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PROGRESSIVE ECONOMY



The Sustainable Shift

Beyond buzzwords - a matter of survival

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FOREWORD

by the **PRESIDENT** of the
S&D GROUP

Dear friends,

Welcome to this, the fifth edition of the Journal for a Progressive Economy, which is the first to start exploring issues around sustainability.

Since the financial crisis we have had to continually challenge the failing austerity policies from the centre-right, and this has been the main focus of the Progressive Economy initiative. The devastating consequences of austerity and structural reform are becoming ever more apparent; with unacceptable levels of unemployment across Europe, especially among young people, as well as unprecedented levels of inequality. The 2015 edition of the Independent Annual Growth Survey showed that inequality in Europe has risen to the same levels as found in the US. Therefore the Progressive Economy initiative will continue to build on its focus on the social dimension of the economy.

The financial crisis has diverted attention away from the multitude of environmental challenges we face, making the measures we need to take to achieve a low carbon economy seem far from reach. It is our duty as progressives to reclaim the arguments for sustainability, and show how environmental, as well as social, aspects are central to our progressive vision for Europe's economy. In focusing on the interplay between these issues we want to promote new progressive ideas in all of these fields.

This edition of the Journal has been edited by my colleague Kathleen Van Brempt MEP, Vice President of the S&D Group for Sustainability. Kathleen has written her own contribution and chosen a selection of experts from academia, journalism, business and European and national politics which should spark debate and bring new ideas to the table. I hope you enjoy reading it and continue to follow the work we are doing towards building a fairer, more sustainable progressive economy.

Best wishes,

Gianni Pittella MEP
President of the S&D Group in the European Parliament



KATHLEEN VAN BREMPT
Member of the
European Parliament,
S&D Vice-President

SUSTAINABLE GROWTH: the **ONLY WAY FORWARD** for **EUROPE'S ECONOMY**

by *Kathleen Van Brempt*

Europe has suffered one of the worst economic crises to date. The austerity response from the right, who have dominated national and European politics during the crisis, has been devastating for a whole range of reasons, including our commitment to sustainability.

Renewables play a major role in achieving CO₂ reduction targets, but energy efficiency will be equally as crucial.

Europe's economic and social interests are closely intertwined with global climate challenges and - as Hillary Clinton said when paraphrasing Winston Churchill - we should 'never waste a good crisis'. From the devastation of the past few years we can build a prosperous sustainable economy, creating quality jobs, new technologies, fostering health and even fundamentally changing the global economic system which is destroying our planet.

Of course on a global scale we have a real opportunity on the horizon. This December the global UN climate talks, COP 21, will be held in Paris; in an EU Member State with a progressive government. It is our chance to secure ambitious worldwide commitments, setting the world on a new path, and putting Europe at the forefront of an industrial revolution.

Europe has a headstart, especially when it comes to renewable energy. Between 2007 and 2009 32% of clean energy technology patents came from EU countries, with just 19% from the US and less than 2% from China. The COP 21 conference could give us the much needed boost to focus on this innovative approach, knowing that

clean energy technologies began to take off after the Kyoto protocol. We have a lot to gain in terms of jobs; the Independent Annual Growth Survey 2015 (iAGS), commissioned by the Progressive Economy initiative, found that most renewables have a relatively high labour intensity, ranging from 7.9 for biofuels to 12.1 for biogas (per million euro of turnover). And the construction of new energy networks is something that could not be off-shored; it would create quality jobs here in Europe.

Renewables play a major role in achieving CO₂ reduction targets, but energy efficiency will be equally as crucial. Energy efficiency has finally been recognised in the Commission's roadmap to the European Energy Union as an 'energy source of its own right'. The International Energy Agency (IEA) has called energy efficiency 'an invisible powerhouse' worth at least €276 billion per year and growing. Europe's main resources are therefore not Megawatts, but Negawatts. The iAGS finds that buildings account for 38% of the EU's natural gas consumption, meaning that energy efficient buildings would help reduce the €72 billion natural gas import bill.

MEP Kathleen Van Brempt (1969) is a Belgian social-democratic politician and vice-president of S&D, responsible for sustainability. Van Brempt studied sociology at the University of Leuven.

She served as State Secretary for Labour Organization and Welfare in the Belgian federal government and as Minister for Mobility, Social Economy and Equal Opportunities in the Flemish government.

She was a member of the European Parliament from 2000 until 2003 and returned to the European Parliament in 2009.

Van Brempt is also a member of the city council of her hometown Antwerp.

Energy efficiency investments offer immense benefits which go far beyond energy savings. We have to consider the fact that almost 11% of EU families were unable to keep their homes adequately warm in 2012. To have such a huge proportion of Europeans facing energy poverty is just not acceptable. Then, of course, there is the impact on employment. One of the sectors hit hardest by the crisis has been the construction service, with output falling by 22% between 2007 and 2013, as outlined in the iAGS. This has left 12 million less people employed in construction, leaving behind a large pool of unemployed but qualified professionals.

A recent report by Copenhagen Economics on the Juncker investment plan (EFSI) concludes that investing in deep energy efficiency improvements in the existing building stock would provide the quickest boost to the economy. Energy-efficiency projects deliver quickly from inception to completion, within one or two years' time, compared to about 14 years for large public transportation projects. Building renovation not only has the potential to be a very cost-effective option to reduce CO₂ emissions, but also to yield high returns to society, creating 17 jobs per million euro invested, reducing CO₂ emissions and dependency on imported energy, and

generating health benefits. Estimations by Copenhagen Economics show that the health benefits may reach € 40 to 80 billion per year by 2020 if the EU fully implements its potential for cost-effective building renovations.

The bottleneck in the road towards an energy efficient economy is financing. Thanks to progressive voices clamouring for investment in our ailing economies we finally have a significant change in policy from the Commission with the announcement of the European Fund for Strategic Investments. There is great potential for this scheme to finally put underfunded European priorities like energy efficiency

and renewables back on the agenda, but we have a lot of work to do. The iAGS finds that investment in renewables fell by 41% in 2013. Currently only 5% of Member State projects under EFSI include energy efficiency measures, smart technology or demand side measures. Increasing this considerably is one of the first challenges we face. That's why, as a rapporteur on the EFSI, I proposed to allocate 20% of EFSI to energy-efficiency projects, to avoid massive lock in effects proposed by Member States who prefer to focus on outdated technologies.

