

TRANSITIONING TO A GREEN ECONOMY

DiEM25 surveyed its members on the impacts of the climate crisis on their lives and communities and on their ideas for addressing the problem. To date, we received 42 responses from DiEM25 members in Belgium, Bulgaria, Canada, France, Germany, Greece, Italy, Portugal, Spain, Switzerland and the USA. Responses yielded a range of concerns about the environment with a very broad and ambitious wish list of policy proposals.

This draft report synthesises member inputs with some publicly-available data on the effects of the climate crisis. Based on this limited data, this paper makes initial recommendations to support a full transition to a green economy in Europe. To develop this paper into a comprehensive set of policies for DiEM25, further member and expert input will be required.

Throughout this paper, we have left questions requiring further member input. Members are invited to review these and share their own experiences of the effects of, and solutions to, the climate crisis. The next version of this report will aim at presenting a coherent set of policies, backed by best practices and case studies drawn from member input.

INDEX

Section	1 1 — THE DESTRUCTION OF OUR ENVIRONMENT	2
1.1	Global Warming	2
1.2	The Environment and our Health	3
1.3	The Natural World and the Changing Weather	4
Section	2 – BUILDING A GREENER EUROPE	5
2.1	Building for Health and Sustainability	5
2.2	Transitioning to Green Energy	6
2.3	Protecting Europe's natural heritage	7
2.4	Investing in Green Transport	8
2.5	Managing our Materials Sustainably	8

2.6	Supporting Sustainable Entrepreneurship and Farming10
2.7	Investing in Green Research and Development
2.8	Legislating for Environmental Justice
2.9	Pursuing a Greener Foreign and International Trade Policy 12
2.10	Building a Greener Democracy
Section	n 3 — SHAPING NORMS AND MEASURING PROGRESS
3.1	Rewiring Europe's Environmental Agencies
3.2	Public Education
3.2.1	Schooling and Universities
3.2.2	Television and Advertising14
3.3	Monitoring and Enforcement
3.3.1	Reporting and monitoring15
3.3.2	The carrot15
3.3.3	The stick
Section	n 4 — FUNDING THE ECOLOGICAL TRANSITION
4.1	The Challenge
4.2	A Green New Deal for Europe
4.3	Exploring opportunities to use private finance
4.4	Next steps

Section 1 - THE DESTRUCTION OF OUR ENVIRONMENT

1.1 Global Warming

The climate crisis is one of the most pressing issues of our time. The United Nations' International Panel on Climate Change (IPCC) warns that if we fail to achieve about a 50% reduction in global emissions by 2030 to limit global warming to 1.5 degrees Celsius above

pre-industrial levels, we face cataclysmic and irreversible impacts on our economies, political systems and communities.

This is a crisis that is already having devastating consequences on our health and our communities, as expressed in the responses of DiEM25 members to our survey. And it is a crisis unlike any before it—it is one from which there is no return. This is why we need radical plans that tackle the issue holistically and from outside the parameters of the current economic and political consensus.

Questions for members:

- 1. What are your biggest anxieties about global warming?
- 2. To your knowledge, what is the single most effective proposal for reducing the pace of global warming? Why is it effective?

1.2 The Environment and our Health

The destruction of our natural habitat has a devastating effect on public health. In their survey responses, DiEM25 members reported a range of effects of pollution in places ranging from Greece, which in certain areas suffers from arsenic contamination in drinking water, to France, the UK and Germany, where drinking water is of low quality and the quality of air has been on the decline in cities, leading to a rise in respiratory disorders and early deaths. One DiEM25 member put it succinctly: "Our survival is at risk."

The effects of the climate crisis on human health are also unequally distributed. The 2010 Marmot Review report—cited by DiEM25 members in their responses—looked at health inequalities in England. It found that people living in the poorest parts of England die, on average, seven years earlier than those living in the richest areas and suffer from disabilities for an average of 17 years longer than the wealthy. There are many causes of these inequalities, but many are demonstrably linked to environmental issues. For example, the use of pesticides correlates with higher cancer rates and hormonal imbalances in children in rural areas.

