisis affects us all – at our workplaces and in our homes and communities. It impacts on hospitals, on schools, on shops – every place and every action that is part of our daily lives is being impacted on and will continue to be impacted by human-made changes in the climate.

The 2018 IPCC Special Report on the impacts of global heating of a 1.5°C increase in temperature note that climate-related risks to health, livelihoods, food security, water supply, human security and economic growth are projected to increase. Among the many impacts that the report notes are higher rates of illness and death due to increased heat, with cities in particular feeling the negative effects of heatwaves as they
trap the heat within built environment; an increase in vector-borne diseases; an increase in water stress; and a rise in risks to health, livelihoods, food, water and economic growth.

These are all areas where public services workers, across multiple sectors and at all levels of government, can be found. Thus their daily lives as employees are already being profoundly affected by climate change and its impacts, and will continue to be so affected.

Local and regional government workers have to deal with the impact of climate change on cities, in a context where urbanization is increasing rapidly. Changes are needed to make our cities equitable, safe and environmentally sustainable and resilient. Trade unions can play an important role in helping to develop and implement climate-friendly, fair solutions and policies which take account of the twin challenges of climate change and urbanization.

Health workers are heavily impacted by the increase in, and spread of, diseases; the increase in injuries and death caused by climate emergencies such as storms, floods and fires; and the increase in ill-health as droughts and floods impact on food availability.

PSI affiliate mobilisation in Santiago, Chile, December 2019. The banner reads: “save the planet, change the system.”
Climate change, working conditions and bargaining priorities

With the intensified effects of climate on workplaces, public service trade unions across all sectors need to develop and prioritise demands with employers to ensure:

a. there are adequate funds set aside for training and improved safety equipment;

b. measures are introduced to help workers deal with heat and generally adverse environmental conditions;

c. effective staffing levels are in place to deal with the scale of challenges;

d. universal access to quality public services is available even under the most extreme conditions;

e. changes are made to the way work is carried out and services are delivered in order to reduce greenhouse gas emissions or adapt to climate change. Public facilities such as hospitals, libraries, schools, police stations, universities and so on, must be ‘greened’, as well as workplace depots, workshops, and other facilities;

f. workers have deep knowledge and understanding of their work processes and sectors – they are in a good position to make suggestions about adaptations and changes, those suggestions can be a powerful resource for trade unions;

g. the implementation of functioning enterprise- and industry-level union-management mechanisms for green transition, health and safety.

The energy sector, which includes electricity and heat, emits the most greenhouse gases. This sector is seeing the increased use of renewable energy – in many countries this involves a major transition towards a new energy system which has significant impacts on energy workers.

Water and sanitation sector workers will be impacted as water resources are compromised and there is increased water scarcity around the world.

Emergency workers will face an increased burden as they are called upon to deal with the escalating number and intensity of climate emergencies such as storms, floods, more frequent wildfires and so on.

Due to workplace changes related to climate change, public services trade unions will increasingly need to incorporate new demands into their bargaining strategies (see box above).
The 2015 Paris Agreement makes reference to “a just transition of the workforce and the creation of decent work and quality jobs”. This transition cannot happen without the involvement of trade unions in the process. And it is not only in the energy sector that a Just Transition must be implemented. Wherever work is affected as a result of the climate crisis, this should be done through a Just Transition.

Trade unions are a key social force in any society and as such need to be involved in discussions around climate change at a public policy level and not just a workplace level. Trade unions and their members, particularly public sector trade unions which are directly involved in the delivery of public services, can contribute towards public policy discussion relating to the countries nationally determined contributions (NDCs), and measures that need to be implemented to reach the goals to which the country is committed; as well as to climate change policies and legislation in general.

**ITUC and “Just Transition”**

The International Trade Union Confederation lobbied for years to have the concept of “Just Transition” integrated into the UN climate negotiations and commitments. The slogan “No Jobs on a Dead Planet” was evocative. In 2015, the phrase “Just Transition” was included in the non-binding preamble of the Paris Agreement. Many organisations now use the term, although the specific meaning of the phrase differs depending on the user.

Starting in 2019, the ITUC launched the “Climate-proof our work” campaign, encouraging unions to engage with their employers on greening the workplace. ITUC encourages unions to take actions on 24 June each year, to show that workers can help make a difference. [WEB: www.ituc-csi.org](http://www.ituc-csi.org)
195 countries have signed the United Nations Framework Convention on Climate Change (UNFCCC), the key global treaty for governments to reach agreement on cutting carbon emissions and dealing with the consequences of climate change. Since 1995, governments have met annually at the Conferences of the Parties (COPs), but after a quarter of a century, there has been little in the way of ambitious and binding targets. While there have been gains made, it is clear that without mobilisation and action from trade unions and civil society, governments will continue to be heavily influenced by corporate interests, including the fossil fuel giants. The role of trade unions in ensuring a just green transition and ambitious carbon reductions is vital.