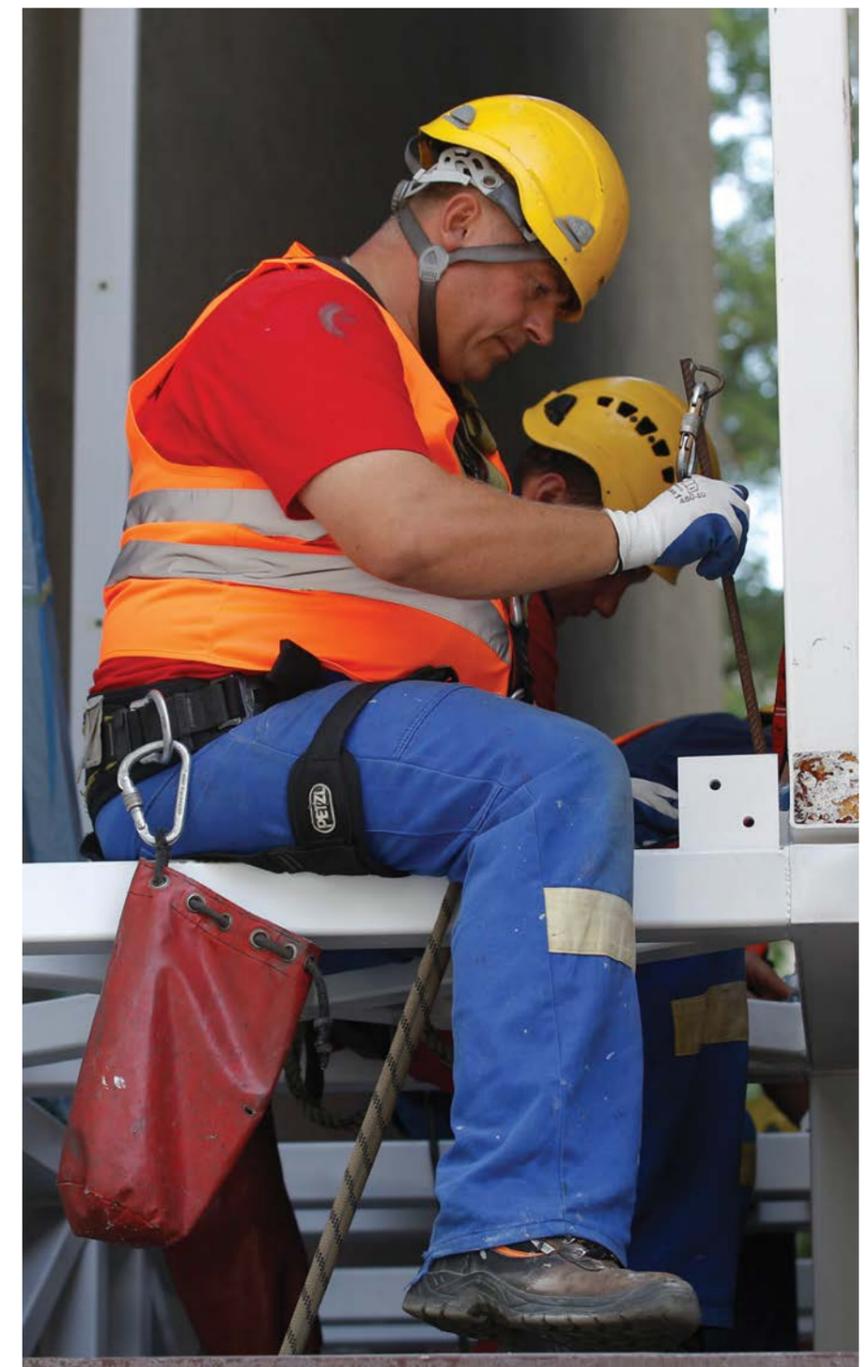
We stand on the brink of a new era for Europe's economy.

In the shadow of a huge economic crisis we can make a choice to go backwards; burn more carbon, rely even more on imported gas and oil, hope the economy will revive itself. Or we can choose to leap forward; become the European Silicon Valley of ecological innovation, create quality jobs, become a truly low carbon economy.

With a new Commission, a commitment to investment and a major climate change negotiation coming up, Europe must now reclaim its global leadership in sustainable development.



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DIVESTMENT

by Bill McKibben

The world is in the middle of a titanic shift. For 200 years or more we've powered ourselves with coal and gas and oil; almost everything we see around us is a relic of that fantastic liberation of fossil energy, which turned us into a race of supermen able, literally, to move mountains and travel through space.

But now, everywhere we turn, we start to see the side effect of that liberation. Our one planet is warming, rapidly, and with it comes the increasingly familiar litany of destruction: melted ice caps, rising sea levels, weirder storms, deeper droughts. Our best efforts to forecast the future on the current trajectory yield ever darker results: famine, pestilence, war. Oh, and a huge financial hit as our civilization turns ever more of its resources to responding to disaster.

Given the stern warning provided by science, one would think the world would be scrambling to do something. But that's not the case. The last global summit on climate change - in Copenhagen in 2009 - was an unmitigated disaster, perhaps the most thorough diplomatic failure since Munich. This December's conclave in Paris will likely do a little better, but no one thinks it will come close to solving the problem.

The reasons for our inaction are many, but atop the list is clearly the financial and political power of the fossil fuel industry.



BILL MCKIBBEN
Author and environmentalist

Bill McKibben is an author and environmentalist. His 1989 book *The End of Nature* is regarded as the first book for a general audience about climate change, and has appeared in 24 languages. He is a founder of 350.org, the first planet-wide, grassroots climate change movement. 350.org is named for the safe level of Carbon Dioxide in the atmosphere, 350 parts per million.

The Schumann Distinguished Scholar in Environmental Studies at Middlebury College and a fellow of the American Academy of Arts and Sciences, he was the 2013 winner of the Gandhi Prize and the Thomas Merton Prize, and holds honorary degrees from 18 colleges and universities. *Foreign Policy* named him in their inaugural list of the world's 100 most important global thinkers, and the *Boston Globe* said he was "probably America's most important environmentalist."

