GREEN JOBS 2023
Successes and opportunities for Europe

THE GREENS/EFA in the European Parliament
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Whilst the COVID-19 pandemic, the current energy and cost of living crisis, and the Russian war of aggression against Ukraine have tested the resilience of global economies, proactive labour market planning and investments for transition must take into account that humans, unlike financial capital or goods, cannot simply flow to where the opportunities are.

A green EU industrial policy could become the driver for job creation in Europe in the years ahead, in emerging and existing sectors, including in clean energy technology manufacturing, where the number of global jobs could more than double from 6 million today to nearly 14 million by 2030. 25 million new green jobs would be created by 2030 in the context of the energy transition, with 160,000 jobs in the EU construction sector alone through the anticipated building renovation wave.

At the same time, the climate and environmental crisis is an increasingly serious concern. Scientists are more certain than ever that human activity is changing our climate and are stressing the risks of failing to take actions to stop the rot. Meanwhile, economists are warning us that the longer we wait before taking action, the greater the costs. But there is a way out: by ‘greening’ our economies, we can create high-quality green jobs to fight unemployment and at the same time combat climate change and environmental decline.

The EU can only benefit from such efforts. Remaining a ‘green leader’ would allow the EU to reduce its dependency on imported energy and resources purchased at volatile prices, and boost Europe’s security of supply.

If we can ensure the strong involvement of social partners, establish targeted training and education programmes and implement ambitious, stable policies designed to foster innovation and green investment, millions of sustainable high-quality green jobs can be created, with many of them in local small and medium-sized enterprises across Europe.

This brochure has been designed to inform you about Europe’s opportunities for creating green jobs and the efforts of the Greens/EFA in the European Parliament to boost green employment.

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2 International energy agency (2023), The world is entering a new age of clean technology manufacturing, and countries industrial strategies will be key to success.
4 COACCH (2021), The Economic Cost of Climate Change in Europe: climate and socio-economic tipping points. (Available here).
WHAT ARE GREEN JOBS?

A ‘green job’ is defined as any professional activity that helps to protect the environment and fight climate change by saving energy and raw materials, promoting renewable energies, preventing or reducing waste and pollution or protecting biodiversity and ecosystems.

Developing sustainable patterns of consumption and production generates potential for new jobs and transforms existing ones into high-quality green jobs, not only in individual sectors, but also across the entire value chain, from research to production, distribution and servicing. It applies to new high-tech sectors such as renewable energies, to traditional industries like manufacturing and construction, to agriculture and fisheries and to service sectors such as catering, tourism, transport and education.

In our view, green jobs provide decent work, which in turn guarantees adequate social security, sufficient levels of incomes, decent working conditions including healthy and safe working environments, respect for workers’ rights, opportunities to individuals for up- and re-skilling and individuals’ participation in decision-making processes that affect their lives.

The Greens/EFA are calling on the Commission to work on concept notes to define what constitutes a green job, based on its potential for ‘greening’ the economy, its contribution to the health and wellbeing of people and the preservation of nature, long-term objectives of sustainable development, and promotion of social justice, equality, and decent work.
A change in energy production offers new economic opportunities: Whilst the closure of polluting plants and mines will result in a loss of jobs in the lignite, peat and coal-mining sectors, new employment opportunities will emerge at the same time. This progressive, yet irreversible transition towards a circular economy has the potential to increase EU GDP by an additional 0.5% by 2030 creating around 700,000 new jobs.

ENERGY JOBS

Global employment in renewable energy was 6.9 million jobs in 2012, growing to 12.7 million by 2021. Of the total figure, 38% were in China, and 63% in all of Asia, while Europe was home to a total of 1.5 million renewable energy jobs with the bioenergy sector being the largest renewables employer on the continent. By industry, 4.3 million jobs were found in the solar photovoltaic (PV) industry, 1.3 million in the wind power industry, 2.4 million in the hydropower industry and 2.4 million in biofuels. If Europe adopts ambitious climate policies, the sector’s potential will be even greater.