"Our survival is at risk." - A DiEM25 member from Lisbon

DiEM25 members also identified access to food and water as a central public health issue. Access to these essentials is unequally distributed, with the poor and vulnerable generally having lower-quality food and water. This contributes to broader inequalities in Europe. Redressing this imbalance must be a central part of an agenda for climate justice. The alternative is an ecological transition that leaves the poor behind—a recipe for long-term political instability amid the surging economic inequality.

It is clear that the fight against the climate crisis is also a fight for the health of Europeans and is strongly linked to the fight for economic justice. Addressing the public health consequences of the climate crisis must be a central component of any ecological transition.

Questions for members:

- 1. In what ways has the changing climate affected your health or the health of members of your community?
- 2. Can you think of examples from your community of solutions to the health impacts of the climate crisis and pollution? Why did or didn't they work?

1.3 The Natural World and the Changing Weather

As members of a rich and complex food chain, humans depend on the careful balance of life within the natural environment. But this balance has been dramatically upset by human intervention. From the wild bison in Poland's threatened Białowieża forest to the Mediterranean's Atlantic bluefin tuna, Europe's natural world of unique flora and fauna is under threat.

The protection of biodiversity and the natural environment is crucial to ensuring our wellbeing and survival over the long term. As DiEM25 members said in their responses, existing regulations are insufficient to thwart deforestation in Europe's most precious natural reserves, to reduce the acidification of our oceans due to excessive emissions and to prevent the rapid loss of biodiversity that we are seeing across the continent.

Survey responses also said that environmental protection agencies are insufficiently funded and resourced, and there is little investment in conservation generally. While conservation movements have won significant victories, these are insufficient to thwart the destruction of the habitats on which we all depend.

As the climate crisis worsens, Europeans increasingly find themselves at the frontline of its most devastating effects. Many DiEM25 members shared the experiences of people across Europe facing more extreme and unpredictable weather, including increasingly frequent storms, reduced snow cover, rising sea levels, the warming of the oceans, heat waves, water scarcity, fires and dust storms, in particular from the Sahara. The burden of these impacts disproportionately falls on the most vulnerable parts of Europe. And beyond the domestic effects, there is growing evidence that many refugees who arrive on Europe's shores are directly or indirectly displaced by the climate crisis.

DiEM25 members are concerned with the possible long-term consequences of these changing weather patterns. Greek and Portuguese members, especially those from seaside settlements and large cities, have reported increasing levels of pollution and the increasing visibility of environmental destruction, which are devastating their communities.

Further input is needed from experts and DiEM25 members across Europe to understand the specific effects of the loss of biodiversity and changing weather patterns on the lives of Europeans.

- 1. What are some examples of environmental destruction in your country or region? Have any of these affected you directly and, if yes, how? Have you done anything to mitigate these effects?
- 2. Can you provide any example of specific species of plants or animals that are increasingly threatened by the climate crisis in your country or region?

Section 2 - BUILDING A GREENER EUROPE

2.1 Building for Health and Sustainability

The climate crisis has a devastating effect on public health. Respiratory conditions flow from increased CO2 levels in the atmosphere, as well as from increased particle matter from activities such as coal burning. At the same time, congestion and unsustainable development in our cities are creating habitats that are loud, polluted and dangerous, as profit motives lead developers to build increasingly cramped buildings devoid of any green public space.

In their survey responses, DiEM25 members have called for the construction of energy-efficient buildings, the development of green public spaces and transforming roads for pedestrian use. Other ideas, such as retrofitting existing buildings with insulation and solar panels, could have a profound effect on job-creation, electricity use, poverty (through reduced utility bills) and, ultimately, on emissions.