Climate change is a problem that is not restricted to one country and cannot simply be solved by one country in isolation from others. High emissions of greenhouse gases affect the whole planet, and not just the country that is responsible for those emissions. The richest countries, like the United States of America, and countries in Western Europe, and even China, are much higher emitters of greenhouse gasses than most of the rest of the world. Recognition of this is behind the principle of “common but differentiated responsibilities.”

Industrialised countries are the heaviest emitters of greenhouse gasses – both because of the emissions from large scale intense produc-
Common but differentiated responsibility

The United Nations Framework Convention on Climate Change (UNFCCC), agreed to in 1992 and signed by 195 countries, adopts the principle of “common but differentiated responsibilities and respective capabilities.” This means:

- **Common** – all countries share climate problems and must act;
- **Responsibility** – countries have different levels of responsibility to deal with climate change because of the very different levels of greenhouse gas emissions from different countries;
- **Capability** – different countries are able to take different actions depending on different levels of capability – which relates to the level of resources, technologies, finances and skills in the country.

In simple terms this means that the richest countries and the most polluting countries (not necessarily the same) must take the most action.

In the 1960s and 1970s many scientists began to note that the increasing level of greenhouse gas emissions in the atmosphere was causing global warming. By the 1990s scientific consensus was reached that this was the result of human activity.

Unfortunately, the collective commitment internationally of governments to put in place a meaningful agreement which would significantly reduce greenhouse emissions has been inconsistent.

In order to investigate this further and understand the implications of climate change for the planet, the International Panel on Climate Change (IPCC) was established in 1988 by the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP). Since then, they have issued a series of *Assessment Reports* which capture the scientific understanding of climate change and related issues. They have, recently and very importantly, focused on the political and economic impacts of climate change.
The Fifth Assessment Report was issued in 2014, and the sixth report is due out in 2020. Since 2014, the IFCC has issued three special reports. These are a report on Global Warming of 1.5 C (2018); a report on Climate Change and Land (2019); and a report on Ocean & Cryosphere (2019).

At the Rio Earth Summit in 1992, convened by the United Nations, countries agreed that there needed to be an international plan to stabilise the amount of greenhouse gases in the atmosphere and deal with the consequences of climate change. The international environmental treaty agreed to was called the United Nations Framework Convention on Climate Change (UNFCCC). This was adopted in 1992 at the Earth Summit in Rio de Janeiro, and came into effect in 1994 after a number of

### 2018 global share of fossil CO₂ emissions for top emitting countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Global share % 1970-2017</th>
<th>Global share % 2018</th>
<th>2017-2018 % Change</th>
<th>Average annual % change since 2015</th>
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<td>21.0</td>
<td>13.9</td>
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**SOURCE:** Joint Research Centre, European Commission
governments and government blocs (like the EU) had ratified the Convention; since that time, 195 countries have signed.

Since 1995, the parties to the Convention have met annually in the Conference of Parties (COP) – with each one being held in a different city around the world. At these annual meetings, countries try to thrash out the practical details relating to the principles outlined above. By how much should each country reduce its emissions? Who should pay for the consequences of climate change? How must countries restructure their economies in order to move to a sustainable low-carbon economy?

Despite 24 COP meetings since 1995, there is still no agreement on legally binding reductions in carbon emissions, or on who should bear the brunt of the cost.

Trade unions and trade union federations, including PSI, have attended both the COPs (with observer status) and the parallel process where environmentalists, activists, social movements and trade unions gather together to mobilise for and put pressure on governments to agree to ambitious reduction targets. After civil society walked out of the COP 15 in Copenhagen, there was a great deal of pessimism about the possibility of an agreement ever being reached.

At the Durban COP17, held in 2011, the process to negotiate a new
agreement was relaunched. This process culminated in the signing of the Paris Agreement at COP21 in 2015. The Agreement came into force in 2016 after 55 countries had ratified it.

The Agreement was welcomed as a historic event as the first universal climate agreement. In this agreement, countries commit themselves to keeping global warming within the limit of 2°C above pre-industrial levels, but with the intention of limiting the increase to 1.5°C. However, it does not include compulsory targets for different countries. Instead, the onus is on individual countries developing their own, voluntary, national climate plans, with self-determined cuts to their greenhouse gas emissions. The plan of each country is called a Nationally Determined Contribution (NDC). In 2023 there will be a global evaluation of progress in meeting these nationally determined targets.

A financing mechanism was also agreed with developed countries contributing at least US$100 billion a year to assist low-income countries.

In addition, as a result of lobbying by the trade union movement, the Paris Agreement, for the first time, included reference to a Just Transition, although this is not binding on the parties. It refers to the “just transition of the workforce and the creation of decent work and quality jobs.”

The notion of a Just Transition has been a cornerstone of the ITUC approach to the economic decarbonisation. It is based on the belief that workers, who are not to blame for the climate crisis, should not have to bear the cost of changes needed. As economies make massive structural changes as they transition away from fossil-fuel generated electricity, petrol cars, and changes in manufacturing, construction, agriculture and forestry, workers should not face higher unemployment, poverty and marginalisation.