The shift towards renewable energy will require additional workers for development and construction, but also for the maintenance of renewable energy infrastructure. It therefore promises to have a positive impact on employment. It is expected that through the deployment of clean energy technologies between 100,000 and 300,000 jobs can be created by 2030, reaching 460,000 by 2050.

ENERGY JOBS

The Greens/EFA in the European Parliament are working hard to create more green jobs in Europe. For instance, in 2023, an initiative by two Green MEPs (Anna Cavazzini and Bas Eickhout) prompted the European Parliament to adopt a strong resolution calling on the Commission to boost the reskilling and upskilling of European workers to accelerate the emergence of future clean industries and to facilitate the shift of workers from declining and phased-out industries towards these new industries, while taking into account the geographical disparities across the European Union.
CONSTRUCTION JOBS

On top of that, the investment in energy efficiency will create additional employment opportunities: it is estimated that for every one million that is being invested in efficiency measures, between 9 and 20 jobs are created in the manufacturing and construction sector. The scale up of renovations to the level needed to achieve an 80% reduction in wasted energy can create an additional 1.3–1.4 million direct local jobs. By committing to the Renovation Wave Strategy, an additional 160,000 green jobs could be created in the EU construction sector by 2030. It is important to ensure that these are quality jobs and offer good working conditions and adequate living wages.

Thus, the support of in-depth renovation projects is crucial as it creates jobs at a local level and helps to reduce carbon emissions by making buildings more energy efficient. Furthermore, in-depth renovations integrate renewable energy sources into buildings and therefore provide experience and skills in working with renewables for workers in the construction sector. This promotes the transition in the workforce towards a renewables-based economy.

The future of the construction sector lies in the efficient use of resources. A transition to a circular economy in the sector could reduce the associated emissions of building materials by 50%.

Research has found that re-using structural steel sections of buildings decreases their environmental impact by 96% compared to recycling.

CIRCULAR JOBS

The circular economy provides a unique opportunity to reinvigorate manufacturing industries both through reshoring of production and through strategies such as remanufacturing, refurbishing, repairing and more. According to CEDEFOP, circular economy can contribute to the creation of around 2.5 million additional jobs in the EU alone by 2030. In addition, for the same volume of waste, circular activities such as recycling generate over 50 times as many jobs as landfills and incineration, whilst repair creates more than 200 jobs.

At the same time, reuse, when carried by social inclusion actors, creates many opportunities for an inclusive circular transition. Social economy organisations are playing an essential role in shaping and expanding circular economy activities and practices through their engagement in circular value chains and promotion of waste prevention via reuse and repair activities; their objective is to strengthen social inclusion by providing job and training opportunities for vulnerable groups. As a result, they contribute to circular business models in accordance with the EU Waste Hierarchy and principles of proximity and collaboration, rather than generating profits for shareholders and owners.

According to La Fédération des Entreprises d’Insertion, every €1 invested by the state for engaging people in employment, can provide an expected return of €4.5. REUSE estimates that social enterprises active in re-use activities create approximately 70 jobs per 1,000 tonnes collected with a view of being re-used. This number varies from 20 to 140 jobs based on the type of materials being handled (textiles, electrical appliances, furniture and so on).

In a nutshell, social economy organisations have demonstrated their positive environmental impact on the planet as well as their capacity to support the fight against social and economic inequalities and to create quality jobs and training opportunities in the circular economy. Especially in the current context of permacrisis, particularly affecting the most vulnerable, it is essential for public authorities to offer better legislative frameworks to upscale their social and environmental goals.
According to the EU Commission, every year more than 250,000 public authorities in the EU spend around €2 trillion per year purchasing services, works and supplies. To ensure this massive amount of public expenditure is consistent with the EU’s environmental and social objectives the motto “Buy local, buy green, buy social” should be the principle applied by public authorities when they make procurement choices.

In 2021, the agreement on the Just Transition Fund (JTF) was adopted by a large majority of MEPs. The fund is a key building block of the Green Deal and aims to pave the way to the green and sustainable economy and to provide support for renewable energy, start-ups, knowledge transfer, retraining, social infrastructure and cultural projects.