DiEM25 members had a range of other policy ideas that could help ensure the protection of our health, including:

- increasing the energy efficiency of buildings (for example, by developing entirely self-sustaining buildings that use a range of renewable energy sources or by insulating existing buildings or installing smart metres). Funding should be available to those not able to cover the cost of retrofitting their homes with insulation;
- discouraging factories from being set up close to towns and cities;
- putting in place a full and immediate ban on the use of harmful pesticides, which have been linked not just to illnesses, but also the collapse of insect populations across the continent;
- developing and enforcing common European regulations to ensure that investments are not channelled towards development that is contributing to the environmental and health crises, but to sustainable projects;
- supporting a return to municipal politics and local production; and
- ensuring adequate protection of the seas and oceans from harmful human activity (e.g., from industrial waste).

Questions for members:

1. What are some examples of successful architectural projects or urban developments from your city or country that have alleviated the health effects of pollution (e.g., parks, traffic-free zones, etc.)? Why were they successful?

- 2. Can you think of any examples of activism having prevented or tried to prevent an unsustainable development (e.g., a factory or non-energy-efficient housing development)? Why did it succeed or fail?
- 3. What is the main cause where you live of environment-related health issues?

2.2 Transitioning to Green Energy

According to the European Commission, the use and production of energy accounts for nearly 80% of all greenhouse gas emissions in the EU. The effects of energy production are palpable around Europe.

DiEM25 members reported experiencing first-hand the effects of unsustainable energy generation. Some DiEM25 members said that such energy production results in high fuel costs and gives rise to inefficiencies. For example, DiEM25 members in Greece reported poor gas energy management and frequent power cuts. In other countries, unsustainable energy sources such as coal remain cheap and there are few incentives to switch to green energy.

There is also significant controversy among DiEM25 members about the use of nuclear energy. Some firmly oppose the use of nuclear power, for example because of the lack of long-term storage solutions for nuclear waste or the risk that nuclear energy enables the eventual development of nuclear weapons.

Other DiEM25 members pointed to evidence suggesting that a full ecological transition cannot be brought about in the short time available without the support of nuclear energy. A Europe-wide conversation about the use of nuclear energy should be held to weight the benefits and disadvantages of this controversial resource.

As with other areas of sustainability, DiEM25 members have proposed a broad range of solutions for reducing CO2 emissions in energy generation. These include:

- a complete cessation in the use of fossil fuels for energy;
- limiting the use of harmful materials in energy generation;
- constructing a range of new green energy production sites such as wind turbines, photovoltaic panels, hydraulic energy, and solar farms;
- unifying all power grids across Europe;
- establishing an international database of green energy projects, which would improve transparency and create a common resource for investors, governments and citizens;
- sparking a Europe-wide conversation about the use of nuclear power;
- creating informational and educational campaigns to change public behaviour around energy use (more on how education can be used to shape norms can be found in section 3.2); and
- expanding the use of hydrogen as an energy source.

Further member input and expert analysis will be required to test these ideas and develop a full policy on a transition to green energy in Europe.

Questions for members:

- 1. Can you provide examples of successful green energy solutions that were deployed in your countries or communities? How were they successful?
- 2. Can you give three reasons for either supporting or opposing the use of nuclear energy in the ecological transition?

2.3 Protecting Europe's natural heritage

From French brie and British stilton, Corsican chestnut oil and Spanish olive oil, to Polish *kiełbasa*, Europe has a rich heritage of local, natural food production, which is inextricably linked to Europe's natural world.

Like many Europeans, DiEM25 members are proud of their natural heritage. But they are concerned about the proliferation of cheap, imported goods that threaten local craftsmanship while also endangering the environment.

In their survey responses, DiEM25 members have therefore argued for the protection of Europe's natural heritage, including the local production of traditional staples, historical buildings, forests and natural resources, as a key measure for the ecological transition. DiEM25 members cited the European Commission's *Natura 2000* project, which is the world's largest network of natural reserves, protecting some 18% of Europe's land area and 6% of its marine territory, as a particularly successful example in this area. In particular, they proposed:

- raising awareness about the local natural heritage through education and Europewide informational campaigns (more on how education can be used to shape norms can be found in section 3.2);
- implementing systems to protect forests, including bans on industrial development on green fields and industrial farming; and
- a major reforestation programme, including in mountainous regions that have been deforested, to improve the quality of our air and create homes for our wildlife.