Since the Paris Agreement, some limitations to the historic agreement have emerged.

Lack of ambition – the Agreement relies on voluntary emission reduction targets set by each country. The total of all the NDCs of all the countries that was agreed to at Paris exceeds the goal of 2°C. Current country
commitments will result in a temperature increase of at least 3°C above pre-industrial levels by 2100. As section 2 of this toolkit has shown, even 1.5°C increase is going to cause major environmental and societal upheavals.

Even then, few countries since the Paris Agreement have implemented the necessary measures to meet their emission reduction commitments. Global emissions continue to rise. At COP24, held in Katowice, Poland, it was emphasised that many of the country commitments are vague and insufficient. 2017, two years after the Paris Agreement, saw atmospheric carbon dioxide levels reach 405 parts per million - a record high. On top of this, the United States of America, a major contributor to greenhouse gas emissions, has withdrawn from the agreement under the Trump Presidency. The process for initiating the withdrawal was begun in November 2019.

The Paris Agreement also lacks a binding enforcement mechanism. The targets set by countries are voluntary and there is no way to hold countries to account.

While the reference to a Just Transition was built into the Paris Agreement, there has been little content given to the idea, and little pressure on governments and companies to pay more than lip service to the agreement.

The “Solidarity and Just Transition Silesia Declaration” was signed at COP24 in Katowice by 50 countries. This declaration notes the importance of a Just Transition “and the creation of decent work and quality jobs” as part of the transition to low carbon development.

Experience around the world has shown us that governments are not going to take the lead with regard to a Just Transition. Trade unions and civil society more broadly need to play a crucial role in giving content to the notion.

A Just Transition cannot be about opening up more parts of the economy to market forces. A Just Transition that is in the interest of workers will not happen unless the state, in partnership with trade unions and civil society, takes the lead in giving it content.
Public services potentially have the strategically most important role to play in reducing carbon emissions and in dealing with the consequences of climate change. Taking a sectoral perspective, this section looks at the impacts of climate change from the point of view of PSI’s membership. What are the changes that will need to be made in these sectors as a result of the climate crisis in order to ensure universal access to quality public services?

At the same time as health workers are faced with increased workloads because of austerity measures adopted by governments world-wide, there is also the increasing pressures associated with climate change. The disease burden is increasing as the number of infectious diseases both grows and moves into new areas. Changes in temperature, in the amount of rain, the extent of droughts – all of these changes encourage infectious diseases to move into new areas where they can now survive. Insects that carry diseases, such as mosquitos (which can cause malaria, yellow fever, dengue fever) and ticks (which can cause Lyme disease, tick fever) are able to thrive in new areas.
Corona virus (Covid-19) and climate change

In March 2020, Covid-19 was declared a pandemic by the World Health Organization (WHO). By May, over 4,000,000 cases in 187 countries had been confirmed, with over 300,000 reported deaths. Covid-19 is considered particularly dangerous and threatening because of the effect on people’s breathing (respiration) – this is the main cause of death from the virus. The well demonstrated consequence of the massive increase in greenhouse gas emissions has been the very significant rise in air pollution. It is now estimated that current levels of air pollution have produced an extra 8.8 million deaths worldwide – many of these from respiratory diseases. In China, during the SARS epidemic, people from areas of high pollution were twice as likely to die. While it is too early to draw a direct link between Covid-19 and climate change, what is clear is that in general conditions where pollution from climate change has already compromised people’s respiratory systems, then a virus which targets people’s respiratory systems will without doubt be more deadly and cause greater havoc.

Health workers are seeing more cases of heat stress which is linked to increasing numbers and intensity of heatwaves. But heat stress is becoming an increasing problem not only in the case of heatwaves. As the ambient temperature rises, manufacturing, agricultural, municipal and other workers face increased heat stress which can affect many parts of the body including the heart (heart attacks), the kidneys (leading to kidney failure) and the brain (leading to strokes).
Cholera becomes an increasing problem as water resources are threatened. With food insecurity increasing in many parts of the world, health workers will be confronted with increases in cases of malnourishment. For workers, the impact of all of this is going to mean greater work intensity. This means that they are expected to do more work, but in the same amount of time. Cutbacks in staff because of austerity measures will make this worse. Workers are also going to be exposed to more, potentially harmful diseases.

The solution is for governments to train and deploy more health workers in all areas. It means more resources need to be spent in ensuring facilities and equipment area able to deal with increased and new demands.

It also means that health workers need to be part of ensuring their buildings, equipment and work methods are sustainable. For instance:

- Can PV panels be put on the roof of the hospitals and clinics to generate electricity?
- Have energy efficiency measures been implemented so that the building is cooler in summer and warmer in winter?
- Is rainwater harvesting in place?
- Are food gardens being encouraged as a local and sustainable way of feeding patients, visitors, staff, and even the broader communities?
- Are health facilities generating less waste?

