TUAC's review of the OECD Employment Outlook 2024:

The Net-Zero Transition and The Labour Market

Paris, 18 July 2024

This year's edition of the OECD Employment Outlook provides a picture of recent labour market developments and examines the impact that the net-zero transition will have on employment and jobs.

I. Key findings:

- Unemployment rates remain close to their 20-year low across the OECD (4.9%), but employment growth has slowed down and is expected to contract further in the near future.
- The OECD emphasises that real wages are recovering lost ground, but, with employment and participation rates at above pre-COVID-19 levels, it is striking that they are still below 2019 levels. The OECD further stresses that, in many countries, there is room for profits to absorb further wage increases, particularly as there are no signs of a wage-price spiral.
- The lowest quintiles of the employed labour force have witnessed the highest surge in real income, as minimum wages have increased well above inflation rates.
- The Employment Outlook finds that 6-7% of all jobs in OECD countries are in high-emission industries. The Outlook does not use the concept of "green jobs", but rather looks at "green-driven occupations": the jobs that will either be in higher demand or in which skills will be altered as the world moves towards a net-zero economy. The Outlook finds that 20% of jobs in OECD countries can be considered "green-driven occupations".
- Thirteen percent of workers in European OECD countries and the United States currently suffer from significant heat discomfort. These workers will be further negatively affected by climate change, in the absence of adequate adaptation policy.
- Workers in high-emission industries are paid relatively well and often have more stable jobs, even if the occupations are on average characterised by a higher incidence of low pay in the rest of the economy. These workers are also much more likely to be covered by a collective bargaining agreement. Workers in these industries

tend to be older, less educated, predominantly male, and more concentrated in rural areas than other workers.

- Compared to other jobs, green-driven occupations that are high skilled have better quality jobs (higher wages). However, green-driven occupations that are low skilled have significantly lower wages and labour market security than other low-skill jobs in the rest of the economy.
- The cost of losing employment is much higher for workers in high-emission industries compared to those working in low-emission industries. Workers in high-emission industries face greater difficulty in finding new employment and in reaching their previous salary levels. These workers are more often required to change sector, occupation, and region in order to find re-employment.
- The wage differential after re-employment accounts for roughly 30% of the wage loss differential between workers from high-emission industries and those from low-emission industries. This gap is largely due to firm characteristics and their wage policies, rather than being the result of worker-specific characteristics.
- Since workers employed in occupations concentrated in high-emission sectors are more likely to be covered by a collective agreement, while the opposite tends to hold for workers in green-driven occupations, the shift of jobs out of industries with higher greenhouse gas emissions comes at the cost of eroding collective bargaining coverage, which ultimately results in worse-paid and lower quality jobs. In light of this, the OECD argues "minimum wages and collectively negotiated wage floors can further play an important role in limiting re-employment wage losses by ensuring that the proceeds of productive labour are effectively shared with workers, especially those with weak bargaining position."
- However, despite identifying firm characteristics as the better explanatory variable for the worsening of job quality for workers moving out of more polluting sectors, the policy solutions presented by the OECD unfortunately seem to be more focused on worker characteristics (activation policies and lifelong learning to improve workers' skill-sets), and risk shifting the cost of adaption from firms to the public sector (unemployment insurance, wage insurance and in-work benefit schemes).
- The transition to the green economy will alter the overall distribution of skill demand in the labour market.
  The transition will be harder for low-educated workers, as green-driven occupations require higher levels of skills than those in emission intensive industries. Training, re-skilling and up-skilling programmes will therefore be important in making sure that the transition to the green economy does not accentuate further the divide in employment and job quality between low- and high-skilled workers.
- The Employment Outlook emphasises that "the involvement of trade unions, employer associations and professional associations throughout the skill policy cycle is crucial to ensure inclusive and diverse perspectives in policy design and implementation." The OECD further finds that collective bargaining plays an important role in facilitating greater access to training opportunities, but that such policies are not widespread yet.
- The Outlook confirms that the distributional impact of carbon pricing measures is regressive, finding that lower income households tend to spend a higher share of their income on basic energy needs.

