TOWARDS A GREENER ECONOMY: THE SOCIAL DIMENSIONS
TOWARDS A GREENER ECONOMY: THE SOCIAL DIMENSIONS

Executive summary and policy recommendations
It is crucial to reduce CO₂ emissions and thus mitigate climate change ...

Policy-makers are acutely aware of the need to move to a greener economy – national science institutions and international networks of researchers have amply documented the phenomenon of global warming. Recent research confirms the damaging effects of climate change and points to the risk of a sudden shift in the world climate balance, leading to exponentially increasing costs in terms of individual well-being and economic activity.

Research also suggests that the speed and extent of climate change observed over the last 40 years is largely due to human economic activity, notably the use of carbon-intensive sources of energy for the production of goods and services, particularly in advanced economies. Indeed, changes in world temperature are closely linked to emissions in carbon dioxide (CO₂) and other greenhouse gases. Slowing, and eventually controlling global warming will require significantly lowering the rate at which these gases are being emitted.

... which can be achieved only through significant structural change.

Moving to a greener economy requires a major structural change, which broadly takes two forms. First, new sources of clean energy need to be developed and widely disseminated. Second, the global economy will need to emit less CO₂, which will entail significant shifts of production and consumption patterns across industries and enterprises as well as within them. In particular, energy and resource efficiency of production processes need to increase considerably and consumption habits have to become more sustainable. Significant reductions in CO₂ emissions can also be obtained through technological and operational innovations within industries. In both instances, the shift to a greener economy will necessarily mean a reallocation of some resources from higher- to lower-carbon-intensive sectors, which will entail considerable employment and income shifts.
Market forces alone will be insufficient in bringing about a reduction in CO₂ emissions ...

To date, markets alone have been inadequate in addressing climate change – global emissions increased by more than 40 per cent between 1990 and 2008. For emissions to fall in a substantial manner and to a sustainable level, governments must take comprehensive actions. An effective strategy must combine market-based instruments with direct public intervention. In the first instance, CO₂ emissions must be allocated prices that properly take into account their environmental damage and the economic costs they cause. In this respect, the European Union (EU), which introduced the Emission Trading System (ETS) in 2005, should be commended. The ETS represents a significant step forward in pricing emissions and is one of few such systems in the world. Yet, a harmonized EU-wide CO₂ tax could complement the ETS and increase overall effectiveness while helping to address a number of short-comings. In addition, these market-based measures could benefit from other instruments like regulations, public investment and increased promotion of research and development that encourage the development of new technologies and innovations.

... and careful consideration must be given to the employment and income dynamics of the shift to a greener economy.

Such a structural change is neither automatic nor painless. Indeed, the shift to a greener economy will entail significant changes for labour markets and incomes. Much of the adjustment in the high-carbon sector will occur in only a few industries – the report highlights the fact that the vast majority of emissions (90 per cent) in the EU-25 from production stems from only 15 industries. Approximately 12 per cent of total employment in the Member States – or some 24 million workers – are employed in these top polluting industries. The gap between EU-15 and EU-10 Member States is particularly striking – more than one-fifth of all employees in the EU-10 are working in the top 15 emitting industries, more than double the rate (9.5 per cent) than in EU-15 Member States.

At the same time, however, the report shows that a move to a more climate-friendly industry mix can generate positive net employment effects. Low-carbon industries tend to have a significantly larger share of the high-skilled workforce and are, on average, more productive. Moreover, the wage share in low-carbon-intensive industries has fallen less quickly than is the case in the top 15 emitting industries. The promotion of new technologies and process innovations will also lead to new products and new business opportunities, and ultimately, to greater employment opportunities.

Economic, social and environmental goals can be consistent with one another if, first, environmental reforms are broadened ...

Making the transition to a green economy a success requires moving away from isolated environment reforms. So far, environmental policies have mainly focused
on measures to mitigate climate change. Environmental tax reforms (ETRs) and regulations have been implemented in various European countries aiming to remedy the market failures through changes in the tax structure in favour of less carbon-intensive production, or directly by requiring the use of certain technologies or the respect of maximum emission rates. Important as they are, however, these efforts will not be successful unless (i) they focus also on emissions arising from the production process (not only households’ energy consumption); and (ii) labour market policies and social policies become an integral part of the policy package.

