



ETUC Project “Involving Trade Unions into adaptation policy”

Thematic workshop #3 –
Consequences of climate change and employment:
Consequences of climate change: working conditions
and occupational health and safety

DISCUSSION PAPER prepared by Syndex

This document is part of the ETUC European project on adaptation to climate change. The three main objectives of this project are : (1) to inform European trade unions about the consequences of climate change on the world of work; (2) to prepare trade unions to play an active role in the design and implementation of the national strategies for adaptation; (3) to develop a tool kit for trade unions to bring adaptation on the agenda of industrial relations. The outcome of this project will be based on the results of 2 questionnaires sent to national and sectoral European trade unions as well as on 5 thematic workshops¹, each of them dedicated to a specific theme : adaptation and the world of work, sectors and regions at risk, working conditions and health and safety, emergency services, role of public authorities.

The present paper will be presented by Syndex during the last session (#7) of the seminar. The participants will be split into groups and invited to discuss its' content and to reflect on the possible implications of climate change and adaptation policies on working conditions and occupational health and safety. The outcome of these discussions will be integrated to the final study.

Climate change is increasingly recognized as a major threat to the stability and prosperity of society. No matter what the climate change mitigation efforts are, unavoidable climate impacts, such as heat waves, floods, droughts and extreme weather events, will take place together with the economic, social and environmental costs coming along. The changes observed in climate are already having wide-ranging impacts on ecosystems, economic sectors, human health and well-being in Europe. The average temperature for the European land area for the last decade (2002- 2011) is 1.3°C above the preindustrial average, which makes the increase over Europe faster than the global average.

Climate change is expected to seriously affect the European economy, bringing with it negative but also positive effects over national and regional economies. According to the European Environmental Agency (EEA), the total reported economic losses caused by weather and other climate-related extremes in Europe already amounted to over EUR 436 billion for the period 1980-2016².

Climate change and adaptation measures are also expected to have a wide range of effects over employment and working conditions. These effects include job destructions and creations, effects over competences and skills needs but also major impacts regarding health and safety at work. These effects may include increased risks of accident, injuries, long-term diseases, psycho-social risks or even fatal casualties (I).

¹ The 5 selected themes are: adaptation and the world of work, sectors and regions at risk, working conditions and health and safety, emergency services, role of public authorities.