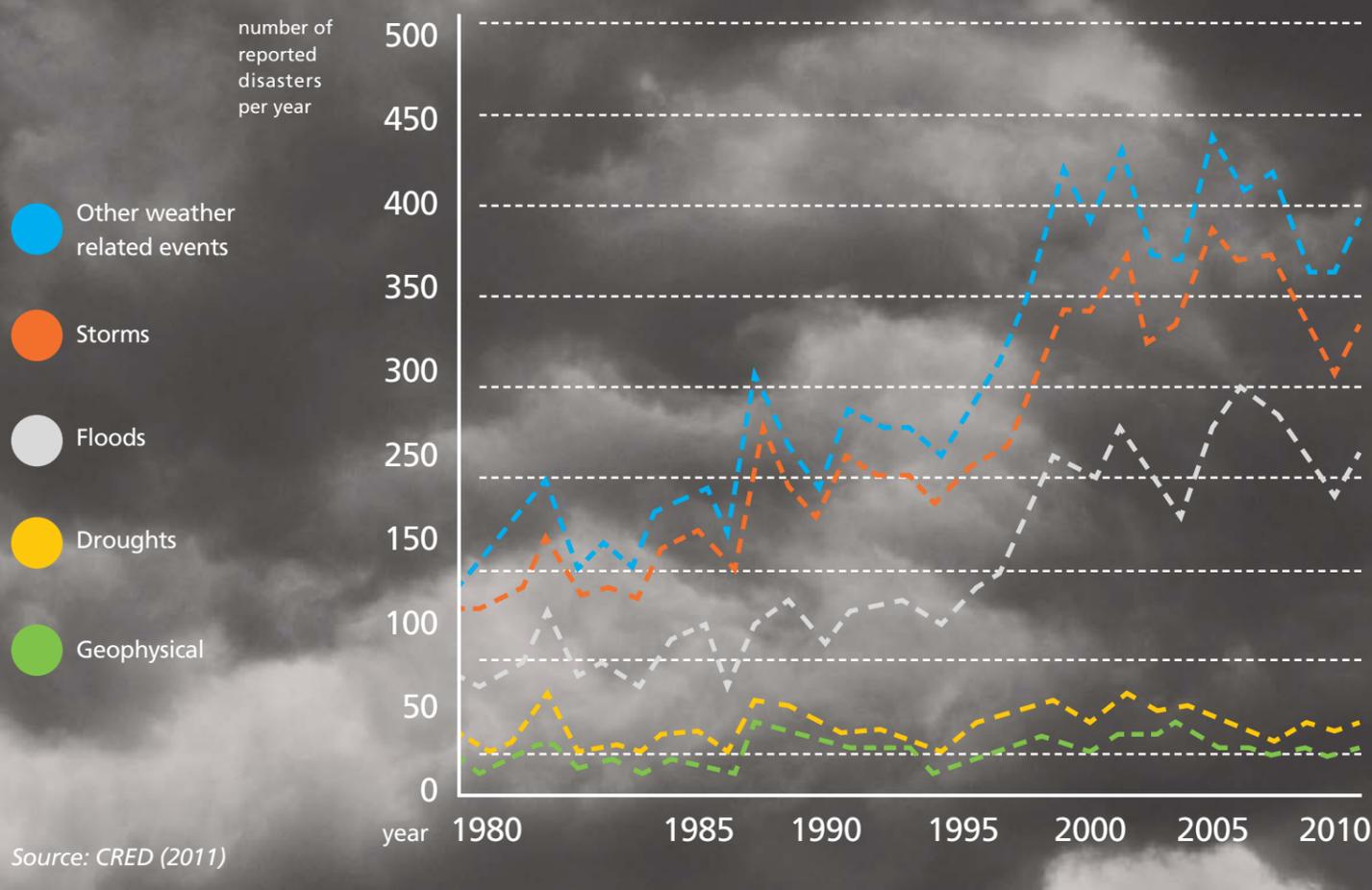
A former staff writer for the *New Yorker*, he writes frequently for a wide variety of publications around the world, including the *New York Review of Books*, *National Geographic*, and *Rolling Stone*. He lives in the mountains above Lake Champlain with his wife, the writer Sue Halpern.

There are a small number of people who have a deep financial stake in making sure that very little changes, even at the risk (really, the guarantee) of wrecking our home planet.

That is to say, there are a small number of people who have a deep financial stake in making sure that very little changes, even at the risk (really, the guarantee) of wrecking our home planet. Consider Shell. When, just as scientists had predicted, our combustion of hydrocarbons melted the Arctic, did Shell's board of directors think 'Hmm, perhaps we should put our research money into renewable energy?' They did not. They let their company lead the scramble to drill in the newly melted seas for yet more oil. When they give out the Olympic medals for cynical irresponsibility, Royal Dutch Shell will get a gold.

But the competition will be intense, because every fossil fuel company is pursuing pretty much the same strategy, continuing to explore and develop new pockets of coal and gas and oil even though it's unambiguously clear that their current reserves already contain far more carbon than any scientist thinks would be safe to burn. The World Bank has focused on this problem of "unburnable carbon" and "stranded assets." So has HSBC, and the Bank of England, and every one else who's looked at the issue. And the oil companies haven't even really tried to reply. The chairman of Shell did tell an oil industry dinner earlier this year that their critics were "naïve" to think that we'd wean ourselves from fossil fuel any time soon, but the next day Tory MP Tim Yeo responded thusly: "Investors are starting to think by 2030 the world will be in such a panic about climate change that either by law or by price it will be very hard to burn fossil fuels on anything like the scale we are doing at the moment."

Extreme weather events are becoming increasingly frequent and severe all over the planet.



Source: <http://350.org/resources/templates/>

If we can slow the fossil fuel juggernaut for even a few more years, we'll turn the tide.

An Oxford study last year showed it was the fastest-growing such campaign in history, faster even than the effort that helped speed the end of South African apartheid. It began in North America, but by now it's leaped the Atlantic - universities from Scotland to Sweden have begun to divest, and even the great Norwegian sovereign wealth fund has made interested noises.

The point of divestment is not to bankrupt BP; in the short run that's impossible because someone else will buy the stock. But prominent institutions divesting will not only point out the immorality of these companies, weakening their political clout. It will also signal to others that their uncontested reign is ending, and that they might want to be careful about investing. Would a smart bank right now, say, lend for a new coal mine that will take 40 years to pay off? Probably not.

If we can slow the fossil fuel juggernaut for even a few more

years, we'll turn the tide. That titanic shift I began by describing is not just away from fossil fuels - it's toward renewable energy. In one of the great optimistic sagas of human history we've learned in rapid order how to take the power of the sun and wind and use it to power our lives. The learning curve is wonderfully steep - as new technologies have come on line the price of solar panels has dropped 75% in the last six years. For most of us that's a deeply hopeful sign. But if you're an oil company, it's a harbinger of doom - that's why they fight to deny reality. Every one who invests their money gets to weigh in on this contest. Either you side with the BPs of the world, or you join the long-haired radicals like, say, the Rockefeller family. The heirs to the first fossil fuel fortune announced they were divesting from coal, gas and oil last September, both for moral reasons and because, as one put it, "if John D. Rockefeller were alive today, he'd be investing in renewable energy."

Which side are you on?

FINDING THE RIGHT WORDS TO SHAPE an EFFECTIVE CLIMATE CHANGE NARRATIVE

by George Marshall

We have a massive problem with climate change - not just the scale and impact of the issue itself, but the continuing lack of public conviction and commitment to action. Granted, in opinion polls two thirds of Europeans say that they are very concerned and 16% consider it to be “the most serious problem facing the world as a whole”.¹ However, when asked to name the most important

issues for their own country, hardly anyone mentions climate change. Even after 25 years of ever more alarming scientific warnings, in no country do polls find climate change listed among the top ten national issues for governmental action. This in turn keeps climate change permanently on the political sidelines: as a distant global problem that someone else, somewhere else needs to deal with - sometime.



GEORGE MARSHALL
Author and climate change communication expert

Over the past 25 years George Marshall has worked at all levels of the environmental movement, including many years in the US as a senior campaigner for Greenpeace US and the Rainforest Foundation.

Working through the Oxford based Climate Outreach and Information Network, the charity he founded in 2004, he has become one of the leading European experts in climate change communications.

He is a lead advisor to the Welsh Government and has led academic, government and campaign trainings around the world.

George Marshall is the author of *Don't Even Think About It: Why Our Brains Are Wired to Ignore Climate Change* (see www.climateconviction.org) and the co-founder of the *Climate Outreach Information Network* (see www.climateoutreach.org.uk).

