Green transition FFWD[1]

The possession of power unavoidably spoils the free use of reason

Immanuel Kant, 1795

Where we stand

We humans are part of the wider living nature on earth. We cannot survive without other organisms. We need clean air, water and fertile soils. At the same time, we fully understand that we currently exploit nature. Global warming, loss of biodiversity and pollution are causing great harm to all societies around the globe, often hitting those first and hardest who contribute little to the crises. The 1% richest Europeans, emit per person twenty times more greenhouse gasses, than the bottom half.

Change is possible

The good news is that we can have a good life in harmony with the rest of nature. Healthy food, decent housing and work, safety, education, culture and leisure – human wellbeing – remain within reach for all. And Europe can and must take the global lead in the transition to long-term and deep sustainability.

The bad news is that we are not changing fast enough, and we need to speed up urgently. Change generates uncertainty. It triggers fears as we do not know what will come. Wealthy people all over the world, must cut back on material extravagances and wasteful activities such as excessive mobility, fast fashion, short-lived electronic appliances or unsustainable diets. For some this is an unwelcomed price to be paid. However, resistance against change is the main bottleneck. The pain is in the change and not in the outcome itself.

Not changing the current unsustainable track leads to greater risks and uncertainties, and we can only close our eyes to these for a while. The coming changes are often exaggerated or portrayed as restrictions. However, what the transition holds for us is living in well insulated homes and using carbon-free electricity and fuels. We will have good accessibility with less mobility, ride electric cars and fly less. We will follow more plant-based and local diets. We will buy less and better clothes. And we will generate less waste. At the same time, wellbeing-based societies invest in better healthcare, education, cultural and social life. Good living conditions for all can be achieved.

The core of the transition is the greening of polluting industries. Producing electricity, fuels, cement, steel, fertilisers, chemicals, food and consumer goods without emitting greenhouse gases and depleting natural resources, making cars, trucks, ships and planes that run on green energy and shifting to sustainable agriculture are major turnarounds. Radical change is needed in these industries.

Vested interests slow down the green transition. It should not come as a surprise that companies in the oil, mining, transport, food and finance industries, protect their business interests. Transnational corporations have gained much power relative to national governments, since the 1980ies. They choose where to produce, where to pollute and where to pay taxes. The power and interests of large and polluting industries strongly influence public opinion and policies.

[1] This paper is written as contribution to the Civil Society Convention on the Future of Europe. Earlier drafts are discussed in the thematic cluster Climate and Environment and enriched the analyses and proposals in this paper. Critical friends helped me with their comments and suggestions.

European leadership

Because national governments are in competition with each other for the favours of transnational companies, a regional block of countries is better situated to speed up the green transition. The European Union must take the global lead. It imports ninety percent of its fossil fuels. Therefore, reducing the consumption of fossil energy will directly translate into a lower import bill. This financial benefit does not occur in world regions with their own fossil resources, such as North America, Russia, and Australia.

The European Union being the largest consumer market in the world, puts it also in the position to set environmental standards, which other countries must follow if they want to sell their products on the European market. By doing so, the EU has a large influence on the development of strict environmental standards worldwide. This includes energy intensive products as steel, aluminium, cement, and fertilizers, when the Carbon Border Adjustment Mechanism is implemented as proposed by the European Commission

Finally, taking the front seat in the Green Transition, creates the opportunity for European companies to become global leaders in green products and services. Europeans will be proud to work for companies that are part of a wellbeing economy.

Ten actions for change

The current pace of change is far too slow to avoid severe damage to the living nature of which we are part. Resistance within society to the required changes is understandable and must be taken seriously, while we need bold decisions to address the most unsustainable practises. The following proposals aim at speeding up the green transition.

1. Restore the balance of power

The balance of power has tilted in favour of transnational industries and their business partners during the last half century. Through mergers and acquisitions a few large companies dominate most global markets, reducing competition and generating high profits. National governments have responded to globalisation by supporting 'their' domestic champions and thus becoming competitors instead of regulators for the public interest. Tax favours, lax environmental policies and subsidies for innovation are common tools used by most countries in their struggle for competitiveness. Because transnational companies are footloose, they locate in countries most friendly to their interests. This bargaining power combined with their vast resources in money and knowledge, gave large industries the opportunity to acquire a disproportionate impact on public policy and public opinion.