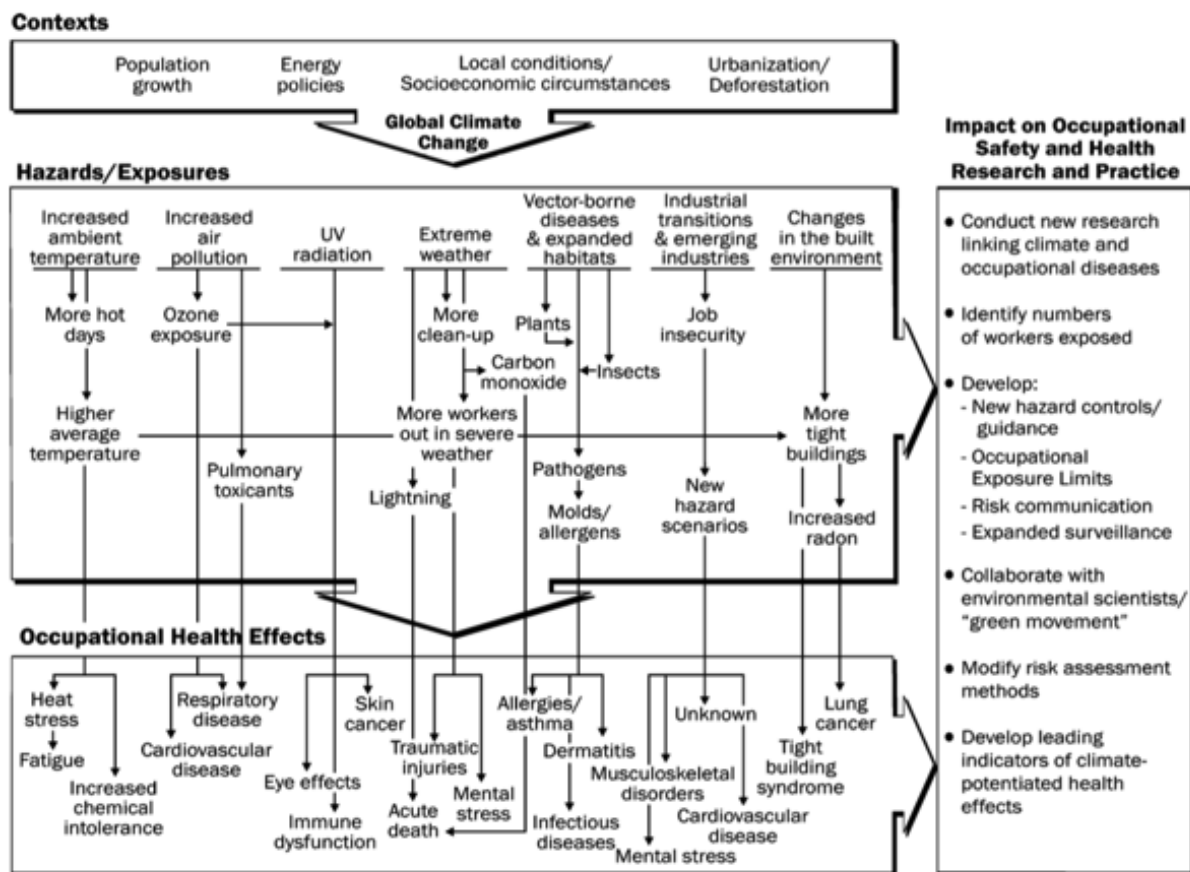
² EEA Report No 15/2017, “Climate change adaptation and disaster risk reduction in Europe” (2017), updated in 2018

As underlined by the ETUC, good occupational health and safety benefits both workers and employers. In that regards, prevention is key and pressure from trade unions can be a decisive driving force to adopt prevention measures. It is therefore crucial that European trade unions get involved in the topic of adaptation to climate change and start gathering sufficient knowledge to promote health and safety rules at all levels (EU, national, sectoral and workplace levels) (II).

1. Occupational health hazards related to climate change

While performing their tasks, workers can be confronted to various weather events affecting their well-being and security at work. Because of climate change, the frequency and intensity of these events is extremely likely to increase over time. The most common risks identified for workers are related to heat and increased ambient temperature, which can lead to the occurrence of heat stress, fatigue, increased exposure to air pollution and decreased chemical tolerance. The other identified impacts over health and safety at work relate to ultraviolet radiation as well as direct exposure to extreme weather events (forest fires, storms, hurricanes, floods, etc....)³. Figure 1 below summarizes these mechanisms which will be discussed in detail in the following sub-sections.

Figure 1: Conceptual framework of the relationship between climate change and occupational safety and health (source: Journal of Occupational and Environmental Hygiene, September 2009)



³ Adam-Poupart, A., Labrèche, (2013). Climate change and occupational health and safety in a temperate climate: Potential impacts and research priorities in Quebec, Canada. *Industrial Health* 51, 68–78.

1.1. Potential impacts of increased ambient temperatures

1.1.1. Heat stress

Heat-induced occupational illnesses and injuries occur in situations in which the total heat load exceeds the capacities of the body to maintain normal body functions without excessive strain. Workers labor in a wide variety of hot environments, and if average ambient temperatures increase, more workers will be exposed to heat stress. Even small to moderate increases in ambient temperature at work can cause discomfort, especially if workers are wearing personal protective equipment. Acute health effects of exposure to extreme heat include heat exhaustion, heat rash (prickly heat), heat fatigue, heat syncope/fainting and heat stroke. It can also lead to complications of many chronic diseases, including chronic obstructive pulmonary disease, coronary artery disease, diabetes mellitus, and chronic kidney disease. As one would expect, not all workers will be equally impacted. Work-related factors such as work practices, work/rest cycles, access to water, and access to shade/cooling controls will play a key role. Furthermore, heat stress effects are also heavily dependent of individual susceptibility (age, weight, physical fitness, general health, etc.)⁴.