The higher fiscal burden resulting from carbon pricing mechanisms was three times and two times higher for the bottom 10% than the top 10% in France and Germany respectively and was also substantial for middle-income households. This poses significant challenges around the fairness and therefore acceptability of green tax measures, if low-income households feel that they bare the largest relative cost of the green transition.

- This speaks to the importance of compensation measures to mitigate the impact on the poorest households. However, TUAC considers that such measures are unlikely to be sufficient in and of themselves, and that policies to ensure progressivity in carbon pricing are needed.

II. Chapter 1 - Steady as we go: Treading the tightrope of wage recovery as labour markets remain resilient

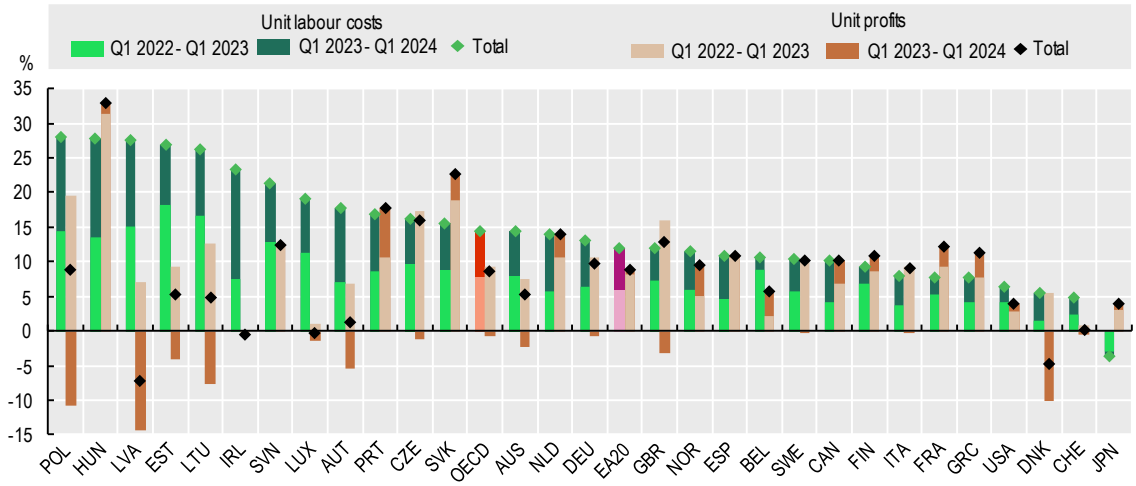
The key message is that wages have started the process of recovery from the cost-of-living crisis and that this wage recovery is not signalling a price-wage spiral:

- High inflation over the course of 2021–22 resulted in serious real wage cuts: on average across the OECD, the purchasing power of wages took a deep 5% dive, with real wage cuts as high as 10% in Italy, Czech Republic, Estonia, Cost Rica.

- Over the last year, real wages have started to recover in 29 of the 35 OECD countries with data available but remain below 2019 pre-COVID levels in 16.

- The catch-up in wages does not risk feeding into inflation as unusually high profits are starting to be used as a "buffer". After firms took the opportunity to increase prices beyond the increase in the cost of labour and other inputs between 2019 and 2022, declining unit profit growth, with unit profits now declining in 14 OECD countries, is absorbing some of the inflationary impact of higher wage costs (see graph below).

Figure 1. Profits are beginning to buffer some of the increase in labour costs
Cumulative percentage change, since Q4 2021, seasonally adjusted data



Note: OECD is the unweighted average of the 29 OECD countries shown in this Chart (not including Chile, Colombia, Costa Rica, Iceland, Israel, Korea, Mexico, New Zealand, and Türkiye). For Norway, the data are based on mainland Norway. Unit labour costs and unit profits are calculated by dividing compensation of employees and gross operating surplus respectively, by real GDP. For Japan and Norway, gross operating surplus is approximated by deducting compensation of employees from nominal GDP – and hence also include unit net taxes. For Sweden, most recent changes refer to the period Q1 2023-Q4 2023.