Electricity generation which relies on fossil fuels (coal, oil, diesel) is the biggest contributor to greenhouse gas emissions accounting for almost 30% of the global total. It is therefore the sector that attracts most attention when governments start talking about a transition to a low carbon development path. This can make energy workers nervous as they fear job losses and ongoing job insecurity. However, the impact on energy workers depends on the sources of electricity generation in each country.

For countries that are heavily dependent on fossil fuels like coal and oil for generating electricity, the challenge becomes one of transitioning to renewable energy such as hydro, wind, solar, wave, geothermal and biogas digesters. Renewable energy is not only important because
of climate change. Because solar plants and wind farms can be built at both small and large scale and because renewable energy plants can be established without necessarily being connected to the grid, renewable energy has the potential to extend electricity access to those who do not have it, either because they live in remote rural areas where the grid does not reach; or because they cannot afford fossil-fuel generated electricity. It is easier for local governments as well as not-for profit community organisations to become involved in electricity generation. But this must be done in a way that does not increase inequalities. For instance, if it is only the middle class who are able to afford the installation of PV panels on the roof of their house, then there is the danger that inequalities in a country can increase.

Countries that draw heavily on hydropower, like many of those in East Africa, are feeling the impacts of climate change. Faced with severe droughts, dams are drying up and are no longer able to generate electricity. These countries face load shedding as supply is severely constrained. The challenge for these countries is not to move to introduce more fossil fuel generation, but to introduce solar and wind as alternative energy sources.

For workers in the energy sector, a transition from fossil fuel based electricity generation to renewable energy poses many challenges.
There is the fear of job losses. Jobs in the renewable energy sector are going to be more spread out among many solar and wind plants, rather than concentrated in large fossil-generated electricity plants or coal mines. This is a challenge for both workers and for trade unions who need to organise these workers. Many jobs in the renewable energy sector are also found in the manufacturing sector.

Will there still be a place for national energy utilities in a context of localised renewable energy generation?

There is also the fear that workers do not have the skills to find jobs in the renewable energy sector.

In this context, it is vital that energy unions are part of negotiating a just transition to renewable energy that does not undermine the rights and interests of workers.

Water resources are increasingly compromised by the climate crisis. Changes in the patterns of rainfall, droughts, floods – all these impact on existing water sources. Conflict over water is likely to increase as water becomes more scarce.

The current trend towards the remunicipalisation of water services is a vital part of dealing with the challenges of water scarcity and compromised water sources. The public sector is best placed to deal with these issues in a way that meets the imperatives of social justice. If left to market forces, lack of access to water is going to become a bigger problem.

When cities are confronted by water scarcity, it can seem an easy solution to hand the problem over to the private sector and bring them in to set up expensive desalination plants, take over the running of treatment plants and the management of water resources. But this is not the solution.

Rather, the challenge for workers in the water sector and for their trade unions is to strengthen the public water utilities and the state’s ability to deal with a challenging situation.

Public service unions can play a greater role in innovation in water supply and demand management.
Already 55% of the world’s population lives in cities, and this is projected to increase to 68% by 2050 (an extra 2.5 billion people), with all population growth taking place in cities by this time. Asia and Africa are likely to see the biggest increases in urban population.

Climate change is going to contribute to this increasing urbanisation as livelihoods in the countryside are destroyed by changing weather patterns, land degradation and desertification, causing migration to urban areas. It is also going to increase the vulnerability of those living in urban areas. Extreme weather events will cause natural disasters that impact heavily on people’s homes, access to basic services like electricity and water, and their ability to go about their daily lives. Disaster management services will be called upon to deal with an increasing number of serious and large-scale incidents. Cities and towns on the coast, or next to large rivers will be particularly vulnerable to storms and flooding. All aspects of urban governance will come under pressure – including water supply, wastewater treatment, sanitation, energy supply, transport, telecommunications, built environment, health services, as well as social services.

Migration will not only happen from rural areas to urban areas within a country, but also from one country to another. As the impacts of climate change are added to other economic, social and political difficulties in some countries, people are going to be pushed into migrating across borders. This has the potential to lead to increased conflict.

Globally, cities produce 75% of the world’s greenhouse gas emissions. This is mainly through buildings, transportation systems and industrial food production and distribution (supporting urban populations).

Public sector workers, particularly those working in urban areas, are going to be called upon to implement measures designed to deal with the impact of the climate crisis, to implement adaptive measures being put in place, as well as implement mitigation efforts being developed to reduce carbon emissions, particularly in built-up urban areas. The biggest challenge perhaps is to make cities and towns more resilient.

Resilience can be defined as “the capacity of individuals, communities, institutions, businesses, and systems within a city to survive, adapt, and grow
no matter what kinds of chronic stresses and acute shocks they experience.” For local governments that are well managed, have sufficient resources, infrastructure and equipment, the challenges of dealing with the impact of climate change is an additional strain. For local governments that struggle financially, and lack sufficient infrastructure and equipment, the challenges of climate are enormous.

The environmental and waste management services provided by the local government become vital. Compromised water sources lead to diseases. Rotting rubbish dumped on street corners causes pollution, spreads diseases and releases methane.