Practical example – extract from the Italian trade unions (CGIL, CISL, UIL) answer to the ETUC questionnaire

“We can take the example of those who work at high temperatures on construction sites for road works, to stretch the asphalt, the masons when they isolate a roof, when they make a concrete casting, or they mount a scaffolding. Among the sectors exposed to heat stress, in addition to agriculture, there is also transport. Here the risk factors, more than the organization of work, are linked to the obsolescence of cars, brakes, buses and metro often lacking air conditioning and even with the windows locked. The working conditions of drivers are heavily affected, as are those of travelers who move with these temperatures. Furthermore, conducting a train in a situation of heat stress puts the safety of passengers at risk: the thresholds for attention and concentration of drivers in these conditions are put to the test”.

Heat stress will primarily affect outdoors workers and especially those which activity is physically demanding. The sectors which are considered to be particularly at risk include construction, agriculture, tourism, fisheries, forestry but also utility delivery and transportation sectors. Several categories of workers who work indoors may also be impacted, especially those who work in warm spaces that are not air-conditioned. In practice, the most often quoted places where such danger can occur are places like greenhouses, bakeries, manufacturing plants, warehouses or foundries. Experience shows however that even office workers can be impacted when no proper cooling / ventilation system is installed. Possible preventive measures include changing hours of work, of work organization, investment in proper equipment and access to water, although some of these measures may introduce new hazards.

1.1.2. Fatigue and the risk of accident

At higher temperatures, fatigue increases, and both the physical and mental tasks capacities to work are affected, leading to a potential “decline in vigilance” that can result in increasing the frequency of several types of work accidents, such as risk of tripping, bumping or other disruption of movement, falling from height,

⁴ Schulte, Paul A. and Chun, HeeKyoung (2009) 'Climate Change and Occupational Safety and Health: Establishing a Preliminary Framework', Journal of Occupational and Environmental Hygiene, 6:9, 542 – 554

risks related to falling objects, to mechanical handling, road risks on mission, risks related to the internal circulation of vehicles, chemical handling or electricity, etc.

All of these risks can be increased by external or work-related factors: high humidity, low air convection, wearing of protective clothing impeding the evaporation of sweat, etc. In addition, an inadequate organization of work and a new warm environment may also aggravate these effects, such as maintaining working hours during the hottest hours of the day, inadequate break conditions, working with hot surfaces, and so on...

Practical example – extract from the ETF Road Transport answer to the ETUC questionnaire

“Extreme weather conditions have a direct impact on the conditions in which bus, coach and truck drivers live and work. In many EU Member States buses, coaches and truck are not provided with air conditioning what impacts drivers’ wellbeing and their capacity to manage complex situations entailed by traffic conditions, being in charge of passengers or tourists, etc.

Additionally, spending the daily rest and even week-end rest in vehicles is a common practice, particularly in road freight transport. Thousands of truck drivers live and work for months in their trucks. Extreme weather conditions have a direct impact on the quality of their rest and quality of life. Although trucks may be provided with air-conditioning installations, keeping it on for long periods when the vehicle is stationary would lead to higher fuel consumption and drivers are often penalised when using too much fuel.

For bus and coach drivers, particularly those working on domestic, short-haul trips, one of the main issues is the long waiting time in between two journeys, which is taken by the driver either in the vehicle or at the company base, depot, terminals etc. which are rarely heated up or are equipped with air-conditioning installations. Investing in adequate resting and waiting areas will certainly contribute to increasing the attractiveness of the sector”.