Further member and expert input will be needed to understand the links between delocalised production and the loss of local craftsmanship with environmental destruction.

- 1. What are some examples of successful conservation efforts in your communities? How were they successful?
- 2. In what ways do heritage sites such as historical buildings and natural reserves contribute to sustainability in your communities?

3. Can you think of examples from your countries or regions of local food production, based on natural, local ingredients, that has resisted the globalisation of food (e.g., by outselling large supermarkets)?

2.4 Investing in Green Transport

According to the European Commission, approximately a quarter of all emissions in the EU are caused by transport, with road transport being the single biggest contributor. Transport is also the major cause of low air quality, noise pollution and congestion in big cities. It is clear that Europe needs to have a mobility strategy that involves a dramatic reduction in the use of road vehicles combined with the electrification of all essential road transport.

While many DiEM25 members reported using cars, they clearly recognised in their survey responses that only public transport can be sustainable over the long-run. They advised promoting bicycle use, investing in electrical and hydrogen fuel cell technology and switching to renewable energy as the main fuel for all transport.

Specific measures could include revising the European legal framework that currently allows certain industries, such as civil aviation, to emit pollutants and creates exemptions from obligations to comply with emission limits.¹ Other proposals included:

- developing clean, affordable and fast public transport;
- investing in renewable energy sources for all transport; and
- investing in infrastructure to support green transport (for example, the adoption of electric clean fuel stations such as hydrogen fuel stations).

Questions for members:

- 1. Can you provide examples from your country or city of the successful deployment of sustainable public transport (e.g., hydrogen or electric buses, electric taxis)? How have they impacted your community?
- 2. What is the main obstacle to you using sustainable transport where you live? How could this be overcome?

2.5 Managing our Materials Sustainably

Sustainable materials management is about addressing the environmental impacts arising along the stages in the life-cycles of materials. These stages typically occur across borders and involve highly-complex supply chains spanning many industries and many parts of the globe. According to the OECD, addressing the management of these stages must be done on a holistic basis. In its book *Sustainable Materials Management*, the OECD says that economic instruments such as climate taxes and charges

¹ For example, Directive 2010/75/EU, Directive 2010/75/EC, Arts 14(3), 15(4.5), 30(5), 33-35, 37(2), and 59(2)

"are difficult to implement due to political and social resistance to their introduction... As a result, policymakers have often created policies that address specific materials, products, life-cycle stages or environmental resources, leading to a highly fragmented policy landscape... While addressing complex environmental issues usually requires the mix of different policy instruments, the inherent risk of a fragmented system is that it lacks integration and co-ordination between policies, leading to economic distortions and the potential shifting of the environmental burden from one medium to the other or from one phase of the life-cycle to the next, instead of an economy-wide reduction of environmental impacts."

While DiEM25 members recognise the efforts of their municipal authorities to improve materials management, they recognise that many regions, especially villages, are left behind. For example, DiEM25 members in Italy cited poor waste collection and processing and, in some areas, a lack of facilities to dispose of compostable waste.

DiEM25 members have suggested a range of solutions to tackle Europe's poor materials management holistically. These include:

- promoting the use of recycled materials;
- investing in facilities that can convert waste into energy (for more on developing green energy, see section 2.2);
- creating adequate infrastructure and associated incentives for citizens and businesses to ensure that more consumer goods are repaired, not thrown away;
- improving the efficiency of European waste and composting systems;
- banning single-use plastics around Europe and develop common rules on deposit schemes (e.g., requiring firms to demand refundable deposits from customers for glass or plastic beverage containers, as is the case in Germany);
- creating EU-level investment in the development of environmentally-friendly alternatives to plastic and introducing regulations to require all packaging to be made with such materials (e.g., promote the exclusive use of biodegradable packaging);
- providing financial motives for producers and supermarkets to refrain from using packaging materials in their products;
- enforcing Landfill Directives; and
- establishing a colour code to make waste collection more efficient.