The Greens/EFA Group has successfully ensured that money from the fund will not be used to support gas infrastructure and fossil fuels. It is a Green success story that not a single euro will be invested in gas infrastructure and fossil fuels. Oil, gas and coal have no place in the change process. Any public investment in fossil fuels is a waste of taxpayers’ money. The future belongs to renewables.

Unfortunately, the fund will have just €17.5 billion at its disposal, far below the demands of the Greens/EFA Group and the European Commission, which have been cut by more than half by EU governments.

The full potential of green employment can only be exploited if long-term legal and financial framework conditions guarantee sustainable investment and encourage innovation. For instance, European rules should ensure that member states have enough fiscal leeway for green and social investments.

In addition, the Greens are pushing for a quick shift of the massive amounts of subsidies going to big polluters towards the most vulnerable groups and the industries that need it most. In a report on the implementation of Council Directive 2000/78/EC establishing a general framework for equal treatment in employment and occupation in light of the UNCRPD, Green MEP Katrin Langensiepen even expressed deep concern that most mainstream programmes, including those covered by Structural Funds, fail to reach out to the most deprived groups, including people with disabilities. Greens/EFA in the European Parliament called on the European Court of Auditors to scrutinise the performance of EU programmes, with a special emphasis on education and employment programmes, for example the European Social Fund Plus (ESF+), the Youth Employment Initiative (YEI), the European Regional Development Fund (ERDF), and Erasmus+.

We also have actively pushed for EU funding, including State aid, to be conditional on public policy objectives, in particular social requirements, in order to offer high-quality jobs, promote collective bargaining, respect EU labour rights and standards and to ensure improved working conditions.
The European Union has to invest in a sustainable economy now if it is to retain its leading role in the development and production of eco-friendly products. Whilst Europe has been the world leader in environmental protection and sustainability and has dominated global competition in renewable energies, other economies are catching up.

Europe can only hold on to its global lead if it invests now – on a massive scale – in a sustainable economy, adopts ambitious environmental legislation and prioritises climate and environmental protection in its budgets. Only then will a large proportion of the globally forecast green jobs be created in Europe.

The Green Deal could play a pioneering role in guaranteeing European competitiveness and green industrial transition. Businesses and industry have long been asking for planning certainty from policies that will put EU companies at the forefront of the global race for green technologies.

The green transition of European industry must be funded. The relaxation of state aid should be temporary and targeted at the production of green technologies like wind turbines, heat pumps, solar panels and batteries. It must be clear that taxpayers’ money must not be paid out as bonuses and dividends. The European Union needs fresh money from a new sovereignty fund to invest specifically in future sectors of the EU as an industrial location and to make itself not dependent on autocrats and fossil fuels.

By the same measure, the EU Waste Hierarchy should be a compass for the building of more circular economies.

In this context, the Greens/EFA successfully pushed for a new sovereignty fund with fresh money for massive investments in the development of renewable energies, green hydrogen and boosting European production of wind turbines, heat pumps, solar panels and batteries, for example, as well as the inclusion of sustainability criteria in the Public Procurement Directive.

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21 — Resolution on the Green Deal Industrial Plan.
For a long time, European businesses have tried to compete globally by cutting labour costs, e.g. wages and social security contributions. However, the costs of the materials and energy consumed in the production process are often many times higher than labour costs.

Accordingly, achieving savings on energy and material consumption, which is a core objective of greening businesses, will generate competitive advantages in the future. Energy savings and a more efficient use of resources help to force down production costs and save factories from closure, whilst at the same time guaranteeing fair wages for workers.

Many trade unions and work councils have recognised this and are committed to promoting energy- and resource-efficient production as a way of easing the pressure on labour costs.

The Greens/EFA in the European Parliament regularly meet with trade union and workforce representatives to discuss how to achieve decent work in green sectors and a socially just transformation in which workers are full partners and are not unfairly disadvantaged by changes. Moreover, the Greens are pressing hard for strong social security systems in Europe, especially during the green transition and for workers between jobs.