1.1.3. Air pollution

Elevated temperatures can increase levels of air pollution, which in turn can further harm human health. For example, high temperatures raise the levels of ozone and other air pollutants, such as particulate matter, that exacerbate cardiovascular and respiratory diseases. Chronic exposures to elevated concentrations of ozone have for example been associated with increased risk for mortality from respiratory diseases such as pneumonia and chronic obstructive pulmonary disease. Exposure to ozone is also said to have an impact over labor productivity. Workers most likely to be impacted by increased air pollution include outdoor workers in urban environments, firefighters, drivers, and workers in indoor spaces with- out filtered air.

In the agricultural sector, it is expected that the lengthening and intensification of agricultural droughts will lead to increases in atmospheric concentrations of dust, which can lead to an increase in respiratory problems among workers who may inhale them. The relationship between the exposition to dust during droughts and respiratory problems has been documented several times⁵.

⁵ Agence nationale de sécurité sanitaire de l’alimentation, de l’environnement et du travail (ANSES, 20018), Évaluation des risques induits par le changement climatique sur la santé des travailleurs, rapport d’expertise collectives, available at : <https://www.anses.fr/fr/content/avis-et-rapport-de-lances-relatif-%C3%A0-l-%C3%A9valuation-des-risques-induits-par-le-changement>

1.1.4. Biological risks

Global warming modifies ecosystems what in turn could lead to a modification of biological risks, such as the development of infectious, immuno-allergic and toxic diseases. Climate change is for instance broadening the range of disease vectors (such as ticks and mosquitoes), thereby increasing disease risks of outdoor workers in the construction, utility, recreation, agriculture, forestry, landscaping, and natural resource-management sectors⁶. In the same way, climate change is favoring the development of pathogens out of areas usually recognized as contaminated. Last but not least, global warming is also said to increase pollen production and pollen seasons, thus leading to increases in allergic disorders among workers and others.

1.1.5. Decreased chemical tolerance

High temperatures and humidity are said to affect the body's physiological responses to environmental toxicants. As for example, warm wet skin promotes the absorption of chemicals. In the agricultural sector, workers, especially pesticide applicators and aerial spraying pilots, can suffer from increased exposure to pesticides. A few studies have also established a relationship between high temperatures, chemical intolerance and monoxide poisoning among race car drivers during warmer days.

Practical example – extract from the Lithuanian trade union LPSK answer to the ETUC questionnaire

“Often, agricultural workers have to stick to a strict schedule (this due to the seasonality of crops’ growth) and sometimes cannot delay the performance of their tasks, this even if the temperature becomes unbearable. This situation can lead to very high risks for workers’ health, like during the spray of chemicals which necessitates wearing special protection suits.

1.2. Extreme weather events

Extreme weather events such as floods, landslides, storms, droughts, and wildfires have become more frequent and intense in recent decades, as temperatures and climatic variability change. The impact of recent hurricanes and heat waves shows that even high-income countries are not well prepared to cope with extreme weather events. Such events may have severe consequences for workers, especially for emergency services and recovery workers.

- Extreme weather events pose a variety of health and safety hazards to rescue and recovery workers, such as injuries from slips and falls and from being struck by airborne objects, inadequate sleep and nutrition because of long and uninterrupted work shifts, physical exhaustion, mental stress, and vehicular crashes⁷;
- Potential health and safety hazards associated with flooding are exposures to toxic substances, asbestos and other hazardous dusts, mold, biological agents, flood debris, electrical hazards, drownings and blood-borne pathogen infections;
- The increased number of forest fires heightens the number of risks faced by fire fighters: falling trees, heat exhaustion, burns, smoke inhalation, transportation-related injuries and cardiac arrest;

⁶ Source : Moore, K. J., Qualls, W., Brennan, V., Yang, X., & Caban-Martinez, A. J. (2017). Mosquito control practices and Zika knowledge among outdoor construction workers in Miami- Dade County, Florida. *Journal of Occupational and Environmental Medicine*, 59, e17–19.