Further input from members and experts will be required to develop pan-European solutions to the challenges associated with materials management.

- 1. Can you provide an example of effective waste management at the municipal level in your country or city? Why was it successful?
- 2. What are some specific obstacles to you recycling where you live?

2.6 Supporting Sustainable Entrepreneurship and Farming

In their survey responses, DiEM25 members cited the need to promote sustainable businesses over unsustainable manufacturers. By way of example, the responses referred to organic farming, aquaculture, cultural tourism and yacht marinas as sustainable businesses that do not contribute to environmental destruction. On the other hand, supermarkets, windmills, mines, hydrocarbon drilling and golf courses have been given as examples of unsustainable businesses.

To promote businesses that are local and carbon-neutral or even positive for the environment, DiEM25 members suggested introducing EU-wide financial incentives for local producers and sustainable businesses, focusing on capacity-building with state support. Specific measures suggested by members include:

- the introduction of punitive taxes for unsustainable businesses and business practices;
- the promotion of organic farming through transparent regulation on agricultural production in Europe, which could also eliminate many agricultural subsidies and involve a ban on transgenic crops and animals; and
- banning the imports of agricultural products that are not sustainably farmed in other parts of the world.

Questions for members:

- 1. What are the key obstacles in your country to you establishing a business focused on sustainability?
- 2. How visible are green or sustainable businesses in your country or city? What could be done to increase their visibility?
- 3. Is organic, locally-produced food readily available where you live? Why or why not?

2.7 Investing in Green Research and Development

DiEM25 members reported that inadequate funding is available for research and development in sustainability and intellectual property rights are often given to private firms even where their research is made possible by public money.

Europe should be at the forefront of innovation in this space. To develop and finance green research, the EU should establish a common research and development fund called the European Sustainability Fund (ESF). The ESF could support green projects such as storage solutions for green energy, the use of turbines in city water pipes to generate energy and the development of radical new aircraft that have no carbon footprint (e.g., aircraft using ionic wind technologies). The Fund should have the capacity to fund entire project pipelines from research to implementation.

In particular, this could involve the establishment of appropriate research institutions where such institutions do not already exist. For example, the ESF could establish and/or fund

university departments supporting research into the ecological transition. Other policy ideas included:

- providing financial assistance to EU Member States dependent on nuclear energy to transition to safer energy-generation technologies;
- provide grants for the research of technological solutions to the climate crisis, from zero-emission aircraft to hydrogen fuel cells. This should particularly focus on smaller and local projects that bring social and economic benefits to local economies;
- prioritise high-potential projects in European research and development, rather than focusing on quantity;
- establish an independent EU-wide network of scientific ethics committees and consider setting up an independent institution to manage alternative scientific research;
- enhance scientific cooperation and ideas exchange with third countries;
- acknowledge different sources of scientific knowledge, including indigenous knowledge and grassroots research; and
- reconsider the role of science in shaping public policy by not seeing science only as a tool for industrial competitiveness and recognising its inherent limitations in resolving long-term goals.

Questions for members:

- 1. Can you name an example of successful, publicly-funded research on environmental sustainability or global warming? Why was it successful?
- 2. What in your view is the key obstacle in the research and development of effective solutions to the climate crisis? Why?

2.8 Legislating for Environmental Justice

Environmental justice is about ensuring that no one is left behind in the fight against the destruction of our environment. Currently, frontline communities face the brunt of the effects of the climate crisis. At the same time, they reap fewest benefits from the natural world, which is shrinking.

These inequalities are felt within Europe, but they also arise between nations internationally. The effects of the climate crisis were seen as a major contributor to the war in Syria and to ongoing conflicts along the equator in Africa. These, in turn, contributed to Europe's refugee crisis. No one should be left behind in the ecological transition.