Source: OECD (2024), "Quarterly National Accounts", OECD National Accounts Statistics (database), https://doi.org/10.1787/data-00017-en (accessed on 21 June 2024), Cabinet Office, Government of Japan, Economic and Social Research Institute (ESRI) Quarterly Estimates of GDP for Japan, and Statistics Norway, Quarterly National Accounts for Norway.

- Given the significant growth of profits over the past three years, and since unit profits remain above their early 2022 levels in almost all countries, the OECD sees further room for this non-inflationary recovery of wages to continue. When looking at the When looking at the most recent wage developments, the OECD does not see a further acceleration of nominal wage growth; in other words, there are no signs of a price-wage spiral.

The OECD also underlines the role of minimum wages in protecting the purchasing power of the lowest-paid workers during the cost-of-living crisis. The average real wage increase for the 30 countries that have a statutory minimum wage amounted to 12.8% in May 2024 compared to May 2019. This average, however, is heavily influenced by a few outliers, with Mexico for example increasing the minimum wage by 90% and Turkey by 70%.

The OECD nevertheless regards the median increase of the real value of minimum wages across the OECD (8.3%, or a mere 1.6% annual increase over the past five years) as "quite significant compared to the increase in median wages". It is regrettable, however, that the Outlook does not acknowledge that (1) low paid workers spend a higher proportion of their income on food and energy and therefore face a higher inflation; (2) stronger minimum wages reflect the essential role played by low-paid frontline workers in keeping the economy going throughout the pandemic; and (3) robust wage standards enhance productivity, with recent research finding that higher minimum wages work to shift workers into more productive firms paying better wages.[1]

[1] For the US, see Autor, Dube, Mc Grew 2023, The Unexpected Compression: Competition at Work in the Low Wage Labor Market | NBER. For Germany, see Ch. Dustmann et al. 2020, Reallocation Effects of the Minimum Wage (repec.org).

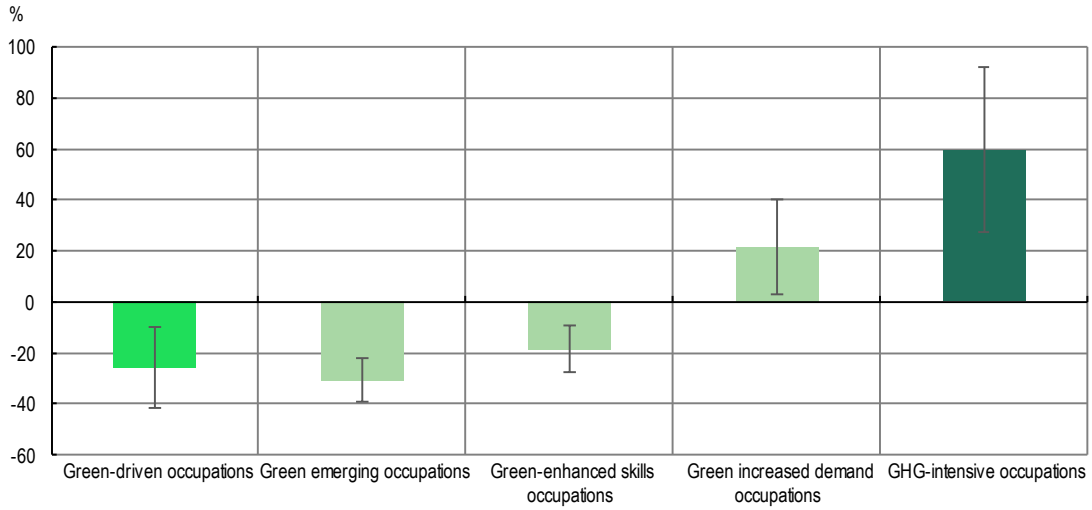
III. Chapter 2: The jobs that will make the net-zero transition: Who holds them and are they good?