⁷ Levy S., Roelofs C. (2019), Impacts of climate change on workers’ health and safety, available at: <https://oxfordre.com/publichealth/view/10.1093/acrefore/9780190632366.001.0001/acrefore-9780190632366-e-39?rskey=JDdqZn>

- Last but not least, climatic events may also be a source of important stress for workers (especially in certain sectors such as emergency and rescue services or crisis management units), with possible negative implications for them both at work (burn-out, increased workplace violence, etc.) and in their private life (depression, post-traumatic stress disorders, linked to activities during cleanup operations).

Practical example – extract from the CGIL fire brigade trade union’s answer to the ETUC questionnaire

“The work of the Fire Brigades is very conditioned by climate change that affects the extreme phenomena that occur in the Italian territory traditionally very fragile. In particular, the increase in temperatures and droughts in the summer period leading to more widespread and intense fires, the strong, violent and concentrated rains and snowfalls in the winter period, natural disasters such as landslides, can only be addressed with a significant increase in the overall number of firefighters, which should be expected to rise from the current 35,000 (about 30,000 operational) to around 50,000; precisely because the working conditions and the safety of firefighters’ operators will inevitably tend to get worse if their number is not soon increased”.

1.3. Ultraviolet (UV) radiation

Climate change alters the distribution of clouds and thus affects UV radiation levels at the surface. Globally, excessive solar UV radiation exposure caused the loss of approximately 1.5 million disability-adjusted life years and 60,000 premature deaths in the year 2000. It is likely that outdoor workers will have more or higher intensity exposure to UV radiation as the result of climate change. This situation may lead to the development of pathologies such as adverse eye effects or increasing risk of skin cancer.

Practical example – extract from Dutch trade union FNV answer to the ETUC questionnaire

“Climate change has an impact on the working conditions especially for people who work outside. {Recently}, the roofers sector claimed more protection for the workers to prevent skin cancer. They demanded special working clothes with UV-protection together with a special cap sun cream distributed by the employer. The construction sector developed a heat stress App to organize workers to demand more breaks and other measures (water) when the weather is too hot.

2. What needs to be done?

Multiple strategies will be required to reduce the risks of work-related illnesses and injuries from climate change. Employer and worker preparedness include recognizing, anticipating, and controlling potential occupational safety and health hazards resulting from both climate change and adaptation measures. Trade unions will have to play a key role in raising workers’ awareness, participating to the elaboration of adaptation strategies, negotiating collective agreements addressing health and safety issues related to climate change and developing new workplace OSH standards when needed.

2.1. Raising workers’ awareness to the adverse effects of climate change and their impacts over occupational health and safety

The different effects of climate change upon workers’ health and safety are not always known and understood. In that regards, Trade union have a key role to play in raising workers’ awareness. This can be done via several

ways and actions, such as organizing conferences or seminars, distributing information leaf-lets, launching communication campaigns or conducting studies.

Practical example – extracts from TUC Fire Brigade Union (FUC), Spanish (CCOO) and Hungarian (MASZSZ) trade unions’ answers to the ETUC questionnaire

In the UK, in 2010, the FBU “published, Climate Change: Key issues for the Fire and Rescue Service⁸, setting out the risk of climate change for our sector. It was based on our 2009 conference policy. This stated that climate change will increase the risk of grassland and forest fires; increase the risk of floods, including from surface water, rivers and from the sea; will affect the supply and availability of water and may give rise to more extreme weather events. The FBU stated that these hazards will have implications for the working conditions of firefighters. Climate change will require significant changes to appliances, to the equipment available to firefighters, to training, greater awareness of firefighters’ health implications, to pumping capability and water use and increased call centre capacity”.

In Hungary, the “Hungarian Trade Union Confederation has already started negotiations with experts to collect information about climate change, their effects on the world of work and to make a campaign and a strategy to draw attention the importance of this topic”.

In Spain, the ISTSAS institute⁹ carries on the Saludapt project¹⁰, which aims to contribute to the development of territorial plans and strategies for adaptation and protection of health in the face of climate change. In this framework, the institute has elaborated a wide range of proposals aiming at improving the protection of workers’ health. The document targets public authorities as well as social partners and companies. Among other proposals, ISTAS proposes to improve the notification of professional contingencies related to high temperatures, by including them in occupational accidents categories, as well as to urge companies to adequately assess occupational hazards due to thermal stress and implement adequate action plans¹¹.