To achieve economic justice, DiEM25 members proposed implementing a universal basic income to give all citizens the ability to meet their needs. Beyond that, members suggested the urgent need to provide free water and food to all refugees, many of whom are directly or indirectly cast away from their homes by failures of European policy or the climate crisis more broadly.

The fight for environmental justice must be linked with a greener foreign and international trade policy that promotes sustainable norms worldwide, without contributing to environmental destruction outside of the EU.

Questions for members:

- 1. Do you notice differences in how the climate crisis affects the wealthy and the poor in your country? How are these differences manifested?
- 2. Are there any practices currently pursued by your government or non-governmental organisations that are reducing or exacerbating the inequalities in the impacts of the climate crisis?

2.9 Pursuing a Greener Foreign and International Trade Policy

Through its foreign policy and international trade practices, the EU contributes to the destruction of the environment both at home and abroad. DiEM25 members have cited the Kyoto Protocol, the EU Emissions Trading System (ETS), fracking and hydrocarbon dependency as policies or the effects of policies that are unfair or destructive for the environment. According to survey responses, these policies have a range of destructive effects ranging from GMO and pesticide use to cruelty against animals.

"Europe is partly responsible for the lack of adequate access to water and food in some regions of Africa and the Middle East." – A DiEM25 member

The effects of these policies are global, as international trade and foreign policy affect the environments and food and water supplies of millions of people. One DiEM25 survey responses noted that 'Europe is partly responsible for the lack of adequate access to water and food in some regions of Africa and the Middle East'. The poor are particularly vulnerable, our survey responses reported.

There are positive examples of European foreign and international trade policy, as well. DiEM25 members cited the EU's support for organic farming and small farms that are respectful to animals' welfare as positive examples. DiEM25 members suggested a range of policy proposals to improve Europe's foreign and trade policies. These include:

- stopping import of timber, animals and food products from countries that do not comply with environmental and Fairtrade standards;
- supporting food production in areas prone to hunger and malnourishment;
- ceasing all support for fracking;
- ending the ETS and replacing it with emissions-reduction targets that cannot be bought or sold, for example through transferring emissions to countries with weaker standards; and
- ending trade with major contributors to environmental destruction and pollution.

- 1. Can you name three specific examples of EU laws or policies that are exacerbating the climate crisis outside of the EU?
- 2. In your view, what is the best way in which the EU can inspire long-term solutions to the climate crisis in other countries, particularly in the "Global South"?

2.10 Building a Greener Democracy

In their survey responses, DiEM25 members have called for making the environment a central part of Europe's democracy. In their view, a green democracy is one in which the respect for nature plays a central role, and in which laws are designed to promote green development. Therefore, every aspect of the ecological transition presented in this paper might contribute to the development of a green democracy.

As an example of a successful model of community engagement around the environment, which could form the basis of a green democracy, DiEM25 members in France cited the associations pour le maintien d'une agriculture paysanne (AMAP, or community-supported agriculture, also referred to as CSA). This is a system in which consumers and producers of agricultural goods are more closely connected by allowing consumers to subscribe to the harvest of local farms. This means that the risks of farming are shared between the farmers and the community that relies on a farm's output.

Increasingly localised governance that involves the voices of communities is consistent with DiEM25's overarching objective to democratise both the economic and political spheres in Europe. More work will be needed to explore how such democratic decision-making can support Europe's ecological transition.

Questions for members:

- 1. Can you name an example from your country of a successful local initiative in participatory production (including cooperatives, community-supported businesses and similar) that is also sustainable? What makes it successful?
- 2. In what way is your community empowered to make, or disempowered from making, decisions about your environment?

Section 3 - SHAPING NORMS AND MEASURING PROGRESS

The broad scope of the proposed solutions carries with it its own challenges. How do we shape public norms around the climate crisis? How can progress in reducing emissions be measured? The sections below discuss at a high level the institutional framework around public education, monitoring and enforcement—key tools to shape European norms around the environment.