COIN's specialist reports on climate communications and human rights can be found at <http://www.climateoutreach.org.uk/resources/>, including recent reports on talking with the centre-right public and politicians.

¹ Special Eurobarometer 409 (March 2014). Europeans' attitudes towards climate change. TNS Opinion & Social, European Commission. Available at: http://ec.europa.eu/public_opinion/archives/ebs/ebs_313_en.pdf http://ec.europa.eu/public_opinion/archives/ebs/ebs_409_en.pdf

There is now extensive research seeking an explanation for this disconnection- which I summarise in my recent book: *Don't Even Think About It: Why Our Brains Are Wired to Ignore Climate Change*. It is clear that climate change has few of the qualities that capture people's attention - it is distant, intangible, uncertain and complex. It requires change and sacrifice, which people always resist, whilst lacking the clear external enemies that would mobilise them to accept such sacrifices in times of war.

Research shows that while our rational intelligence **knows** from the scientific evidence that we face a major threat, we can only **accept** and **feel** it when it is converted into a narrative that speaks to our values and identity and is shared by people we know and trust. A narrative that can give climate change the priority it requires must go yet further: it must convince people that climate change threatens their most sacred values and that taking action will reinforce their core identity: whether that identity is political, cultural, national, religious, occupational or just being a parent or a sports fan. Put simply, people need to believe that action will make them feel even more the person they already believe themselves to be.

The problem is that we have not yet found a way to speak to the majority of people that energises these values or feelings. The 5 to 10% of people that truly accept climate change tend to come from a very narrow social demographic of middle-class, educated, left-leaning, environmentalists.

I am one of them and I fear that we have been all too successful in promoting the narrative that speaks

best to our **own** values: of global environmental justice, protection of wild ecosystems, and an enthusiastic embrace of new technologies. Our language, packaged with images of polar bears, African famine, and solar panels, dominates the issue in every newspaper report, documentary, and call to action.

My organisation, the Climate Outreach Information Network (COIN), is a non-profit that has led opinion research for the British and Welsh governments and all the main British environment organisations. Consistently we have found that this conventional narrative does not work with the wider population. For many ordinary people, struggling to keep up with daily life, climate change seems distant, irrelevant and even elitist. As people told us repeatedly in focus groups, why should they get excited about a battery-powered car when they could scarcely afford to keep up the payments on the current one? And as for the much vaunted millions of new jobs promised in the low carbon revolution? Well, this just sounded like another empty politician's promise. They will believe it when they see it.

In 2009 COIN led a large two-year project with five trade unions to communicate climate change and sustainability to their membership. In focus groups it soon became clear that the conventional language around climate change and sustainability was disastrously unsuitable. Union activists had a visceral dislike for the typical green demands that people make small personal changes in their energy use to achieve a sustainable "lifestyle"- a word which, for them, represented the worst kind of superficial consumerism.

In response we reshaped the language around their values, naming it "Climate Solidarity" and emphasising that change will come through collective action. For Unison, Britain's largest union, we wrote a handbook on "Negotiating around Climate Change" which showed union activists how an understanding of climate change and energy conservation could strengthen their hand in negotiations over pay and working conditions.

In recent years a stronger left-wing narrative has emerged that emphasises the relevance of climate change to social justice, workers' rights, racial and gender equality, and argues that the issue contains a radical challenge to corporate capitalism. At last we are starting to see the mobilisation of people across the left against the common threat to their core values.

But here lies another danger. There is already a political divide between the left and right on this issue. Across the European Union as a whole², but especially in Britain, France, and parts of Scandinavia, there is a marked and growing scepticism among conservatives. In America attitudes on climate change are now a stronger predictor of someone's personal politics than their position on any other issue, including the hot button issues of abortion, capital punishment, and gun control.

For conservatives a weak and intangible narrative is being replaced by a far more compelling one: that climate change has been exaggerated (or even invented) by their traditional enemies on the left to undermine their interests and extend the power of the state.

I cannot see how we can possibly generate the level of social and economic transformation required to deal with climate change without having support that crosses all society.

Does this matter? Yes I think it does. It is possible to generate political change on many issues through conventional activism but I cannot see how we can possibly generate the level of social and economic transformation required to deal with climate change without having support that crosses all society.

We live in democracies and can only move forward through a shared commitment to action.

That is why, as a radical environmentalist with a long association with the political left, I have concluded that the most radical thing I can do now is to talk with conservatives. If the left is finding the narrative that speaks to its values, it is just as important that conservatives do too. Many of the values held by the centre-right have direct relevance to this issue: among them a belief in self-reliance, personal responsibility, a resistance to intergenerational debt, a support for enterprise, and a strong personal investment in local community and place.

I doubt very much if there is any cosy middle-ground compromise about how we deal with this problem. And even if it did exist I doubt that it could ever mobilise sufficient enthusiasm or energy to deal with this problem. So I would anticipate that, if left and right were both adequately engaged it could generate some difficult, but nonetheless fruitful, struggle between the different political worldviews.

Nonetheless, for all its contradictions, society has still been built through cooperation and mutual interest. Left and right can still find common ground around the need to defend our way of life, livelihoods, jobs and cultures from an existential threat. There is no need for us to settle our differences- in fact we need to recognise and respect those differences in order to find the creative solutions we need. But we also need to tap into something deeper: our shared humanity and our immense capacity for empathy and cooperation.



² Special Eurobarometer 313 (July, 2009). Europeans' attitudes towards climate change. TNS Opinion & Social, European Commission. Available at: http://ec.europa.eu/public_opinion/archives/ebs/ebs_313_en.pdf



Circular Economy

"To promote sustainable development, new approaches should have a holistic focus"

Walter R. Stahel

"Europe is still locked into a resource intensive, linear economic model that developed over centuries of abundant resources. "

Karmenu Vella

"We have to dare to point out structural system failures and show the alternatives to solve them"

Michael Braungart



WALTER R. STAHEL
Professor,
University of Surrey

SUSTAINABLE TAXATION

by *Walter R. Stahel*

Today's industrial economies are confronted with the challenge of promoting renewable energies to mitigate climate change, of ageing populations, rising sovereign debt and high youth and long-term under-employment, to name but a few.

The industrial revolution has been instrumental to overcome scarcities in resources, food and goods, but cannot cope with today's situation of an abundance of cheap materials, food and goods imported from countries with low-cost labour.

This article promotes a circular economy—a low-carbon low-resource alternative to the industrial throughput economy, based on the smart management of existing stocks of manufactured assets—with a focus on maintaining the performance, value and quality of existing stock, in synergy with manufacturing innovative new systems (Stahel 2010). Managing stock is based on caring; caring is labour-intensive, skilled and local.