2.2. Participation to the elaboration of adaptation strategies that take into accounts the working conditions and occupational health and safety risks.

At European level – On 19 December 2018, the ETUC Executive Committee adopted its policy resolution on the need for EU action to protect workers from high temperatures. The ETUC called on the next European Commission to take this issue seriously and to introduce a legislative instrument that recognizes the increased risk for workers that have to work under high temperatures and provides a protective legal framework¹².

At national level, the participation of trade unions to the definition of mitigation and adaptation strategies is obviously of crucial importance, what has been recognized by both the International Labor Organization and the European Commission. ILO guidelines on just transition invite governments to provide “stable policy signals based on social dialogue and a regulatory framework to enable sustainable enterprise development

⁸ FBU, *Climate Change: Key issues for the Fire and Rescue Service* (2010), available at: <https://www.fbu.org.uk/publication/climate-change-key-issues-fire-and-rescue-service>

⁹ ISTAS (Labor, Environment and Health Trade Union Institute) is an autonomous technical union foundation promoted by Comisiones Obreras (CCOO) with the general objective of promoting social progress activities for the improvement of working conditions, the protection of environment and the promotion of the health of workers. More information at: <https://istas.net/istas/que-es-istas>

¹⁰ <https://istas.net/medio-ambiente/saludapt>

¹¹ <https://istas.net/noticias/saludapt-presentacion-del-estudio>

¹² <https://www.etuc.org/en/document/etuc-resolution-need-eu-action-protect-workers-high-temperatures>

and decent work for all”¹³. At EU level, in its communication “A clean energy for all European citizens”, the Commission stresses that “social partners play a crucial role in mapping skills needs and anticipating and managing changes (...) and need to be closely involved in (...) the discussions on the integrated national energy and climate plans”¹⁴. According to the EU regulation on the governance of the energy union and climate action ((EU)2018/1999)¹⁵, trade union association to the elaboration of the integrated national climate and energy plans is an obligation for all the EU Member States.

Practical example – extracts from Belgian trade union FGTB answer to the ETUC questionnaire

In Belgium, in December 2010, the National Climate Commission adopted the National Adaptation Strategy. This strategy has synthesized the expected impacts of climate change in Belgium and served as basis for the National Adaptation Plan (2017-2020), which has been adopted on 19 April 2017 by the National Climate Commission. According to the FGTB, trade unions have been consulted during the elaboration process of the plan, among others through their participation to the Federal Council for Sustainable Development (FRDO-CFDD), a body which advises the Belgian federal government on sustainable development policies. In its’ opinion from 13/2/2017, relating to the project of national adaptation plan¹⁶, the Council underlines, at the request of the trade unions, “that a comprehensive analysis of the socio-economic impacts of climate change would be desirable to identify the sectors, firms and categories of workers that will be the most affected and how to anticipate this. The opinion also stresses, also under the impetus of the unions, the different elements missing in the draft, id. e. “the impacts of climate change on workers (especially with regard to their health), the other sensitive groups in our society (children, pensioners, vulnerable people) and more generally the necessity to maintain an effective health system for all. ”

2.3. Negotiate specific collective agreements at national, sectoral and workplace levels

Collective agreements define the working conditions that apply to workers in a specific industry or company. The signing of specific agreements relating to climate hazards and health and safety at work (or the inclusion of specific clauses into existing agreements) is for sure one of the most efficient way to ensure protection for workers.