The green transition should be an opportunity for working people to access more and better jobs with stable employment, fair pay, and decent working conditions, with workers and trade unions being involved at every stage of the process. In the transition to net zero, focusing merely on skills and the number of jobs created would not bring about justice, if in-work poverty and inequality, economic insecurity and precarious working continue to grow. Necessary change should facilitate upward convergence and not jeopardize quality employment.

For us as Greens it is crucial that green jobs promote decent work with adequate social security, sufficient incomes, healthy working conditions, a respect for workers’ rights and individuals’ participation in decisions that affect their lives. The transition must benefit both existing workers and displaced workers who transition to new jobs or undergo significant changes in their work tasks, by ensuring adequate working conditions for all. The green transition of the job market should go hand in hand with better working conditions, including decent wages, and good physical and mental health, not least through health and safety at work.
In September 2022, the European Parliament voted in favour of the Directive on Minimum Wage in the EU. The Greens/EFA made the EU minimum wage directive happen. Thanks to our fight for #decentpaywithoutdelay, two-thirds of Member States are expected to gradually increase their minimum wages, which will improve the standard of living for millions of people no matter where they live. The Directive on Minimum Wage is an important victory for a more social European Union. Thanks to this directive, 25 million workers will see their wages increase by 20%. This legislation is also a step forward for gender equality. The gender pay gap should decrease by at least 5%, as women are over-represented in the lowest paid sectors. To protect all workers, we successfully fought to include gig or platform workers. The Greens/EFA calls on the European Commission to show ambition and to propose a directive on a minimum income in the EU as soon as possible.

Kira Marie Peter-Hansen, Greens/EFA MEP and European Parliament rapporteur for the Pay Transparency directive managed to reach an agreement on a new EU directive on pay transparency with the European Parliament, the Council and the Commission. The legislation will improve access to information on pay conditions and salaries broken down by gender. This means that millions of European workers will be better prepared and have stronger arguments in salary negotiations to secure a fairer income. The Pay Transparency Directive will be signed into law on 10th May 2023. The rules will come into force shortly after that. This is a great accomplishment for millions of workers in Europe and one step closer to breaking the glass ceiling!

Finally, the Greens/EFA also managed to pass a resolution calling for an EU law that grants workers the right to digitally disconnect from work outside of their working hours without facing negative repercussions.
and collective interest. The ecological transition will also require substantial efforts across society but we must ensure it is the wealthiest and biggest polluters that contribute the lion’s share and that the most vulnerable are protected.

We in the Greens EFA Group in the European Parliament firmly believe that a transition to ecological sustainability must go hand in hand with social justice, as they are not only vital to human prosperity, but complement and reinforce one another. To that end, we aim to expand the European Green Deal. In addition to environmental commitments and objectives, we demand that it also covers social commitments to make the ecological transition work for rather than against each and every person in Europe.

In its place, we propose a true EU Green and Social Deal with a new and equitable social contract that would make achieving the primary aim of the EU – “...to promote peace, its values and the well-being of its citizens” 22 its highest priority. Our political goal is to translate this new social contract into a binding commitment of the EU institutions and Member States to ensuring that all policies respect planetary boundaries and an upward convergence towards a minimum level of well-being for people throughout the Union.

The Social Union should ensure commitments to, but not limited to, green job creation, adequate minimum income schemes, EU-level social solidarity mechanisms and adequate work-life balance and support for the care economy 23.

Greens rapporteur Sara Matthieu had a resolution on adequate minimum income adopted in which the European Parliament called for the first time ever to have a directive that minimum incomes be raised at least to the national poverty line. This is a strong instrument to eradicate poverty. Mere recommendations have not resulted in the eradication of poverty. Only a binding instrument can ensure a decent life for everyone.

Greens/EFA rapporteur Sara Matthieu has also fought for a robust social climate fund that provides direct support to people in energy and mobility poverty. This is an important step in the right direction, but no more than a drop in the ocean. The Greens will continue this fight advocating a stronger fund towards a much more ambitious social green deal.