The balance of power between different interests in our societies needs to be restored. This systemic change has many benefits to society, among which speeding up the green transition. More influence on policymaking should go to the upcoming green companies, to organisations and grassroots movements dedicated to environmental protection and to civil society in general. Only our democratic institutions can restore the balance of power. The laws and institutions that currently allow companies and markets to exist and to operate under specified conditions should be changed to serve the public interest. The preferential treatment of transnational industries needs to be ended and their influence on policymaking and public opinion should be limited. On the other hand, non-market interests should be strengthened and allowed better access to policymaking. Taxpayers' money should become available for think tanks and advocacy aimed at protection of the environment, consumer safety, labour conditions, health care and education. This will create the badly needed level playing field between the different interests in our societies. In turn, this will strengthen evidence-based policies, as opposed to resulting from mere power struggles.

2. Effectiveness first

Most environmental policies and studies take cost parity of clean technologies as the main criterion. Estimates are made of the years it will take until green becomes cheaper than dirty, and the implicit assumption is that thereafter the market will take care of a fast deployment. This common way of arguing has three critical flaws. First, it slows down the transition, because we must wait until cost parity is achieved and the expected date even tends to move backward in time. Second, there is no guarantee that the market will take up the clean technologies immediately after cost parity is achieved. Third and most fundamental, accepting cost parity as a criterion implies that we do not accept any cost increases for polluting activities. This reduces the value of nature to zero and is clearly at odds with the widely supported polluter pays principle.

The new policy frame puts priority on effectiveness, instead of on efficiency. We need policy measures that deliver fast and with certainty the required reductions in emissions of greenhouse gases and protection of our biodiversity. For many years long lists of promising green technologies and behavioural changes are discussed, numerous pilot projects have demonstrated which one's work, now is the time to get them applied on a large scale. Reducing pollution should be the first and main criterion for the assessment of policy options. We need results and we need them now.

3. Accept price increases and degrowth of some industries

Replacing cost parity with effectiveness implies that we accept that polluting activities become more expensive. This will partly be temporary, because the new technologies and processes will become cheaper over time, once they are applied on a large scale. However, some products will remain more expensive than their polluting predecessors. Think of aviation, chemicals, green fuels, metals, and electricity. It is not that we want these to become more expensive, but we want them to become clean. And if that is only achievable against higher costs, we accept this consequence.

Part of the initial cost increases will be avoided by becoming more efficient and using less: better insulation of buildings, energy efficient machines and operations, recycling of materials, efficient logistics and so on. The remaining cost increase for consumers will lead to a change in their consumption pattern. Less purchases with a large environmental footprint and more spending on clean products and services. Less holidays per aeroplane, less meat consumption, less heavy cars. This will cause degrowth of affected industries.

4. More direct regulation

Direct regulation of pollution has proven to be most effective. To mention only four of its many past successes:

- The international ban on the production of CFCs restored the ozone layer.
- Setting standards for air quality and setting progressive limits on the emissions from industry and vehicles, greatly improved the quality of the air we breathe.
- Bans on the use of the most environmentally harmful pesticides have saved many animal species from extinction and improved human health.
- Creating land and marine conservation areas protected vulnerable species and ecosystems.

While such regulations are under political consideration, affected companies often emphasise negative effects – on jobs, economy, prices – of these measures. However, after implementation these doomsdays have largely evaporated.

Direct regulation either takes the form of a full ban of harmful products or processes after a transition period – as with CFCs – or of periodically tightened emission limits – the Euro standards for vehicles. Direct regulation is an appropriate way to end the current environmental externalities, as the economic textbooks advocate. Some attractive applications are:

- Moratorium on the exploration for new fossil fuel reserves.