Practical example – French CFDT and CFTC construction federations’ sectoral initiatives on health, safety, working conditions of workers in heat-wave and hot weather:

In 2018, the construction sector federations of French trade unions CFDT and CFTC have negotiated and concluded an agreement in the Limousin region with the regional employers’ ‘Federation of Public Works (FRTP-EFPW) on workers’ rights regarding health, safety, working conditions in hot weather and heat waves, which includes a set of prevention measures to be implemented on work sites, including the possibility of getting unemployment compensation for work interruption because of hot weather. In June 2019, the FNCF-CFDT issued a press release asking the government and the employers to generalize this type of agreements in all French regions because the national legislation on this issue has a constraining effect on workers’ rights and

¹³ http://www.ilo.org/wcmsp5/groups/public/---ed_emp/--emp_ent/documents/publication/wcms_432859.pdf

¹⁴ See annex 2 of the Communication at: http://eur-lex.europa.eu/resource.html?uri=cellar:fa6ea15b-b7b0-11e6-9e3c-01aa75ed71a1.0001.02/DOC_3&format=PDF

¹⁵ <https://ec.europa.eu/energy/en/topics/energy-strategy-and-energy-union/governance-energy-union/overview>

¹⁶ <https://www.frdo-cfdd.be/fr/publications/advices/avis-sur-le-projet-de-plan-national-dadaptation-2016-2020-pour-la-belgique>

their representatives¹⁷. Furthermore, since 2015, the FNCB-CFDT runs an information, awareness and training campaign for its members and also lobbying campaign called "the hidden face of the sun".

Practical example - extracts from Danish and Italian (CGIL, CISL, UIL) answers to the ETUC questionnaire

According to **Danish**, FH trade union, "in the Danish building trades collective agreements, there are clauses which compensate workers for adverse weather. These might be used more frequently in the future. The past summers, there has been complaints over lack of air con in many Danish hospitals".

In **Italy**, metalworkers have concluded so-called "HEAT AGREEMENTS», which allow workers to benefit from adapted working conditions that allow them to continue to perform their production activity even in situations of high heat within the plant. Also, at national level, the INPS (National Social Security Institute) message 1856/2017 clearly indicates that if the temperature (even perceived) rises above 35 degrees, companies can recur to the layoff fund. However, this possibility is not always used, and the interventions are almost always rather arbitrary.

Practical example – extracts from French CFDT – Territorial Public Service Federation - answer to the ETUC questionnaire

"During periods of intensive heat, civil servants are asked (according to the intensity of the heat wave and its duration) to stop working or reduce their working time because of the risks for their health. For social medical staff and especially those in charge of the elderly, the workload in these periods of heat wave is very strongly impacted. The consequences of climate change also have an impact on the working conditions of the personnel assigned to public security, water management as well as on local authorities' agents who are very quickly concerned by the consequences of climate related damages. In some regions and ministries, trade unions have made circulating questionnaires on working conditions during periods of heat wave and asked that these same employers put in place acceptable working conditions for the agents, with for instance the possibility for them to stop working when feeling uncomfortable (droit de retrait)".

Practical example – extract from the Italian trade unions (CGIL, CISL, UIL) answer to the ETUC questionnaire

"Excessive exposure to high temperatures requires a change in the organization of work (schedules, workloads, clothing, materials, etc.), especially exposure time. Many studies show that working in extreme weather conditions makes workers less attentive, the physique responds with less readiness and also exposes them to indirect risks. It should be thought, where possible, to change the working time to take advantage of the less hot hours, rotate shifts among workers, plan the activity so that work is carried out as much as possible in areas that are less exposed to heat, avoid staying isolated, thus allowing mutual control. The union on these aspects must do a meticulous and painstaking job within the territories and workplaces. Workers' organizations can and must negotiate the organization of work and shifts. It is important that all workers are increasingly aware of the risks to which they are exposed in certain situations: if you do not protect yourself from excessive heat, the danger of accidents or occupational diseases increases exponentially. And therefore, it must be reiterated that no exchange between safety and work can be possible, which unfortunately in recent times, due in particular to the economic crisis, is not always easy".