Focussing on the jobs that are likely to be in higher demand as a result of the green transition, and comparing them with jobs in high-emission industries, the OECD finds that:

- Employment in occupations that are concentrated in high-emission industries is limited to 6% of all OECD employment, while green-driven occupations employ 20% of workers.
- Workers in high-emission industries are paid relatively well and tend to have more stable jobs, even if their occupations are on average characterised by a higher incidence of low pay in the rest of the economy. These workers are also more likely to be covered by a collective bargaining agreement. The graph below illustrates this for the US: while the share of greenhouse-intensive occupations in workers covered by collective bargaining is 60 percentage points higher than among workers not covered, the opposite is true for green-driven occupations.

Figure 2. In the United States, workers in green-driven occupations are less likely to be covered by a collective agreement

Marginal effect of being covered by a collective agreement on the share of green-driven occupations, controlling for main individual characteristics, 2015-19



Note: The chart reports the point estimate (and 95% confidence intervals) of the percentage difference in the incidence of each type of green-driven occupation between employees covered by a collective agreement and those not covered. Estimates are obtained from a linear regression with the inverse hyperbolic sine of the share of each type of green-driven occupation as dependent variable and including a collective agreement dummy, educational attainment (3 classes), gender, age (3 classes), time dummies as explanatory variables. Standard errors are clustered on the dimensions of variability of the dependent variable. The reported point estimates and confidence intervals refer to the estimated coefficient of the fixed-term contract dummy and are expressed in percentage of the untransformed dependent variable.

Reading: Controlling for demographic characteristics, the percentage share of green-driven occupations is 25.8% lower among workers covered by a collective agreement than among those not covered while the percentage share of GHG-intensive occupations is 59.6% higher among workers covered by a collective agreement than among those not covered.

Source: Secretariat's estimates based on the Current Population Survey, U.S Census Bureau.

- Compared to other jobs, green-driven occupations that are high-skilled have better quality jobs (higher wages). However, green-driven occupations that are low-skilled have significantly lower wages and labour market security than other low-skilled jobs in the rest of the economy.

- There is a risk of widening regional inequality since regions with a high share of high-emission occupations do not necessarily overlap with regions with a higher incidence of green-driven occupations.
- The OECD report, unfortunately, pays little attention to the gender dimension, despite that research from the ILO and the International Renewable Energy Agency showing that women are currently underrepresented in renewable energy industries: even in the sector with the best gender balance – solar technology – only 40 percent of jobs are currently held by women.[2]

- Shifting from the mitigation to the management of climate change, the OECD finds that 13% of workers are exposed to high temperatures, suffering from significant heat discomfort.

These findings raise key questions. How can lower skilled workers be encouraged to shift from relatively well-paid jobs in emission-intensive industries to green-driven occupations where pay is relatively lower, the jobs are more insecure and job strain is higher? How can green-driven occupations attract lower skilled workers (from any part of the economy, not just greenhouse gas intensive activities) if they pay less and offer less job security than other low-skilled jobs?

After warning against the presumption that increased demand for green-driven jobs will improve wages and working conditions, the OECD takes the opportunity to emphasise the importance of collective bargaining as a way to improve wages and working conditions of lower and medium skilled jobs in green-driven occupations as a way attract workers and help drive the green transition forward. The OECD states that:

- "Initiatives to foster collective bargaining and social dialogue in these (green-driven) industries and companies would therefore play an important role and may improve their attractiveness for low and medium-skilled workers" (editorial page 7).
- "Minimum wages and collectively negotiated wage floors can further play an important role in limiting re-employment wage losses (of workers losing their jobs in high-emission industries) by ensuring that the proceeds of productive labour are effectively shared with workers, especially those with weak bargaining position" (chapter 3, page 138).

Stronger collective bargaining is thus seen by the OECD's Employment Outlook as a pillar of a Just Transition and of effective and adaptation policies.

[2] IRENA and ILO (2023), *Renewable energy and jobs: Annual review 2023, International Renewable Energy Agency*

IV. Chapter 3 - Job displacement in high emission industries: Implications for the net-zero transition

In the coming years, the number of redundant workers in high emission industries is bound to increase, due to more stringent environmental legislation and the shift to a greener economy. In light of this, Chapter 3 provides a comparative analysis of the costs of job displacement in high emission industries and low-emission sectors.