To promote sustainable development, new approaches should have a holistic

focus; legislators should define policies which are simple, convincing and cross-cutting with the objective of preserving stock. Sustainable taxation is a point in case (Stahel 2013):

- do not tax renewable resources, noting that human labour is renewable, but exclusively tax non-renewable resources, wastes and emissions,
- do not subsidise the production and consumption of non-renewable resources,
- do not levy value added tax (VAT) on the value preservation of stock (such as reuse and service-life extension activities),
- give carbon credits to carbon emission prevention (smart stock management) at the same rate as to carbon emission reductions (cleaner flow).

Sustainable framework conditions create societal and corporate resilience. A non-taxation of all renewable resources including work would promote all caring activities (looking after people's health, looking after natural and cultural capital) cheaper and manufactured (physical) stock management activities more competitive.

It must be emphasised that the proposal here is for a shift in the tax base rather than an increase in tax levels. A fiscal policy of sustainable taxation could make many subsidy policies redundant; taxing non-renewable resources instead of labour would give clear incentives to economic actors to shift from flow to stock business models. In addition, it would make all stock management activities (looking after people's health, looking after natural and cultural capital) more competitive.

Not taxing labour but non-renewable resources instead has to be adapted to national characteristics; in the USA, eleven States do not tax labour (human capital) but flow (the construction industry in Florida, the oil and gas industry in Texas). In Canada, the move in British Columbia towards taxing GHG emissions (B.C. 2013) appears to be having effects which are both environmentally and economically beneficial (Elgie and Clay 2013). In addition, creating more jobs by not taxing labour will reduce a number of public expense items, for instance in mental health costs (OECD 2015).

Not subsidising the production and consumption of fossil fuels world-wide would save all Nation-States between USD 0,5 and 5 trillion annually.

Not levying VAT on value preservation activities would give goods in the circular economy a substantial cost advantage over new goods (around 20 per cent in most EU countries), giving economic actors again a clear incentive to change from flow to stock management.

Giving carbon credits also to prevented emissions would create a level playing field between efficiency and sufficiency approaches and benefit the circular economy for its substantial reduction of environmental impairment.

The emphasis on work is ethically justified as people are the only resource with a qualitative and creative capability which can be developed but which deteriorates if not used. A ton of coal left in the ground for another ten years does not deteriorate; human labour left unused for ten years may lose all skills.

Unemployment has a high and hidden cost for society (unemployment benefits, loss of opportunity and wealth for individuals and the economy). More people at work directly reduce this cost. Sustainable taxation is the most efficient lever to create new regional jobs of all skills.

Walter Stahel is the founder-director of The Product-Life Institute Geneva, which is the oldest established consultancy in Europe devoted to developing sustainable strategies and policies; with partner institutes in Tokyo and Vienna, founded in 1983.

Stahel is the Head of Research for Extreme Events and Climate Risk at The Geneva Association, and was previously the Head of risk management research and Vice Secretary General.

In 2015 Stahel was elected Finalist of the Fortune Award for Circular Economy Leadership. In 2014 he was nominated as a Member of the Global Agenda Councils of the World Economic Forum. In 2013 he was elected as a Full Member of the Club of Rome. In 2012 he was awarded Doctor of the University, honoris causa, in recognition of his outstanding contribution to the field of Sustainability, from the University of Surrey (UK).

Some of Stahel's most recent publications include 'The business angle of circular economy, higher competitiveness, higher resource security and material efficiency'; in Ellen MacArthur Foundation (ed) A New Dynamic, effective business in a circular economy, and the second edition of 'The Performance Economy', (2010).

Stahel worked as an architect in London and Switzerland after graduating in architecture in 1971 from ETH, the Swiss Federal Institute of Technology, in Zurich.

WHERE NEXT for EUROPE'S CIRCULAR ECONOMY?

by *Karmenu Vella*

The circular economy is at the centre of a lively debate in European circles, and that can only be a good thing. Resolutions are born out of conflict, and good or revolutionary political ideas often emerge when passions are running high.

We are all familiar with the reasons why a circular economy is a good idea. Europe is still locked into a resource intensive, linear economic model that developed over centuries of abundant resources. We extract resources, only to discard them as waste, without realising their full potential value and use. But in a world where the global population rises by more than 200.000 every day, with all the demand that places on land, water, food, feed, fibre, raw materials and energy, this is no longer sustainable.

And the demand for food, feed and fibre will rise by 70 per cent. Yet more than half the ecosystems these resources depend on are already degraded, or are being used beyond their natural limits.

In a circular economy, almost nothing is wasted. Re-use and remanufacturing is standard practice, and sustainability is built into the fabric of society. There is less waste to deal with, more is generated from limited resources, and new technologies bolster Europe's competitive position on the world stage.

Policies are in place to safeguard business activities, creating jobs and ensuring a better quality of life for Europeans. In fact many environment policies already do precisely that: despite the financial crisis, in the environmental goods and services sector, employment continued to increase during recent years, from 3 to 4.2 million jobs (2002-2011), with 20%

growth in the recession years (2007-2011). There is also an expanding global market for green industries, offering substantial export potential.

And that is the policy line we need to follow in the future. Recent estimates show how increasing resource productivity by 30% by 2030 could boost GDP by nearly 1%, while creating over two million jobs more than under a business as usual scenario. Waste prevention, eco-design, reuse and similar measures could bring net savings of € 600 billion, or 8% of annual turnover, for businesses in the EU, while reducing total annual greenhouse gas emissions by 2 - 4%.

Getting there will take robust policies. This is why the Commission is aiming to present a new, more ambitious circular economy package late in 2015, to transform Europe into a more competitive resource-efficient economy, addressing a range of economic sectors in addition to waste. Getting maximum value from resources requires action at all stages of the life cycle of products, from the extraction of raw materials, through product design, production, distribution and consumption of goods, repair and re-use schemes, to waste management and increasing use of secondary raw-materials.

Continuously advancing waste management remains a priority of course, through incentives and support for waste reduction as well as high-quality separation and collection systems. The latter ensure that resources stay within the circle and are available for future use. The Commission will of course present a new legislative proposal on waste

targets, taking into account the input already given to us during public consultations, and by Council and in Parliament, in particular the comments made by many that the previous waste proposal needed to be more country-specific.

But a transformation on the scale we have in mind will never come about simply as a result of legislation. We need a combined approach, where smart regulation is blended with market-based instruments, research and innovation, incentives, information exchange, and support for voluntary approaches. This would provide businesses, including SMEs, with concrete tools and instruments and incentives to promote the transition to a circular economy.

The Commission will continue to promote eco-innovation and investment in clean technologies to build a circular economy. The preparatory report on the European Strategic Investment Plan highlights the importance of resource efficiency, identifying it as one of the key objectives. This should translate into firm support for eco-innovation projects, actively complementing the considerable support already available via the European Structural and Investment Funds.

What we are looking for, in short, is ways to induce lasting change. There is work to do: the phrase "circular economy" is not yet on everyone's lips. But I firmly believe that by the end of this year, what now seems strange and unfamiliar will have become an inevitable evolution. It's the future for our society, and that, obviously, is something we need to fight for.



KARMENU VELLA
European Commissioner for Environment, Maritime Affairs and Fisheries

Karmenu Vella is the European Commissioner for Environment, Maritime Affairs and Fisheries.