¹⁷ <https://www.cfdt-construction-bois.fr/presse/1016-alerte-canicule-salaries-du-btp-8-morts-en-2018-10-en-2017-cela-doit-cesser.html>

2.4. Develop adapted workplace Occupational Safety and Health (OSH) standards and policies

Exposure to climate change related hazards creates high risks for workers' health and safety at work. The implementation of preventive measures, such as training, adaptation of work organization and working hours (for example night shifts or reduced working time), investment in air-conditioning or preventive / protective, equipment, access to drinking water, can be efficient ways to avoid negative impacts over the workforce. Such measures can be put into place at sectoral and workplace levels, through the implementation of OSH standards and policies.

The implementation of such standards is one of the basic recommendations of the International Labor Organization. According to ILO's guidelines for a just transition, "Governments, in consultation with social partners, should conduct assessments of increased or new OSH risks resulting from climate change, resource scarcity or other risks related to human health and the environment, and identify adequate prevention and protection measures to seek to ensure occupational safety and health"¹⁸.

2.5. Ensure the appropriate means for public authorities, emergency and rescue services

As underlined by a recent EPSU study¹⁹, central and local government, social services, education, healthcare, public transport, disaster management, and emergency services (e.g. firefighters) will be put under pressure²⁰. The case of emergency services is of particular importance. Climate change is expected to have severe impacts over human health and mortality. The situation is serious as, at the same time, emergency services (especially the medical sector but not only) are facing personnel shortages in most of EU countries following the recent crisis-related budget cuts.

Practical example – extracts from TUC Fire Brigade Union (FUC) trade unions' answer to the ETUC questionnaire

"Climate change itself and adapting to climate change will require more jobs in the fire and rescue service. This has been well established by the FBU and other firefighter unions across the globe (for example the United Firefighters Union of Australia). The biggest attacks on jobs have come from governments disregarding the risks and imposing their austerity cuts. Some 12,000 firefighter jobs (20%) have been cut in the UK since 2010, despite the growing risks of climate change and the growing work done by firefighters at floods, wildfires and other weather events. The FBU has published several reports on flooding, indicating the extra work done by firefighters and the need for long term funding²¹".

¹⁸ https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_ent/documents/publication/wcms_432859.pdf

¹⁹ <https://www.epsu.org/article/epsu-feature-adaptation-climate-change>

²⁰ Galgoczi B. (2017), Public services and adaptation to climate change, EPSU, available at: <https://www.epsu.org/article/epsu-feature-adaptation-climate-change>

²¹ See for example: FBU, *Inundated: The lessons of recent flooding for the fire and rescue service*, available at: <https://www.fbu.org.uk/publication/inundated-lessons-recent-flooding-fire-and-rescue-service>

Conclusion

Climate change poses serious threats to workers' safety and well-being at work. In Europe, while the number of extreme weather events is expected to increase in the future, numerous fatal casualties among workers have already been reported. The Construction / wood industry section of French trade union CFDT has, for instance, recently published a press release²² in which it points out the number of deaths related to heat stress at the workplace (8 in 2018, 10 in 2017). In Poland, a crane operator has published a video online, which has gone viral, in which he denounces the danger for him to work in periods of intense heat, the temperature in his cabin reaching almost 60°C at 10 in the morning²³. Even in the answers to our questionnaire, a death by heat stroke linked to heat stress has been reported. Trade union action is therefore needed and specific trade union strategies on climate change impacts over occupational safety and health have to be urgently developed. The results of our survey show that there is still much to be done. At present, a total of 25 Member States have adopted a national adaptation strategy (NAS)^{24,25}. Despite the obligation for Member States to consult trade union while elaborating the integrated national climate and energy plans, only 59% of our respondents indicate they have been associated to such process.

²² https://www.cfdt-construction-bois.fr/images/communiqués_de_presse/com-presse_07-19.pdf

²³ For English subtitles, click on the subtitle button at the bottom of the video window - <https://www.youtube.com/watch?v=EsOR3uxinug>

²⁴ <https://ec.europa.eu/energy/en/topics/energy-strategy-and-energy-union/governance-energy-union/overview>

²⁵ Although Bulgaria, Croatia and Latvia have not yet adopted a NAS, the documents are drafted and likely to be adopted in the forthcoming month.