- High greenhouse gas emission industries account for 80% of total greenhouse gas emissions and 7% of total employment at the OECD level, and the number of workers employed therein is expected to contract by 2% annually, between 2019 and 2030. While these percentages might seem modest, they translate to a gross absolute loss (estimated by TUAC) of about 1 million jobs per year, or 12 million by 2030, across the whole of the OECD.
- Workers in high emission industries tend to be older, less educated, predominantly male, and more concentrated in rural areas than other workers. At the same time, their salaries tend to be somewhat higher than those of their peers in less-emitting sectors. All combined, this leads to higher detachment costs for workers in high-polluting industries, as they face higher challenges both in getting re-employed and in reaching their previous salary levels. Not only does this group of workers have more difficulty in finding a new job, but they are more likely to have to change sector, occupation and even region to find re-employment.

The Employment Outlook observes that the wage differential after re-employment accounts for roughly 30% of the wage loss differential between workers leaving high-emission industries and workers from low-emission industries. This gap is predominantly not the result of worker-specific characteristics, such as their skill level, but is rather firm-related (i.e., is dependent on firm wage policies in the different sectors).

One of the critical reasons why wages tend to be lower upon re-employment is that firms in greener sectors are less likely to have signed sector-level wage agreements. Since the industries with higher greenhouse gas emissions are in sectors that traditionally have a higher degree of collective bargaining coverage, the shift from these industries to others comes at the cost of further eroding collective bargaining coverage, which ultimately results in worse-paid jobs. This is why the OECD suggests that “minimum wages and collectively negotiated wage floors can further play an important role in limiting re-employment wage losses by ensuring that the proceeds of productive labour are effectively shared with workers, especially those with weak bargaining position.”

Despite identifying characteristics of firms rather than workers as the better explanatory variable for the worsening of job quality for workers moving out of more polluting sectors, the OECD presents a number of policy solutions that seem to be more focused on the latter (activation policies and lifelong learning to improve workers’ skill-sets), and risk shifting the cost of adaption from firms to the public sector (unemployment insurance, wage insurance and in-work benefit schemes).

Compared to the tested effect of sectoral agreements in defending workers’ bargaining power, the effectiveness of some of the OECD’s suggested measures, such as wage insurance schemes, is still to be widely tested. The Employment Outlook also fails to

acknowledge that such measures could have detrimental effects in highly concentrated sectors/regions and monopsonic labour markets. In such circumstances, employers could discount income support measures by offering even lower wages, transforming *de facto* income support measures into business subsidies.

The Employment Outlook further finds that earning losses are more pronounced in those countries where unemployment rates are generally higher, hinting at the functioning of labour markets and the coherence of labour market policies as reasons for this. However, it does not consider the fact that economic complexity is a higher predictor than labour market regulation in driving outcomes for displaced workers: the economic structure of countries, whether they are highly concentrated in high-emission industries or not, will affect the probability of workers being able to find alternative employment, especially as the number of redundant workers accelerates in the years to come.

According to TUAC, a forward-looking industrial policy with clear social conditionalities and strengthened collective bargaining is needed to reduce the gap in displacement costs between workers in high- and low-emission industries, while at the same time creating new employment opportunities in the most affected sectors and regions. In its absence, there is a risk that the green transition will accelerate de-industrialisation and accentuate the divide between countries with high and low employment levels. Future editions of the Employment Outlook could build on these preliminary results to delve deeper into the importance of collective agreements in securing a smooth and just transition for all.

V. Chapter 4 - Skills for the green transition

Chapter 4 of the Employment Outlook examines how the green transition is impacting skills demands and discusses how policies can help guide and support workers and "connect talent to opportunities."