Previously Commissioner Vella held various positions including Maltese Minister for Tourism and Aviation, and Group Coordinator for the Labour Party Parliamentary Group.

Commissioner Vella has a master's degree in Tourism Management, and trained and worked as an architect.

“If we carry on with business as usual, by 2050 we will need three times more resources than we currently use.”





CELEBRATE COURAGEOUSNESS

by Michael Braungart

Lasting prosperity is not something we can take for granted. The strong tendency to represent development as just an economic growth rate is hindering progressive thinking. Europe finds itself in one of the most challenging periods of the

last decades. We ought to be proud of what we have achieved, but in times of unknown political situations and related unequal economic developments, the cracks in our European foundation of solidarity, cooperation and stability are clearly visible.

Especially during these moments, our society needs inspiring approaches to overcome fearful thoughts and traditional mind-sets. Although, it is difficult to step out of your comfort zone and dare to question the fundamental errors which have caused the latest crises.

We celebrate our individuality and freedom in Europe; at the same time it is a challenge to think differently. With the ongoing unification of our educational systems, individuals have freedom but are taught to think within standardized concepts. These are not the ingredients for lasting prosperity. Let us celebrate diversity and use the possibilities our earth is offering us within a certain broad framework. This is exactly what the Cradle to Cradle concept is about.

For more than 20 years it has been scientifically clear that our economic system, the way we produce things and the processes behind it, could be improved massively. Instead of solving and fixing the structural errors, we try to minimize the negative impacts or control process by rules and regulations. Step by step we are realising that humans and nature should be a central element in our economic system. The good intentions of sustainable development will not change anything and is in fact meaningless; to minimize our negative impact on the environment, it is better not to exist at all. This approach makes people feel guilty and turns customers into enemies. At the very most, this approach extends the moment before this system collapses. We sometimes simply forget that the vision and behaviour of companies always depend on the people who are leading them. All key moments in history - which have brought us peace, prosperity and development - have been made possible by political leaders with a specific conviction and persuasiveness. Strong leaders can realise the so needed transition.

We have to dare to point out structural system failures and show the alternatives to solve them. Should it be accepted that we are continuously damaging our health and nature by our lifestyle and consumption? Is it smart to make high quality products and then incinerate the precious materials?

When explaining the Cradle to Cradle concept to people, more and more are becoming enthusiastic and consider it as an eye opener.

Everything is designed to be a nutrient for something else.

Some might find my ideas unrealistic or too idealistic; the opposite is true. Many companies have proved that it is indeed possible to produce C2C products and even buildings. Cradle to Cradle shows people how they can renew things in a progressive and pragmatic way we did not do before. It is an innovative and positive business model with a starting point that everything is designed to be a nutrient for something else.

With this view, we cannot allow toxic substances in the material flow system, i.e. the two cycles of technical and biological nutrients. To enhance the quality and value of materials and products, they become beneficial for human health and nature while improving profitability and cost effectiveness. Besides, it helps companies to become less dependent on scarce resources and increasing prices of raw materials. The goal is to start up material banks where materials maintain their status as resources and can be used over and over. The big difference between Cradle to Cradle and the circular economy is that it is not only about the materials. The C2C certification involves also the quality of the products, the use of renewable energy, effective water management and social equity. This design frees us from our current responsibility to reduce any negative environmental effects our behaviour has. Moreover, customers are encouraged to buy the products or services so the organisation can accelerate its rate of improvement. These changes have to start in our economy and society; there lies a Cradle to Cradle leader in each one of us. Do not celebrate what we have achieved, but celebrate our inventiveness, creativity and diversity. Only then, are we able to bring the humanity back and enjoy life.



**MICHAEL
BRAUNGART**
Pioneer of the Cradle to
Cradle design concept

Professor Dr. Michael Braungart is founder and Scientific Director of EPEA, the Environmental Protection and Encouragement Agency in Hamburg, Germany, which was founded in 1987; co-founder of McDonough Braungart Design Chemistry (MBDC) in Charlottesville, Virginia and founder of the Hamburger Environmental Institute (HUI).

For decades, Prof. Dr. Michael Braungart has pioneered the Cradle to Cradle design concept. He has worked with a number of organizations and companies across a range of industries, and has developed tools for designing eco-effective products, business systems and intelligent materials pooling.

Prof. Dr. Michael Braungart holds the Academic Chair Cradle to Cradle for Innovation and Quality at Rotterdam School of Management, Erasmus University (RSM) and holds professorships at several other universities in Germany (Leuphana University, Lüneburg; Munich University of Technology) and the Netherlands (Delft University of Technology; University of Twente).



**FRANS
TIMMERMANS**
First Vice-President of the
European Commission

A TRANSFORMATIVE AGENDA: INVESTMENT for SUSTAINABLE GROWTH

by Frans Timmermans

The global recovery is continuing after the financial and economic crisis, but the situation remains fragile. Therefore, the overarching priorities for the new Commission are job creation, economic growth, fairness and democratic change. We have to give our economy a new boost so that people regain trust and confidence

in their future, their children's future and Europe's future. Investment is one of the keys to growth.

“ We need growth in order to create jobs, but not any kind of growth and not any kind of jobs. We want green growth. ”

We need growth in order to create jobs, but not any kind of growth and not any kind of jobs. We want green growth, contributing to a sustainable long-term agenda in which social cohesion, environmental protection and economic success go hand in hand. We need a transformative agenda to realise this. That's why, less than a month after taking office, the Commission presented its €315bn Investment Plan for Europe.

Investment in Europe is 15% below pre-crisis levels. In the short term, weak investment slows our economic recovery, in the longer term it hurts our global competitiveness. Our investment plan will attract €315 billion of public and private investment into the EU economy over the next three years (2015-2017).

A decisive step to meet the long-term needs of our economy by boosting competitiveness in strategic areas. We will set aside a quarter of the financing capacity for SMEs and emerging companies, who are the innovative job creators of the future.

We are moving fast to put our plans into action, and less than two months after announcing our plans, we put forward a legal proposal for their implementation. The most visible strands of our investment roadmap are the European Fund for Strategic Investments (EFSI), the project pipeline submitted by Member States, and an advisory hub to provide technical assistance to make sure that finance reaches the right projects.

Frans Timmermans is the First Vice-President of the European Commission, in charge of Better Regulation, Inter-Institutional Relations, the Rule of Law and the Charter of Fundamental Rights. He also has horizontal responsibility for sustainable development.

Previously Commissioner Timmermans was a member of the Dutch Parliament representing Partij van de Arbeid (Dutch Labour Party) and has held various positions including Minister of Foreign Affairs and Minister of European Affairs.

Commissioner Timmermans studied postgraduate courses in European Law and French Literature at the University of Nancy and a degree in French language and literature at the Radboud University Nijmegen.



proposals before the end of the year to complete the circle and support the shift to a new vision of design, sourcing, production, repair, re-use and recycling. We must look further than waste reduction targets and truly boost both intelligent product design and the market for recycled materials. This will help build a new generation of European businesses with innovative technologies which export clean products around the globe and create sustainable jobs in Europe.