- Phase out of production processes emitting greenhouse gases for electricity, fuels, steel, chemicals, and cement.
- Ban on the registration of cars and vans with a combustion engine.
- Stepwise increasing blending mandate for the minimum percentage of green synthetic kerosene for aviation. Similar for shipping but allowing for a wider range of no-carbon fuels.
- Ban on the use of crops for other purposes than food production.

Although economic instruments such as taxes and tradable emission permits can be more efficient for specific purposes, they are less effective than direct regulation. The resulting emission reduction is uncertain. In addition, experience shows that the level of taxes or emission ceilings are often not sufficient due to lobbies of affected industries. The urgency of environmental degradation is now so great that we need to add more direct regulation to the policy mix, which achieves results double sure and without delay. Effectiveness needs now to be prioritised over efficiency. A no-pollution fence should set the borders for the market economy.

Another major advantage of direct regulation is that this does not require government subsidies. Governments will be short in money once the corona-debts have to be repaid. And subsidising green alternatives to polluting technologies and activities is rather ineffective and inefficient. Subsidising green energy and transport, for instance, has negative feedback loops, because they increase demand for energy-services and mobility. Banning fossil energy on the other hand will reduce the growth in both.

5. Empower low-income households

Households will be confronted with higher prices for energy, food and mobility. This is only acceptable when low-income households are financially compensated and supported in their efforts to reduce their ecological footprint. They should not pay the price for the green transition, because they cannot afford it and because they pollute much less than wealthy people. The 50% Europeans with the lowest incomes are close to achieving their maximum carbon budget for 2030 in line with the Paris agreement, while the top 10% still needs to reduce their carbon footprint by two thirds. Everyone should be able to cope with the unavoidable changes incurred by the green transition. Not doing so, would be both unfair and will deteriorate public support for the needed changes.

Compensation to low-income groups needs to be in money – lower taxes and higher social security – and not by sparing them from environmental regulations. Incentives to reduce pollution should also apply to those with little financial means. Low-income households should also be supported in their efforts to reduce their ecological footprint. The Social Climate Fund as proposed by the European Commission in its *Fit for 55* package is a recognition of the need to compensate low-income households. However, the proposed fund should become permanent and larger.

The government revenues required for the compensation of low-income households can come from many sources. Examples are stopping all subsidies on fossil industries, increase of taxes, such as on aviation and luxuries, pricing pollution, ending the tax deduction for lobby and advertising, and from international agreements to reduce tax avoidance by transnational companies. These desirable fiscal changes generate more revenues than needed to compensate low-income households. The excess revenues can be used to lower the tax burden on labour. This makes schools, health care, repair, and other labour-intensive activities more affordable.

6. Support job transition

The green transition needs more people at work. A full implementation of the Paris agreement would create more than one million additional jobs in the EU by 2030. While there will be job losses in the fossil and automotive industries, these will be more than compensated by the creation of new jobs in

greening sectors, including construction, waste management and sustainable finance. Currently two times more people work directly in renewable energy production than in the fossil energy industries.

Although the green transition will increase total employment, there will be a mismatch between old and new jobs, both in location and skills. This will affect most of the 0.4 million Europeans directly employed in the fossil industries and part of the 2.9 million workers at the OEMs and suppliers in the automotive sector. Many employees in the car industry will shift to producing and maintaining electric vehicles. The total number of jobs in the European Union lies around 190 million, showing that one percent of European employment will be directly affected by the green transition.

Workers who lose their jobs in technologies that are phased out should be supported by government programmes. These assist workers to relocate and to reskill and aim also to avoid shortages of employees in the renewable energy industries. The programmes must not deepen existing gender gaps, but instead aim to reduce these. In addition to these specific programmes, governments have the responsibility to guarantee social protection for all.