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22 — Article 2 of the Lisbon Treaty and the EU Charter of Fundamental Rights.
23 — See our demands in full here.
The energy transition has the potential to provide a large number of high-quality jobs and will require a major rise in the number of trained people across several industries, including renewable energy and energy storage. According to the European Strategic Energy Technology Plan of the Commission, the industrial sector alone will require 180,000 qualified professionals, technicians, and engineers by the year 2030. Up to 66,000 jobs would be required in the photovoltaic solar energy production sector.24

The green transition, including the shift from fossil fuels towards renewable energies, requires a reskilling, training and upskilling of workers. The Greens in the European Parliament are calling for a broad education and training initiative for green jobs across all skill levels. The green transition must offer opportunities for everyone: young and old, male and female, highly or lesser skilled, jobless and employed. All workers are entitled to training and lifelong learning.

To reach the EU 2030 Social Target of 60% of adults participating in lifelong learning each year, it is essential to promote an inclusive, work-based, and targeted approach to training, notably for those who can’t access formal education opportunities.

Vocational training and education programmes must ensure that a worker who has spent, say, 30 years working in coal mining can acquire the skills required to land a green job. This is absolutely essential if the job potential of the green transition is to be fully exploited. Employers, workers and governments are jointly responsible for devising coherent education and training strategies. A first step will entail identifying new and future skills needs and pinpointing workers’ skills gaps. Furthermore, demands in green and circular skills across all sectors, such as repair skills, should be further stimulated.

In a resolution on the European Skills Agenda for sustainable competitiveness, social fairness and resilience, the Greens in the European Parliament stressed the need to deliver “generic, sectoral and occupation-specific skills where needed and minimise skills bottlenecks and skills imbalances.”25 We succeeded in ensuring that employment and training measures funded with EU money have to take into account the shift to a green economy. The resolution acknowledges the importance of the green transition in driving the labour demand across all sectors, whilst recognising that a successful transition to a green economy needs to go hand in hand with skilling, re-skilling and upskilling measures to develop the skills, knowledge and competence required by a green economy.

We are also fighting hard to promote workers’ fundamental right to training and to grow democratisation in the workplace. This right requires that employers have a duty to set out projected skills needs and public authorities to design and promote proactively training programmes. Current or future workers cannot be expected to anticipate the skills needed for the expanding green sectors, nor can they be expected to know which training is available without a proactive approach from employers and public authorities. After all, innovation and creativity happen not only in research facilities, but also on the shop floor when workers propose new ideas.

Finally, in her INI (non-legislative) report on green jobs, the Greens/EFA MEP Sara Matthieu stresses that every worker must have an individual right to education, training, and lifelong learning, and that this be reflected in every EU and national environmental policies as well as in company mitigation and adaptation strategies. Public and private authorities shall closely engage with social partners, civil society, education and training providers, labour market bodies, learners, and representatives of organisations or bodies active in the field of skills, education, training and lifelong learning. She further emphasises that workers should be involved in determining the skills profiles that will be needed to plan the transition of the workforce, and shaping education and training systems to deliver the necessary skills.

25 European Parliament resolution of 11 February 2021 on the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions European Skills Agenda for sustainable competitiveness, social fairness and resilience (2020/2818(RSP))
26 Draft report on Green Jobs (2023), available here.
Currently, only 35% of workers in the RES sector are women and, while women hold 46% of administrative posts, they only occupy 28% of technical and 32% of senior management positions. This sector still performs much better than the fossil energy sector, where women hold fewer than 12% of leadership roles, but it can improve. The potential for creating green jobs is particularly high in certain sectors, like construction, the production of solar and wind power facilities and research into energy- and resource-saving technologies. These sectors are all traditionally male-dominated in EU Member States and the prejudices of employers and colleagues are often so deeply entrenched that many women still face the threat of discrimination. At the same time, young women today persist in only rarely choosing professions involving mathematics, computer science, the natural sciences and technology.