Our Investment Plan will support this transformation. Circular economy and energy efficiency projects will be eligible for EFSI funding. I am convinced that this Fund will make a substantial contribution to green growth. As investment decisions will be based on the economic viability of the projects, their EU added value and maturity, I believe that many projects that contribute to the transformation of our economy into a low-carbon and circular economy will be selected.

Without investing in this new direction for our economy, Europe will inevitably become less competitive, less attractive and less economically viable, which will erode our social welfare model. Our economies cannot rely on imports of increasingly scarce raw materials, nor can we keep using the Earth's resources in a finite way. There is a global market for new products, new sources of energy and new skills which Europe has the potential to deliver. Let us invest in it today to ensure Europe's long term prosperity.



The other fundamental strand of our investment plan is the creation of an improved investment environment. To encourage investors to spend their money in Europe, our regulatory framework needs to be clear, predictable and stable. This is particularly true for long-term investments. For example if we want a private sector investor to support a major renewable energy project, he or she needs certainty about the policy vision and relevant upcoming legislation regarding energy targets and emission levels. Or what about a young European entrepreneur who wants to develop a

business recycling plastics to use them as secondary raw material for recycled products? He or she will want to know about the EU's ideas for the circular economy, and what potential incentives there are to create such a business.

Let me be very clear on our message to investors: we are building an environmentally and socially sustainable future for Europe, and we want investment to help us do it. In October 2014 European leaders adopted a forward-looking energy and climate framework, leading us towards a low-carbon and resource efficient economy.

This year we will revise the Emissions Trading System, making it more effective and we will take action for a European Energy Union. This flagship initiative of the Juncker Commission will reduce our carbon footprint and dependence on fossil fuels, and aid the transition to renewable energy sources. It will also strengthen Europe's position as a competitive global leader in the green energy industry. If the Energy Union is to be a success it has to be about transition.

The circular economy will help to create jobs too. We will present new

SUSTAINABLE URBAN TRANSPORT

IT'S TIME for ACTION

by Lucy Anderson

In 2010, more than 70% of European citizens called a city or larger urban area home, with recent estimates suggesting that this figure will reach 82% by 2050.

Our cities are the drivers of growth and economic activity, generating over 80% of EU GDP. But they are also often very unequal places, with extreme divisions between rich and poor, and with inadequate attention given to the needs of disabled people, the elderly,

children and others who are vulnerable. In some cities, housing costs are so high in central areas that many workers must live in more suburban areas and face long and expensive commutes. In many cities, the existence of 'urban sprawl' can make it harder to implement



greener and safer transport policies. In overall terms, it is widely recognised that providing sustainable, affordable and integrated public transport in and around urban areas can play a key part in creating fairer, healthier and more socially equal cities. Supporting and promoting walking and cycling in particular should be a high priority. The sustainable urban transport agenda is something that we can all be proud to campaign for.

Achieving sustainable urban mobility in the EU has long been a goal for centre-left politicians but sufficient funding and investment has been lacking. European Commission studies have concluded that there is a huge increase needed in funding requirements to 2040 and beyond in both capital and revenue for sustainable urban transport.



The annual EU urban transport operational subsidy requirement alone has been projected to increase from €13.1 billion in 2010 to €24.1 billion in 2040 (in 2010 values).

The EU allocated €10.7 billion between 2000 and 2013 to co-finance projects helping cities to implement urban transport such as metro, trams and buses. It is clear that this focus and funding is a helpful catalyst, but that so much more must be done by national, regional and local authorities to achieve the levels of investment and support

required. It is also a complicated issue, linked closely with planning and wider development policies. As pointed out by the Committee of the Regions, it is hard to benchmark sustainable urban mobility effectively because cities and urban areas frequently have very specific characteristics and problems. The development of 'smart' technologies and approaches in transport policy can also help considerably, for example on vehicle safety issues, travel connections and ticketing. The work done on this at European level and in many cities has been positive and should be continued.

We also know that providing sustainable public transport in cities is critical to tackling and adapting to climate change. Urban areas account for around a quarter of all carbon emissions from transport. Equally, the quality of the air in some of our cities is unacceptable and in breach of European-wide legal limits, largely because of pollutants from vehicles of all types. The EU has ambitious targets that would help; by 2030 to halve the use of 'conventionally fuelled' cars in urban transport, and to eliminate their use by 2050. In addition, the aim is to achieve essentially carbon-free movement of goods in major urban areas by 2050.

From a progressive perspective, fair treatment of transport workers and those in related sectors in cities, and the important role that they play in ensuring the quality and safety of public transport, is often overlooked. Urban public transport operators in the EU provide around 1.2 million jobs. Given the amount of EU funding for 2014-2020 said to be made available for transport projects through the Investment Plan, Connecting Europe Facility, and other funding streams, there is also a particular issue about making sure that these funds help create both more and better jobs in affected sectors. Part of taking account of the position of the workforce in cities should be for social dialogue at all levels to be formally encouraged.



LUCY ANDERSON
Member of the European Parliament

Lucy Anderson was elected as a Labour MEP representing London at the last European elections in 2014. She is a member of the Transport and Tourism Committee and a substitute member of the Internal Market and Consumer Protection Committee, with a particular interest in sustainable transport, passenger rights, improving accessibility and ensuring quality jobs in the transport sector.