In terms of the former, re-orienting the current structure of the ETRs to also tax production processes would improve efficiency. Currently, the focus is narrowly restricted to households’ energy consumption, despite the fact that over 80 per cent of emissions originate from firms’ production of goods. Equity can also be improved by introducing personal energy allowances within the tax structure, that is, a certain amount of energy per household would be exempt from taxation, and reducing the regressive nature of the current ETRs in place.

The double-dividend hypothesis, from which ETRs were inspired, claims that the benefits to the environment and employment can be simultaneously achieved through a properly designed policy mix. However, a necessary condition for achieving the double dividend is that the revenue from taxing emissions is re-channeled to the labour market – which is not sufficiently the case. To achieve the economic and employment gains of environmental change, increased emphasis on labour market measures and knowledge development strategies will be necessary.

... and second, emphasis is placed on improving employment prospects of the most vulnerable ...

A green transition is not unlike other structural adjustments with the exception that the adjustment process can be foreseen and thus, with the right policy mix, can be managed. Nevertheless, labour market adjustments and employment transitions are often particularly acute for certain groups of workers, for instance low-skilled and older workers. In order for the adjustment process to be fair and equitable, the existing suite of policies will need to be re-oriented to address the challenges of those most affected by a green transition process.

With this in mind, first, governments and worker representatives can work with employers to take preventative action to identify early potential adjustment pressures in the top emitting industries. In particular, public authorities could work closely with vulnerable sectors to examine potential skills deficiencies and develop preventative strategies to ease the transition process. Second, greater emphasis will have to be placed on skills upgrading and training as many of the workers in the top emitting industries will have to adapt their skills and worker practices to a new, environment-friendly technology, or move to less carbon-intensive sectors. In fact, nearly 30 per cent of the workers in the top 15 emitting industries are low skilled. Third, some workers are also likely to incur earnings losses that can persist over time. As such, governments need to ensure that adequate income support systems are in place and are consistent with employment objectives. Finally, the successful delivery of these programmes will hinge on having a well-resourced, effective public employment service that has a firm grasp on the employment needs of a greener economy.
... and third, strategies are developed to leverage the positive employment potential of a greener economy.

There is considerable upside potential to leverage greener jobs to the benefit of the economy. First, new and decent jobs can be created in the environmental sector. Second, the transition itself from high-carbon industries to low-carbon industries can also yield employment benefits. Low-carbon industries provide already the largest portion of income in most EU Member States and tend to employ a higher-skilled labour force, while at the same time producing only a very small proportion of CO₂ emissions.

This will require that the existing education system and vocational training system be capable of equipping future workers and small and medium-sized businesses with the requisite breadth of competences needed to take full advantage of the new technologies. In particular, mechanisms to facilitate the effective generation and transmission of knowledge between higher education institutions and business will be central. In particular, increased research and development activities need to be complemented by support for new technical skills, mainly related to the natural sciences and engineering. If the right human capital strategies are implemented, a green economy can unlock the potential of higher employment, better employment conditions and higher resource productivity.

A fair and sustainable transition to a greener economy can only be achieved through effective social dialogue.

Tripartite social dialogue can play an important role during the transition. Climate policies induce a long-term structural change in the economy that can only be successful and just if social partners support the transition and accompany government actions by adequate, employment-friendly measures. Vulnerable groups have to be given opportunities to participate in the structural change and to at least maintain their incomes during and after the transition. Long-term industrial policies need to be communicated to and coordinated with social partners. On the other hand, social partners can help to identify skills needs by encouraging research in certain areas, interpreting findings and informing policy and implementing recommendations in institutions that provide skills and vocational guidance. In cooperation with governments, social partners can ensure job security, working conditions and adequate compensation for researchers, engineers and other professions that are urgently needed to drive the necessary technological change for a successful green transition.

Greening of enterprises occurs within firms and can be promoted by social partners. Governments can support this process by developing knowledge platforms at the industry level and by implementing financial incentives in coordination with social partners. Social dialogue will also be central to setting incentives for more investment in resource productivity and making sure that efficiency gains are distributed in a just manner. Without the prospect of a successful and just green transition on a national level, the chances for binding international agreements on climate change issues remain very low.