The role of local government in implementing adaptation measures is particularly important. This can include ensuring enforceable building codes, housing built above flood lines, clearing stormwater drains, greening public spaces, and facilitating the development of community food gardens. Local government needs to play a role in ensuring buildings are more climate resilient, incorporating energy efficiency, insulation and water saving features. This is important not only for buildings that are going to be built, but also for retrofitting existing buildings.

Workers and trade unions operating in the local government/regional government sector need to play an important role in helping to develop and implement climate-friendly, resilient and fair solutions to the challenges of both urbanisation and climate change.

It is generally the poor who are most at risk of the impact of climate change. Too often it is informal housing that is worst affected by floods, poor people that face food insecurity, and poor communities that are least able to build measures for resilience. Local government policies and actions must be geared towards building climate-friendly, resilient cities and towns that put the imperatives of social justice and meeting basic needs front and centre.

What do local governments need to do to cope with climate change?

- Build planning around reducing greenhouse gas emissions and adapting to the impacts of climate change into all planning processes
- Have an effective information system in place that can analyse what is happening with the climate and its manifestations (drought, floods etc), and what impact this is having on service delivery.
• Sufficient resources to continue operating even when climate crises are happening
• Develop strategies to deal with problems caused by climate change

Emergency workers are the public sector workers that are most likely to feel the full force of climate change. They must deal with the consequences of fires, floods, droughts, hurricanes, cyclones, and other extreme weather events. Emergency workers will be called on to deal not only with people in distress, but also with destroyed or severely damaged infrastructure.

As health epidemics break out it is emergency workers and frontline responders who are going to be in the forefront of responding to these emergencies. These workers are going to face an increased burden. In this context, PSI emphasises the importance of preparation, anticipation and prevention.

Public sector workers in both urban and rural areas, in offices and out in the field, are increasingly going to be called upon to work in conditions where high temperatures create unpleasantly hot conditions; and where droughts and other consequences of extreme weather make access to water, electricity, and other infrastructure necessary for their work difficult to access.

Projected temperature increases will make heat stress more common. It will also impact on how much work workers are able to do – particularly those in the field like meter readers, those digging trenches for cabling, those who maintain water systems and collect waste and so on. They will need to rest more, and will also work more slowly because of rising temperatures. Research has shown that when the wet bulb globe temperature is higher than 26 degrees, work capacity is reduced.

Health and safety standards at workplaces will be even more difficult to sustain in a context where the environment is unstable/under threat or where there are major environmental hazards.
Neoliberal restructuring since the 1970s has fundamentally shifted social balances worldwide, privileging private interests over the public good. In this context, the climate crisis presents both threats and opportunities. Threats because the dominant political and economic processes are responsible for the crisis. Opportunities precisely because present economic and political processes cannot adequately resolve the problems the climate crisis generates. The field is open more than ever - the possibilities and potential for new thinking, new actions and new directions are growing. Public service trade unions can ally with other organisations who are working towards alternative energy, economic and social futures where climate justice is at the core of programmes for social and economic justice.

At policy level, trade unions need to be engaging governments about shifting economies onto sustainable low carbon development paths. It is vitally important that governments do not use this crisis as an opportunity to deepen the role of market forces in public services. A public driven solution is the only way that a crisis of the size we are facing is going to be met.

The challenge for trade unions, however, is that too often governments do not want trade unions involved in broader socio-economic issues. They prefer to keep unions restricted to the workplace and to negotiating around workplace issues. This means public service unions must
work with others, build alliances and join progressive coalitions. Trade unions need to be putting as much pressure as possible on governments to confront the climate crisis and to prioritize a just and equitable transition.

Within different types of public services, trade unions need to be involved in identifying areas for reducing greenhouse gas emissions, changing work processes to reduce emissions, and introducing more environmentally friendly work processes. Changes made must not be to the detriment of wages, working conditions and job security. Innovative public solutions will be needed and trade unions have a vital role in elaborating these solutions.

On these pages are organisations and movements working to address the climate crisis. In various countries, members of PSI affiliates, PSI’s affiliates and PSI itself have worked with all these organisations.
What is the School Strike for Climate?

Started in Sweden, the school strike for climate (Skolstrejk för klimatet), also known variously as Fridays for Future (FFF), Climate Strike, Youth for Climate, or Youth Strike for Climate, is an international movement of school students who take time off from class on Fridays to participate in demonstrations to demand action from governments to address the climate crisis, to transition to renewable energy and sustainable production and consumption.

A global strike on 15 March 2019 gathered more than one million strikers. Around 2,200 strikes were organised in 125 countries. On 24 May 2019, the second global strike took place, in which 1,600 events across 150 countries drew hundreds of thousands of protesters. The 2019 Global Week for Future was a series of 4,500 strikes across over 150 countries, in late September 2019.

Likely the largest climate strikes in world history, the 20 September strikes gathered roughly four million protesters, many of them schoolchildren. On 27 September, an estimated two million people participated in demonstrations worldwide. SOURCE: wikipedia.org
Who are Trade Unions for Energy Democracy?