- The Chapter explores differences between the skill requirements of green-driven occupations, greenhouse gas-intensive occupations, and neutral occupations. It finds a shift towards high-skilled analytical jobs in the green economy, with the most sought-after skills in green-driven occupations being process skills (such as critical thinking, monitoring and active learning) and cross-functional skills (such as complex problem solving and decision-making). Technical skills related to machine operation and maintenance rank as the least demanded.
- The Chapter then compares the level of skills and knowledge required by green-driven occupations with the levels required in greenhouse gas-intensive and neutral occupations. The findings paint a concerning picture for workers with lower levels of education and training: while skill and knowledge levels are very similar between green-driven occupations and greenhouse gas-intensive occupations requiring high levels of education, new green-driven occupations with low education and experience requirements generally demand higher skill and knowledge levels compared to other job types. This suggests "that transitioning from greenhouse gas-intensive to innovative, green-driven occupations may be easier for workers in high-skilled positions" than for those in low-skilled positions.
- The Chapter also examines the skills distances between different occupation pairs to assess the feasibility of transitioning into green-driven occupations for workers in greenhouse gas-intensive occupations in different sectors. Here, too, the findings indicate that transitioning to green-driven occupations will be more difficult for some categories of workers. While the analysis indicates that the majority of GHG-intensive occupations share similar skill requirements with at least one green-driven occupation, the OECD finds that workers in certain industries – such as manufacturing, agriculture, and transport – may struggle to transition directly to green-driven occupations due to different skill requirements. The OECD suggests that, for these workers, transitioning to occupations that are not green-driven could be a more viable option.

The OECD highlights the need to increase participation in upskilling and reskilling, particularly for groups who are likely to be more vulnerable to displacement in the context of the green transition. In this regard, the Employment Outlook notes that participation in training differs substantially between groups, with low-skilled adults, unemployed adults, self-employed workers, temporary employees, and part-time workers tending to participate less. The OECD further highlights that participation in training is also lower among workers in greenhouse gas-intensive occupations than those in neutral occupations and observes that, without proper policy attention, there is a risk that "the green transition could exacerbate already existing labour market inequalities." Data further show that there is a growing "green gender skill gap", that women are less likely to hold a green-driven job, and that women might benefit relatively less from the growth in green jobs than men; targeted policy action is

therefore required to mitigate the risk that the transition may "generate a double disadvantage for women."

To improve participation in adult learning, the OECD calls for flexible, short-term and stackable training modules, highlighting their potential in addressing barriers such as lack of time and lack of labour market relevance. It should be noted, however, that some workers may still face difficulties in taking up these more flexible opportunities without a recognised right to training and paid training leave, a point that is acknowledged in the analysis.

The Chapter also emphasises that "actively engaging stakeholders is essential for a successful transition" and highlights the importance of social dialogue in the design and implementation of skills development policies. Finally, the OECD acknowledges the role of collective bargaining as a tool in ensuring workers' right to training leave, funding for training and remuneration upon acquiring new qualifications, citing Sweden and Denmark as examples of countries where tripartite agreements have led to the institution of education and re-skilling programmes.

The Chapter makes a strong case for greater attention to and investment in skills development policies, rightly emphasising that this should be seen as a top priority both in achieving sustainability goals (i.e., through ensuring that countries have the workforce needed to advance the green transition) and in supporting workers and ensuring a just transition. However, it should be recognised that, essential as they are, skills should not be seen as a silver bullet but must rather go hand-in-hand with policies that ensure the creation of quality jobs, as well as comprehensive social protection programmes.

VI. Chapter 5 - Who pays for higher carbon prices? Mitigating climate change and adverse distributional effects

Chapter 5 looks into the carbon content of household consumption to assess the impact of carbon pricing mechanisms on household budgets.

- While relying on a limited number of countries (France, Germany, Mexico, Poland, and Türkiye), the chapter clearly shows how the distributional impact of carbon pricing measures is regressive, with lower income households tending to spend a higher share of their income on basic energy needs. This implies that both energy consumption and energy taxation such as carbon pricing is regressive.