3.1 Rewiring Europe's Environmental Agencies

The EU currently has a number of agencies, including European Environment Agency (EEA), the European Food Safety Authority and European Chemicals Agency, that together have a

number of responsibilities related to the environment. These institutions need to be reformed. In addition to subjecting them to much tighter conflict of interest policies, as DiEM25 members suggested, more work is needed to explore whether the powers of these institutions can be expanded, in particular in the area of monitoring and enforcement.

Questions for members:

- 1. Imagine the ideal European Environmental Agency. What is its remit? What are its powers? What controls (democratic, procedural) is it subject to?
- 2. Can Europe's environment-focused agencies be reformed, or are new agencies needed? Why?

3.2 Public Education

3.2.1 Schooling and Universities

One of the recurring themes in survey responses from DiEM25 members was the belief that educating the public about sustainability is one of the most important ways in which we can help resolve the climate crisis.

Responses suggested increasing the focus in education on consumerism and its effects; recycling; waste collection; waste processing; and other essential ecological topics. These could be rolled into expanded civics or ecology courses at primary and secondary schools and universities.

The design of such educational programmes will be of fundamental importance to securing Europe's environment, and will require considerable input from DiEM25 members and experts.

Questions for members:

- 1. Do you feel that, throughout your education, sufficient emphasis was placed on the climate? Why or why not?
- 2. What are some examples of good school or university curricula on the environment? What makes them effective? How could they be improved?

3.2.2 Television and Advertising

DiEM25 members suggested increasing television programming around the environment. To achieve this, the EU could establish a pan-European television network, modelled after state-funded networks like the British Broadcasting Corporation, which would develop high-quality, impactful programming on the environment. Alternatively, it could develop such programming for use on other networks and revenue from the licencing of this content could be fed back into other measures forming part of the ecological transition.

Further work could be done in the area of advertising. European law sets a limit on the amount of advertising that can be shown on television networks to a percentage of the total

broadcast time. As part of the ecological transition, this law could be updated to mandate that a percentage of traditional corporate advertising on European television networks is replaced with ecological messaging.

This could be used to educate viewers, but also to replace the market mechanism for allocating advertising slots, assigning them to firms and projects that have achieved most towards sustainability targets. This could generate free publicity for firms and send a powerful signal to others in the market.

Questions for members:

- 1. Have you recently seen an example of successful messaging about the climate in the media? Why was it successful?
- 2. Describe three ideas for increasing the visibility of climate-related issues on public television.

3.3 Monitoring and Enforcement

In their survey responses, DiEM25 members suggested a range of measures that could be used to monitor progress in the ecological transition. These systems of measurement, if developed on a pan-European level and carried out by a specialised agency, could also be used in the enforcement of ecological legislation.

3.3.1 Reporting and monitoring

DiEM25 members suggested that regular checks of CO2 emissions, hazardous substances in the sea and on land, waste levels in the sea and the use of pesticides will be important in ensuring that Europe remains on target.

A reformed European environmental agency could be responsible for carrying out such checks. As part of its remit, it could develop reporting tools for a range of industries, requiring firms to submit regular, standardised reports based on EU-wide templates to the European agency, which would have broad powers to verify their accuracy. If adopted widely in the EU, such templates could become a global standard, pushing firms everywhere to reduce their emissions in line with European targets.

Specific measures suggested by DiEM25 members in their survey responses included establishing a "baby-step" targeting regime, which would measure year-on-year percentage changes in carbon use to assess progress, and a specific timetable with clear milestones for carbon reduction.

3.3.2 The carrot

In their survey responses, DiEM25 members discussed the need to research de-growth strategies for reducing the damaging effects of constant economic growth. One way to achieve this at a macro scale could be to move away from using gross domestic product

(GDP) as an indicator of progress. The creators of the GDP warned against such a use for the measure, as it fails to account for the destruction that inevitably results from growth. The adoption of an alternative metric, like the genuine progress indicator (GPI), should be considered.

The GPI is the GDP minus the social and environmental consequences of growth. Adopting this metric would necessarily shift our economies away from a model based on the demand for endless growth and push us towards the more equal distribution of existing resources.