Trade Unions for Energy Democracy (TUED) is a global, multi-sector initiative to advance democratic direction and control of energy in a way that promotes solutions to the climate crisis, energy poverty, the degradation of both land and people, and responds to the attacks on workers’ rights and protections. 76 unions currently participate in TUED representing workers in 24 countries. Four global union federations participate, representing educators (EI), food workers (IUF), the transport sector (ITF) and public services (PSI). National centers representing workers in Argentina, Brazil, Canada, India, Italy, Nepal, the Philippines and South Africa are involved.

SOURCE: www.unionsforenergydemocracy.org

What is Extinction Rebellion?

Extinction Rebellion (abbreviated as XR) is a global environmental movement that uses nonviolent civil disobedience to compel government action to avoid tipping points in the climate system, biodiversity loss, and the risk of social and ecological collapse. The movement uses a circled hourglass, known as the extinction symbol, to serve as a warning that time is rapidly running out for many species. SOURCE: wikipedia.org

What is 350.org?

350.org is an international environmental organisation which seeks to end the use of fossil fuels and transition to renewable energy through a global, grassroots movement. The 350 in the name stands for 350 ppm (parts per million) of carbon dioxide, identified as the safe upper limit to avoid a climate tipping point. As of 2019, the current level has reached 415 ppm. Through online campaigns, grassroots organizing, mass public actions, and collaboration with an extensive network of partner groups and organisations, 350.org has mobilized thousands of volunteer organizers in over 188 countries. It was one of the many organizers of the Global Climate Strike in September 2019. SOURCE: 350.org
This section of the toolkit identifies different educational activities that can be used to build the capacity of public services workers to understand climate, to mobilise and to take action as trade unions.

The exercises presented here are oriented at all levels of public service trade unions and have three goals. First and foremost is to build confidence amongst members and leadership to speak out about climate change and public services. The science of climate change is frequently reported in overly complex terms. Political and economic responses to climate change are often presented as so difficult as to preclude solutions. However, by treating the climate crisis as too complex to understand and thus to be left to experts or too politically difficult to reverse, the implicit consequence is that nothing can be done. That would be directly against our interests as public services workers and public service trade unionists. Which leads to the second purpose of these exercises: to highlight the unique interest that public services workers have in confronting the climate crisis. The climate crisis can only be resolved through an expansion of public services and state regulation. Without state-support for a just green transition, without an expansion of publicly-owned water and sanitation services, without the delivery of public energy services and without an expansion of public health care, the impacts of the climate crisis cannot be fully addressed. Third, the exercises are designed to help public services unions articulate sector and workplace solutions, explore the ways in which these can be promoted and what would be necessary for their successful achievement.
**MODULE 1 – Understanding human activity and climate systems**

- **Expected outcome:** each participant can convey in simple terms the causes of human-centric climate change

**Time frame**
- 20-30 minutes group work
- 5 minutes per presentation
- 10-15 minutes wrap-up and observations

**Method**
- Break into pairs or groups of three
- Each group should develop a visual guide that explains what the climate crisis is. This visual guide can be in the form of a poster, a powerpoint presentation, a drawing.
- As an alternative, ask groups to present a short drama or role-play.
- Once the groups have completed their tasks, present to the wider group for discussion
- At the end of the activity you need to have arrived at a commonly agreed definition and explanation of climate change.

**MODULE 2 – Impacts of climate on workers**

- **Expected outcomes:**
  - each participant understands the difference between extreme climate events and climate change
  - each participant can identify, with gender sensitivity, negative impacts of climate on communities and public services workers

**Time frame**
- 30 minutes group work
- 10 minutes per presentation
- 20 minutes wrap-up and observations

**Method**
- Break into groups of three or more and discuss the following:
  1. How has the climate crisis impacted your community?
  2. How is climate affecting you in your workplace and in the work you carry out?
  3. How do you think women and men are being impacted differently by the climate crisis?

*Facilitator tip: help participants to reflect on the consequences of changes in the climate, rather than the effect of single events.*
**MODULE 3 – Engaging government on climate**

**Expected outcomes:**
- Each participant is aware of national policy on climate change and the strengths and weaknesses of the government’s position on climate
- Each participant can identify specific threats and opportunities to public services

**Time frame** 1 day (breakdowns below)

**Method**
The facilitator/invited speaker will give a short input highlighting:
- the main points contained in the country’s NDC
- an overview of other climate-related government policies and law

In groups of four or five, discuss the following:
- Identify the strengths and weaknesses of the government’s NDC
- To what extent do the government’s broader development policies support or contradict the NDC?
- What are the strengths and weaknesses of specific climate related policies and legislation that the government has adopted?