Gender equality should become an integral part of green economy strategies, as a just transition focusing solely on the most polluting sectors in specific regions will mainly benefit male workers and reinforce existing gender segregation and inequalities. A green economy without the inclusion of gender equality could be inconsistent with the ILO’s decent work agenda.

The Greens/EFA in the European Parliament are strongly advocating female participation in the green economy. Recent research carried out for our Group shows that shockingly, the vast majority of RRF money (75% in the short term but still 60% in the medium term) will be invested in the creation of work opportunities for men, thus further illustrating that, without enforceable rules on tackling gender balance in such sectors, well intentioned funds will end up exacerbating existing biases.

In her INI report on green jobs, Greens/EFA MEP Sara Matthieu calls on the Commission to take all measures to ensure that pre-existing gender inequalities are not transferred to the emerging green economy and that opportunities for women in the changing labour market are identified and grasped.

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27 — Gender Impact Evaluation of the Recovery and Resilience Plan for Italy” Dr Giovanna BADALASSI - other studies showed similar results for Germany and Spain (respectively a little better and a little worse)

28 — Draft report on Green jobs (2023), available here.
People with disability (PwD) have the right to full participation in the labour market and society but their fundamental rights are often withheld in the EU. PwD are a diverse group, often subject to intersectional discrimination.

50.6% of PwD are in employment (48.3% of women and 53.3% of men) compared with 74.8% of people without disability. The rate of unemployment of PwD (17.1%) is almost twice that of the general population (10.2%) and the unemployment of PwD lasts longer than that of people without disability, regardless of qualifications. The rate of unemployment is highest among young PwD (those aged between 16 and 24), at 24.9% compared to 16.6% in the general population. At the same time, women with disabilities, who constitute 16% of the total population of women and 6% of the overall population of PwD in the EU, continue to face multiple and intersectional discrimination in all areas of life.

This difference is inextricably linked to education opportunities. They are overwhelmingly excluded from the open labour market and denied their right to engage in work on an equal basis with others or face major difficulties in achieving equal access to and equal conditions of participating in the labour market.

In her report, MEP Katrin Langensiepen called for stronger EU-legislation to force Member States to implement their commitments. The horizontal anti-discrimination directive, which has been blocked in Council for more than a decade, has to be adopted and a new strong EU Disability Strategy post 2020 has to be launched. She further stressed the need for the Commission and the Member States to take a preventive and inclusive approach to occupational health and safety when supporting the recruitment and return to work of people with disability.

To sum up, a Just Transition must promote gender equality and empower people with disability, those in vulnerable and disadvantaged situations as well as marginalised groups in order to avoid that current inequalities are reinforced. Thus, the active involvement and participation of women and other marginalised groups have to be an integral part of this transition throughout the whole transition process as well as the promotion of inclusive labour markets and improved working conditions.

29 — EU statistics on income and living conditions (EU-SILC) 2017.
30 — Idem.
31 — ANED 2019
Young people are finding it difficult to access the labour market after graduating. Far too many young people are caught up in unpaid jobs during the day but take up paid night work to support themselves. Others are stuck in a vicious cycle of one unpaid internship after another as they find it impossible to find quality, paid work.

Young people are the basis for sustainable economic and social prosperity for Europe and are a key priority for the EU as affirmed by the European youth strategy and the reinforced Youth Guarantee. They therefore warrant priority measures for their support, protection, guidance, inclusion, and deserve to fully benefit from the new employment opportunities created by the green transition.

MEPs voted to ban unpaid internships, putting an end to the expectation that young people should first work for free to later be eligible for an entry-level job. The Greens/EFA called for adequate remuneration and social protection for all traineeships, making internships more accessible to young people who cannot rely on financial security or parental support. Now, it is up to the European Commission to propose a law to make sure every intern will be paid.
COLOPHON

This publication has been produced by the Greens/EFA in the European Parliament. Its first part is based on previous work by Green MEP Elisabeth Schroedter, specifically, the brochure “Green Jobs. The opportunity for the European labour market”, published in 2011, and the European Parliament report “Green Jobs”, presented by MEP Sara Matthieu in June 2023, Rapporteur: Sara Matthieu.

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