7. No compensation for stranded assets

Industries using fossil-based technologies are confronted with capital loss. Declining value of stocks and early write-off from factories, infrastructures and intellectual property are unavoidable. This prospect of capital loss forms a major driver for industries to lobby for less strict regulation and to postpone the date of implementation. Companies also frequently ask for financial compensation in exchange for giving up their resistance to tighter environmental policies. However, this is not where taxpayers' money should be spent. Companies are for decades aware that global warming should be stopped, and they decided knowingly about the investments they made. They took the risk of environmental policies becoming tighter over time and it is unfair to make others pay for this. It is a normal entrepreneurial risk they have taken.

Compensating industries for capital loss, would also give a wrong signal for the future. Knowing that governments will be financing these losses, will perpetuate the problem, because companies and their banks will continue to invest in fossil-based assets. Instead of just taking the loss one time, government money for stranded assets will result in a continued drag slowing down the change.

8. Support green bottom-up initiatives and new business models

Many support the green transition in their personal behaviour, even though the current societal structures do not reward this. Eating biological food from local farmers, not flying, reducing car kilometres, avoiding waste, installing solar panels are examples. Many take initiatives to green the company they work for. In addition to individual changes in consumption, collective initiatives are taken, e.g., for energy cooperatives, city agriculture and to improve neighbourhood facilities. Such popular activities are beneficial in itself and stimulate the required systemic change as well. By developing and testing green production and consumption, lessons are learned which benefit the upscaling.

9. Education for sustainability

Education and lifelong learning are key enablers for the achievement of environmental and social justice goals. This requires changes in curricula, pedagogies, learning environments, teacher training and professional development. The aim should be to acquire skills and knowledge to live in tune with our planet and be able to exercise critical thinking. Education and training programmes include climate and environmental literacy, sustainable lifestyles, understanding of human-nature interdependencies and collective action for change.

10. Safeguard democracy and participation

The green transition can only be reached through a collaborative effort by different stakeholders including the EU institutions, governments, companies, civil society and climate activists. Consultation and participation of a wide range of stakeholders and experts is critical to the development of climate policies and regulations.

Sadly, many states impose unnecessary and disproportionate restrictions on the right to protest, free speech, access to information, and freedom of association—fundamental freedoms and rights that enable all civil society actors to participate in decision-making in environmental matters. States should refrain from creating obstacles to civil society participation and safeguard civic space for all actors that are engaged in defending our climate and biodiversity.

Impact

Living earth

The package of ten as sketched above, is designed to accelerate the green transition. This makes the target of net-zero greenhouse gasses in 2050 achievable. Limiting the use of fossil fuels will not only slow down global warming, but it will also reduce air pollution and increase the price of virgin materials, as concrete, steel, fertilizers, and plastics. In combinations with tightened regulations for ecological mining, this will result in more circular flows of materials. Transforming the industrial and fossil-based agriculture into food production in harmony with the rest of nature, will preserve the worldwide biodiversity.

Green recovery

Speeding up the pace of change will lead to a fast and green recovery of the economy. Environmental regulations are most important for this because they create a predictable demand for clean technologies. To meet this demand, industries will invest in production plants, supply chains, and R&D. These expenditures will end the economic slump of the last decades.

Green regulations create market demand, which contrasts the approach chosen by the EU and many countries to set up a large government fund for economic recovery. The latter falls back to the Keynesian method to stimulate the economy by increased government spending, with the well-known risks of inefficient political choices and self-serving lobbies. Creating demand for green products and services through green regulations leaves more scope for the market mechanism to match demand and supply. Enforcing strict environmental boundaries for industries, however, requires strong and independent governments, but these do not have to be big governments.

Financial compensation for low-income households creates also additional demand. High income households save a large part of their income in demanding times, while those with little means spend most of what they get. This was clearly unveiled during the covid crisis. The shift in purchasing power from high to low-income households, will therefore contribute to the economic recovery. Even more important is that this shift in purchasing power will steer innovations in the direction of the needs of deprived people and away from the affluent.

Both direct green regulation and support for low-income households create new demand for products and services. These demand side measures are a welcome shift from the focus on the supply side of the economy, which has dominated economic policies in the last decades. For, the prospect of demand is the key condition for companies to invest, even when interest rates are zero. New economic dynamism will result from the advocated green transition.