(40 minutes in groups; 5 minutes per presentation; 15 minutes to wrap up)

In plenary, participants jointly create a map of all the relevant government departments, ministries, agencies etc involved with climate (30 mins)

You will now work in sector based groups:
- What are the specific policies and legislation relating to climate change that impacts on your sector?
- Look at the map of interventions developed in plenary; what government body would you prioritize for dealing with climate in your sector?
- What would be the main issues to structure an engagement around?
- What would be the obstacles to such an engagement?
- How could you overcome these obstacles?

(40 mins in groups; 10 min per presentation; 30 mins wrap up and comments)

Working in groups, discuss the following questions:
- Has the government made changes or commitments to strengthen the public sector in order to meet climate challenges?
- If yes; what can unions do to ensure these are fulfilled?
- What are the most important changes in terms of policy and in the way public services are delivered to deal with the climate crisis?

(40 mins in groups; 10 min per presentation; 30 mins wrap up and comments)
MODULE 4 – Understanding sectoral impacts of climate change

• Expected outcome: each participant can identify sector-specific proposals that would improve universal access to public services in the context of either mitigation or adaption to the climate crisis

Time frame
- 40 minutes group work
- 10 minutes per presentation
- 30 minutes wrap-up and observations

Method
You will work in groups. Groups should preferably be organised on a sectoral basis. Discuss the following questions and report back:
1. What are the climate change impacts in your sector that make it difficult for you to deliver a quality public service? Does the climate crisis make already existing problems worse?
2. What is the impact on workers of climate change in your sector?
3. What kind of solutions would resolve these problems?

MODULE 5 – Impact of climate change in different regions/countries

• Expected outcome: each participant understands the particular impact that the climate crisis has on their country and/or their region of the world

Time frame
- 30 minutes group work
- 5 minutes per presentation
- 20 minutes wrap-up and observations

Method
Break into groups of three or more and discuss the following:
1. Describe any events in your country or region attributed to climate change.
2. How have living and working conditions in your country been affected?
3. Have people taken measures to adapt?
4. Which groups are most impacted?
5. Why do you think they have felt the greatest impact?
6. Have formal adaptation and mitigation measures been put in place?

Facilitator tip: collect articles from newspapers and online sources that highlight the different impacts that the climate crisis is having in your country or region. Hand these articles out to groups at the beginning of the exercise to stimulate their thinking, or refer to them at the end as part of summing up.
MODULE 6 – Gender inequality and climate

• Expected outcome: each participant has a better understanding of the different impacts of the climate crisis on men and women workers and specific impacts that arise for those from marginalised, indigenous and/or disabled communities.

Time frame
• 30 minutes group work • 5 minutes per presentation
• 20 minutes wrap-up and observations

Method
Break into groups of three or more and discuss the following:
1. How are women and men affected differently?
2. Do women and men have the same ability in terms of skills, resources and capabilities to confront the climate crisis?
3. Whose work is being/will be most affected?
4. How can we realistically and effectively consider gender equality when taking action?

MODULE 7 – Building alliances

• Expected outcome: participants identify key allies unions can work with on the climate crisis who can jointly strengthen public sector response.

Time frame
• 30 minutes group work • 5 minutes per presentation
• 20 minutes wrap-up and observations

Method
Break into groups of three or more and discuss the following:
1. Share information on other civil society organisations that you are aware of working on the climate crisis.
2. Identify each organisation’s aims, focus and approach. What are the commonalities and differences?
3. Have you or your union had any interaction with any of these organisations? What would be areas of common cause with these groups?
4. Which organisations would be useful to link with? How can you do this?

Facilitator tip: find out about other groups focussing on the climate crisis. Information on these groups can be given to the participants before the activity. When exploring common ground issues, focus on differences in vocabularies and decision-making and how unions can overcome this.
We encourage you to use these activities flexibly, depending on how much time you have, and what you want to achieve. The activities are designed to be easily adapted to suit the particular circumstances or need in your country, region or sector.

The following table suggests how the activities could be combined for different time frames. Your union might wish to conduct a full three-day workshop on climate change. You can use the table below to put together the various elements of the workshop to cover all the issues you have prioritised. But it might also be that you are running a short session in a union meeting on climate change, and you could choose one of these activities.