At a more micro scale, DiEM25 members suggested developing incentives for firms to develop and invest in green technologies and solutions. As part of that, a pan-European sustainability award could give considerable publicity to the top contributors to the climate transition. This could be promoted in the EU-wide advertising scheme described above. Additional incentives, based around changes to EU prudential standards and other financial regulations, could be developed to support private investment in green infrastructure (see section Section 4 for more details on funding the ecological transition).

Finally, DiEM25 members suggested that ample protections must be available for ecological whistle-blowers to create additional transparency in the corporate world.

3.3.3 The stick

DiEM25 members advocate for 'a clear compromise on tackling climate change' that includes punitive measures for those who are major contributors to climate destruction but who do not currently contribute to solutions.

Such punitive measures could be applied as part of the newly-expanded remit of one of the European agencies dealing with the environment. The new enforcement powers could be based on existing EU legislation. For example, firms in breach of environmental rules could be liable to pay a fine of up to 10% of annual global group turnover, a sanction that currently applies to breaches of EU competition law and has been a powerful deterrent to anticompetitive activity in the EU. This can be combined with robust criminal penalties for senior management, which could include fines and, for the most egregious offences, custodial sentences.

DiEM25 members also reported cases of a range of eco-crimes that continue to occur in Europe, from trading in ivory, smuggling endangered animals as pets and illegal logging. In response, DiEM25 members suggested that fines for violators should be made available. Such sanctions could also be applied by the newly reformed European environmental agency.

Further input is needed from both experts and members to develop an effective set of deterrents for ensuring that the ecological transition stays on track.

- 1. Can you name any examples of effective regulatory reporting/monitoring tools? How can these be adapted for use in monitoring progress on the ecological transition?
- 2. Describe three ways that we could incentivise sustainable practices in Europe. Are there any successful examples from your region?
- 3. What penalties do you think are appropriate for firms in breach of environmental standards? How does your answer differ for firms who breach the requirements because of inadequate internal controls, and firms who do so through fraud?

Section 4 – FUNDING THE ECOLOGICAL TRANSITION

4.1 The Challenge

Among the most frequently cited obstacles to meaningful climate action is its prohibitive cost. To achieve a reduction in emissions that would limit warming in line with the latest recommendations by the IPCC, it is estimated that we will globally need to invest over USD 100 trillion in sustainable infrastructure development over that period. This is more than the global gross domestic product.

4.2 A Green New Deal for Europe

To meet the challenge, we will require a full economic mobilisation on a scale not seen since Franklin Roosevelt's New Deal in the 1930s and the Second World War. As part of its Progressive Agenda, DiEM25 is exploring the development of a New Deal for Europe, which is covered in a separate policy report. This programme would combine a major fiscal stimulus to support state investment in green projects with a mobilisation of private capital through changes to tax rules and banking regulation, ensuring that idle, unproductive capital is channelled towards the ecological transition.

4.3 Exploring opportunities to use private finance

Any solution to the climate crisis will need to mobilise both private and public capital. Already, the finance industry is taking note and beginning to push for private solutions to the climate crisis. For example, the \$85tn asset management industry, awakened to the long-term financial risks posed by the climate crisis, are applying increasing pressure on energy companies to cut emissions.

Any green finance policy needs to recognise that private-sector-led solutions are fundamentally undemocratic, as they involve decisions by the wealthy as to where investment needs to be channelled. We must ensure that the efforts of the private industry do not hijack the broader response, for example by being seen as a substitute for coordinated public action.

At the same time, the considerable amount of capital in the finance industry needs to be directed towards investment in green infrastructure. Although not mentioned in survey responses from DiEM25 members, further work is needed to identify the best tools to

allocate private capital to this kind of investment, including radical regulatory reform for the finance sector.

4.4 Next steps

Further work will be needed to ensure that the financial mobilisation under the European New Deal is used effectively. DiEM25 members continue to discuss the financing of the ecological transition and plan to develop a comprehensive budget. Further member and expert input will be needed to finalise the budget for the European ecological transition.