Figure 3. Poorer households typically spend large parts of their income on energy, but spending is "top-heavy" in some middle-income countries

Household expenditures on fuel and other energy as a percentage of disposable income, by income decile

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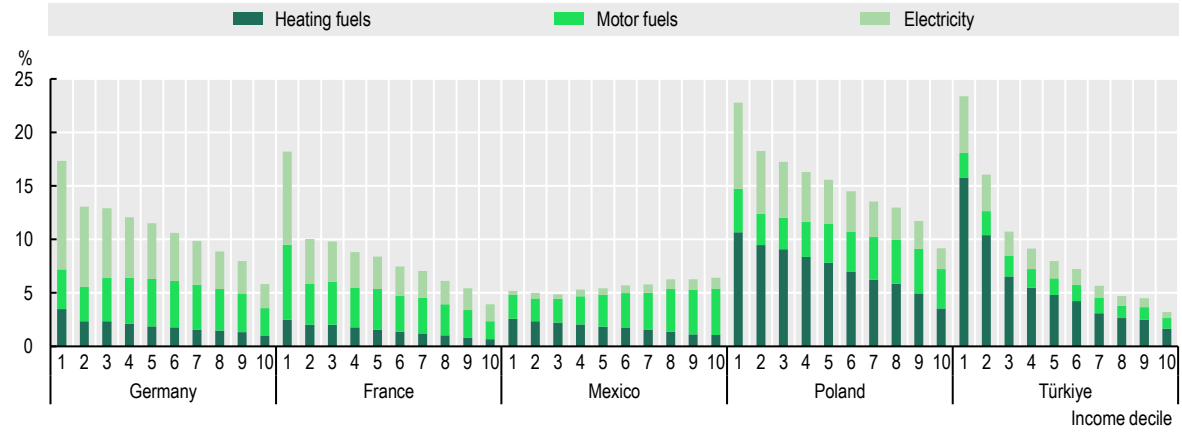

Note: Groups 1-10 refer to income deciles (equivalised disposable household income). Heating fuel includes expenditure on gas (natural gas and town gas), liquified hydrocarbons, kerosene and other liquid fuels, coal and other solid fuels. Motor fuel includes expenditure on diesel and petrol for transportation.

Source: OECD calculations using household budget surveys (2015 for EU countries, 2016 for Mexico, 2019 for Türkiye) and WIOD input-output data (for electricity).

- The Employment Outlook finds that before COVID-19 the highest-income households (top 10%) accounted for 4.5 times the emissions of those in the bottom 10%, with significant variations according to employment status, age, family size and between urban and rural areas.
- The higher fiscal burden resulting from carbon pricing mechanisms was three times and two times higher for the bottom 10% than the top 10% in France and Germany respectively, while also being substantial for middle-income households. This poses significant challenges regarding the acceptability of green tax measures, if low-income households feel that they will bear the largest relative cost of the green transition.

The OECD discusses compensation strategies to mitigate the impact on the poorest households, including by redistributing and earmarking carbon tax revenues. TUAC considers that, while important, redeploying revenues towards the most vulnerable households could be insufficient, both from an economic and political perspective:

- First, because there is a time gap between when the new tax hits, revenues are collected and a mitigating plan, especially if targeted, is put in place.
- Second, because, as the chapter finds, "[a]lthough lower-income households often saw the biggest burdens relative to their incomes, losses for many middle-class households were mostly of a similar order of magnitude". Since mitigation policies cannot completely offset the cost for households of increased carbon pricing, it becomes imperative to achieve progressivity and not just proportionality in carbon taxation (i.e., the richest households need to pay much more than lower and middle-income households).

The Stockholm Environment Institute estimates that the richest 0.1% of the world's population (85% of whom reside in OECD countries) emits 10 times more than the top-10% combined;[3] and the IEA says that if this top 10% of emitters keeps their emission levels, they alone will exceed the remaining carbon budget in the IEA's *Net Zero Emissions by 2050 Scenario* by 2046. In other words, substantial and rapid action by the richest 10% is essential to decarbonise fast enough to keep 1.5°C warming in sight. Targeting the top 10%, 1%, and 0.1% in more progressive ways would create additional fiscal space and be seen as a generally fairer solution than simply focusing on redistributing part of the carbon price revenues towards the bottom of the income distribution.

[3] Ghosh, et al. (2021), *The inequality-emissions link and what it means for the 1.5°C goal*, https://www.sei.org/wp-content/uploads/2022/01/220109a-burton-ghosh-inequality-report-2111a.pdf