<table>
<thead>
<tr>
<th>Objective</th>
<th>Timeframe</th>
<th>Modules</th>
</tr>
</thead>
<tbody>
<tr>
<td>• To provide a basic introduction to climate change</td>
<td>1 – 1.5 hours</td>
<td>1</td>
</tr>
<tr>
<td>• To deepen understanding of climate change</td>
<td>1 day</td>
<td>1, 2, 5 &amp; 6</td>
</tr>
<tr>
<td>• To build confidence in dealing with climate change</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• To explore the implications of climate change for public sector workers</td>
<td>1.5 hours</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Half-day</td>
<td>2 &amp; 4</td>
</tr>
<tr>
<td>• To build a campaign around climate change and the public sector</td>
<td>2 days</td>
<td>3, 4, 5 &amp; 7</td>
</tr>
<tr>
<td>• To understand the gender implications of climate change</td>
<td>1.5 hours</td>
<td>6</td>
</tr>
<tr>
<td>• To develop an approach to engaging government around climate change</td>
<td>1 day</td>
<td>3</td>
</tr>
<tr>
<td>Acronyms</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>CC</td>
<td>Climate change</td>
<td></td>
</tr>
<tr>
<td>COP</td>
<td>Conference of the Parties</td>
<td></td>
</tr>
<tr>
<td>GHG</td>
<td>Greenhouse gas emissions</td>
<td></td>
</tr>
<tr>
<td>ITUC</td>
<td>International Trade Union Confederation</td>
<td></td>
</tr>
<tr>
<td>ILO</td>
<td>International Labour Organization</td>
<td></td>
</tr>
<tr>
<td>INDC</td>
<td>Intended Nationally Determined Contribution</td>
<td></td>
</tr>
<tr>
<td>IPCC</td>
<td>Intergovernmental Panel on Climate Change</td>
<td></td>
</tr>
<tr>
<td>IPCC SR15</td>
<td>Intergovernmental Panel on Climate Change Special Report 15 on Global Warming of 1.5° Celsius</td>
<td></td>
</tr>
<tr>
<td>NGO</td>
<td>Non-Governmental Organisation</td>
<td></td>
</tr>
<tr>
<td>PSI</td>
<td>Public Services International</td>
<td></td>
</tr>
<tr>
<td>SDGs</td>
<td>Sustainable Development Goals</td>
<td></td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
<td></td>
</tr>
<tr>
<td>UNEP</td>
<td>United Nations Environment Programme</td>
<td></td>
</tr>
<tr>
<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organization</td>
<td></td>
</tr>
<tr>
<td>UNFCCC</td>
<td>United National Framework Convention on Climate Change</td>
<td></td>
</tr>
<tr>
<td>WMO</td>
<td>World Meteorological Organisation</td>
<td></td>
</tr>
</tbody>
</table>

All the materials presented in this toolkit, including all the education modules, extensive links and updated information are available at PSI’s dedicated climate change education subsite:

https://psishort.link/ClimateCrisis
https://psishort.link/CrisisClimatica
https://psishort.link/CriseClimatique
PSI wishes to gratefully acknowledge three affiliated unions in Sweden whose project cooperation work with PSI on the climate crisis has informed the development of this toolkit. Starting in 2015 as a pilot project between PSI and Akademikerförbundet SSR, and facilitated by the Swedish trade union solidarity organisation Union To Union, the project was subsequently expanded to include the participation of Kommunal and Vision from 2017 onwards. Representatives from Akademikerförbundet SSR, Kommunal and Vision all contributed to the overall planning and evaluation of PSI’s climate change project work and without the continuing, generous and critical support of these unions, this toolkit would not have been possible.

PSI would like to thank the subregional secretaries and project officers who facilitated project activities in Tunisia (Najwa Hanna), Zambia (Tichoana Fambisa), Kenya (Jackie Nalubega), Jamaica (Sandra Massiah) and Perú (Juan Diego Gomez). The lessons learned from these activities provided important frameworks for the materials presented here. Support from PSI’s regional secretaries Jocelio Drummond (InterAmerica) and Sani Baba Mohammed (Africa and Arab Countries) was also very important.

The idea for this toolkit was initially proposed by Jasper Goss (PSI’s director of projects 2011-19) and developed in consultation with Sandra van Niekerk (South Africa). PSI is grateful for comments on the text from David Boys (PSI).

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Akademikerförbundet SSR (The Union for Professionals) organises workers specialising in social sciences. ASSR represents more than 72,000 members in both the public and the private sectors and is strongly committed to international solidarity, especially in the areas of refugee rights and climate change. WEB akademssr.se

Kommunal is the Swedish Municipal Workers Union which represents more than 500,000 workers throughout local government services. More than 75% of Kommunal’s members are women. Kommunal is active internationally supporting gender equality and trade union rights. WEB kommunal.se

Vision organises those in management, developing and administrating welfare in private companies, municipalities, county councils and churches of Sweden. Vision has almost 200,000 members representing thousands of professions. Vision is a Fair Union, supporting human rights and the right to organise. Vision believes strongly in a sustainable environment and international solidarity. WEB vision.se

Union to Union is the Swedish trade union movement’s organisation for international development cooperation with a focus on decent work, democracy, equality, a fair distribution of resources, poverty reduction and sustainable development. Union to Union promotes human rights at work and supports the creation and the strengthening of unions worldwide. WEB uniontounion.org
Unprecedented change in the earth’s climate system is causing disruption world wide. The planet is heating due to increases in greenhouse gases in the atmosphere. Despite international efforts since the 1970s, pollution continues to grow.

Greater demands for protection from the consequences of climate change are directed to governments everywhere. Companies demand subsidies for a transition to a green economy. Others even deny there is a problem.

**What can be done? What is the future role of the state? How must public services be deployed to protect people and reverse the climate crisis?**

For trade unions in public services, this crisis presents profound challenges and unique opportunities. Helping public service unions understand the crisis and seize opportunities is the focus of this toolkit.