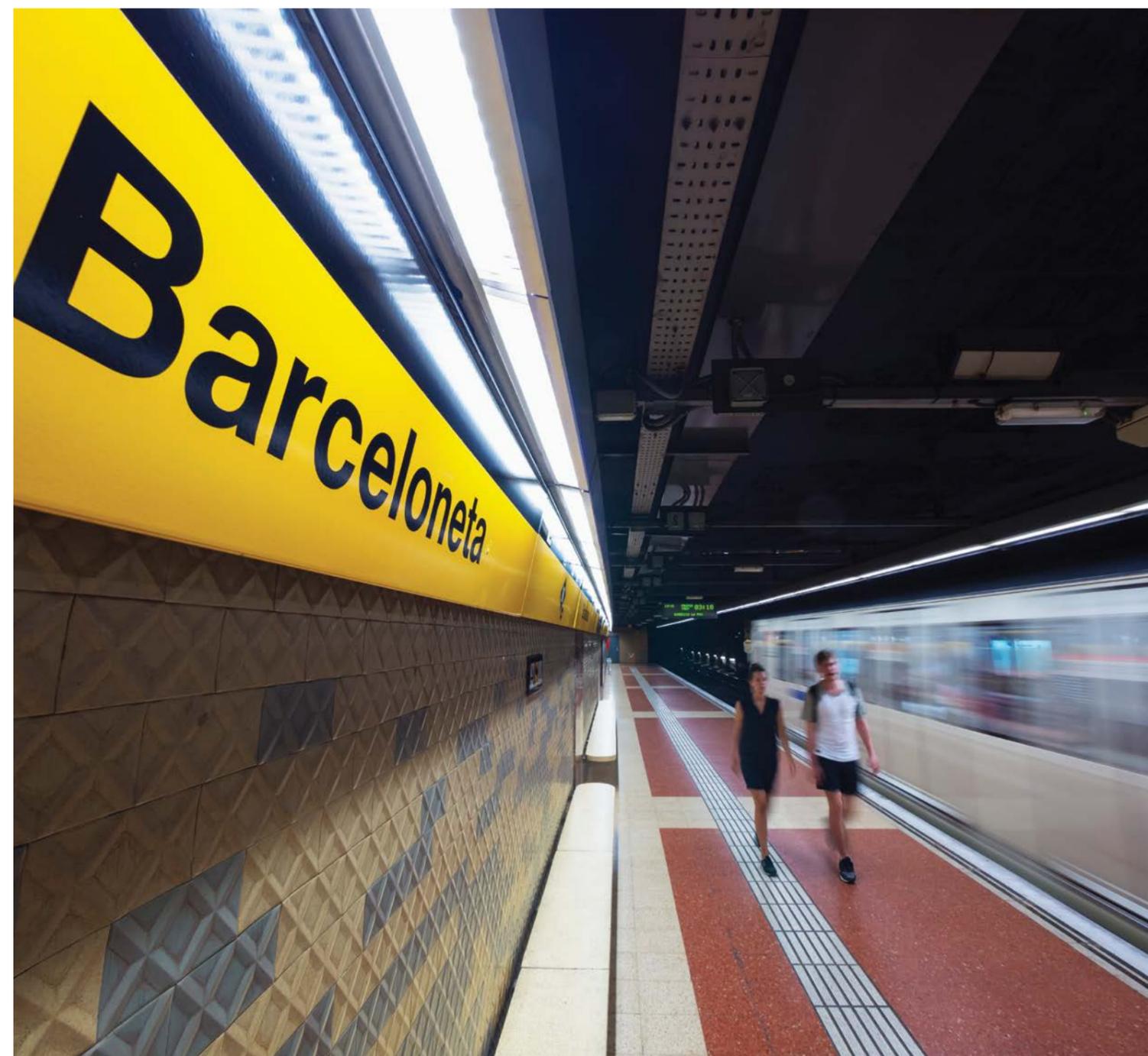
Lucy is a qualified solicitor and trade union activist, whose previous positions included posts at the National Union of Teachers, Greater London Authority and Trade Union Congress, as well as representing the London Borough of Camden as an elected councillor.

Road safety in urban areas is an area where there is also a strong argument for tougher European-wide action, as part of sustainable transport policies. According to the 2013 Eurobarometer survey on urban mobility, 73% of European citizens consider road safety to be a serious problem in cities. In 2012, there were 11,000 road deaths in urban areas across the EU, around 37% of which were pedestrians. Citizens who are over 65 are over-represented in these figures. In 30% of all fatal accidents in urban areas, the victim is elderly. A disproportionately high proportion of deaths and serious accidents in urban areas are caused by heavy goods vehicles. However well-designed such vehicles may be, there is still a major concern about their sharing city road space with cyclists and other vulnerable road users.

On most of these issues, the European Commission is pushing in the right direction, but should clearly be making sustainable urban mobility much more of a priority. Current debates in the European Parliament and more widely on the implementation of the 2011

Transport White Paper and the 2013 Commission Communication on Urban Mobility are illustrating this. Business and public sector organisations are united with environmental and safety campaigning groups on the need for rapid progress. The politically difficult issues of addressing congestion and reducing carbon emissions and pollution through road user charging or other 'modal shift' incentives are often being ducked. Subsidiarity is a valid consideration, but given the overwhelming case in favour of sustainable transport policies, it could be argued that the balance here is shifting. For example, there is a developing consensus that sustainable urban mobility plans are an important strategic instrument, and that more mechanisms should be explored to ensure that they are put in place in cities. This could include making EU-level funding conditional not only on having such plans, but also on their containing concrete action on key target areas such as road safety, accessibility, tackling climate change and air quality.

Our cities are the drivers of growth and economic activity, generating over 80% of EU GDP.





CLEAR the AIR

by Christer Ågren

You must breathe to live. Every day you inhale some 10 000 litres of air, and you expect - or even presume - that air to be clean air. But it is not. Actually, breathing may kill you.

Almost all urban citizens are exposed to pollutants at levels deemed unsafe by the World Health Organization (WHO), resulting in nearly 450 000 premature deaths in the EU in 2011. This means that the toll of air pollution, much of which comes from cars and trucks, is more than ten times greater than the number of deaths from road accidents.

More than 95 per cent of these premature deaths are caused by fine particles (PM), the remainder by ground-level ozone. This comes on top of extensive morbidity effects that affect a much greater number of people.

For example, each year the current levels of PM are estimated to be responsible for around 100,000 cases of respiratory or cardiac hospital admissions, 35 million respiratory medication use days, several hundred million restricted activity days, and more than 100 million lost working days. Air pollution particularly affects vulnerable groups such as infants, children, the elderly and those suffering from asthma, allergies and other respiratory diseases.

While some may find it distasteful to put monetary value on human life and health, this is done for the purpose of cost-benefit analyses. For the year 2010 alone, the external costs of health damage in the EU due to air pollution were estimated to amount to between €330-940 billion.

On top of these huge health impacts comes the damage to ecosystems and biodiversity, with vast areas of vulnerable ecosystems being exposed to deposition of acidifying and eutrophying air pollutants in excess of the critical loads – the limits of nature’s tolerance.

For air pollution, the EU’s long-term objective is “to achieve levels of air quality that do not give rise to significant negative impacts on risks to human health and the environment.” For health, this implies achievement of the WHO’s health guidelines, and for the environment it means that the critical loads and levels should not be exceeded.

These objectives are not new; they have in fact been in place since the EU’s 5th Environmental Action Programme (EAP) was adopted in 1992, and were again confirmed in the 7th EAP, adopted in 2013.

Minimum requirements for air quality are laid down in EU legislation, and the air quality limit values for maximum allowed concentrations are not to be exceeded anywhere in the EU. It should be noted that the science-based WHO’s air quality guidelines are far stricter than the EU’s standards - for fine particulate matter (PM2.5), the EU standard is more than twice as high as the WHO guideline.

Many Member States are struggling to meet the air quality standards for PM and nitrogen dioxide, and as it looks now, the Commission will most likely have to bring several countries to the Court of Justice for failing to comply with the legislation.

Environmental, health and citizens’ organisations from across the EU have agreed three main priorities for action to improve air quality. They want:

- Ambitious emission reduction commitments for 2020 and 2025 in the revised NEC Directive that should lead to the achievement of the EU’s long-term objectives for air quality by 2030 at the latest.
- Specific legislation to cut emissions from all major source sectors, especially domestic heating, agriculture, shipping, industrial combustion, road vehicles, non-road mobile machinery and solvent use.
- Implementation, enforcement and strengthening of current EU air quality standards in light of the most recent recommendations from the WHO.



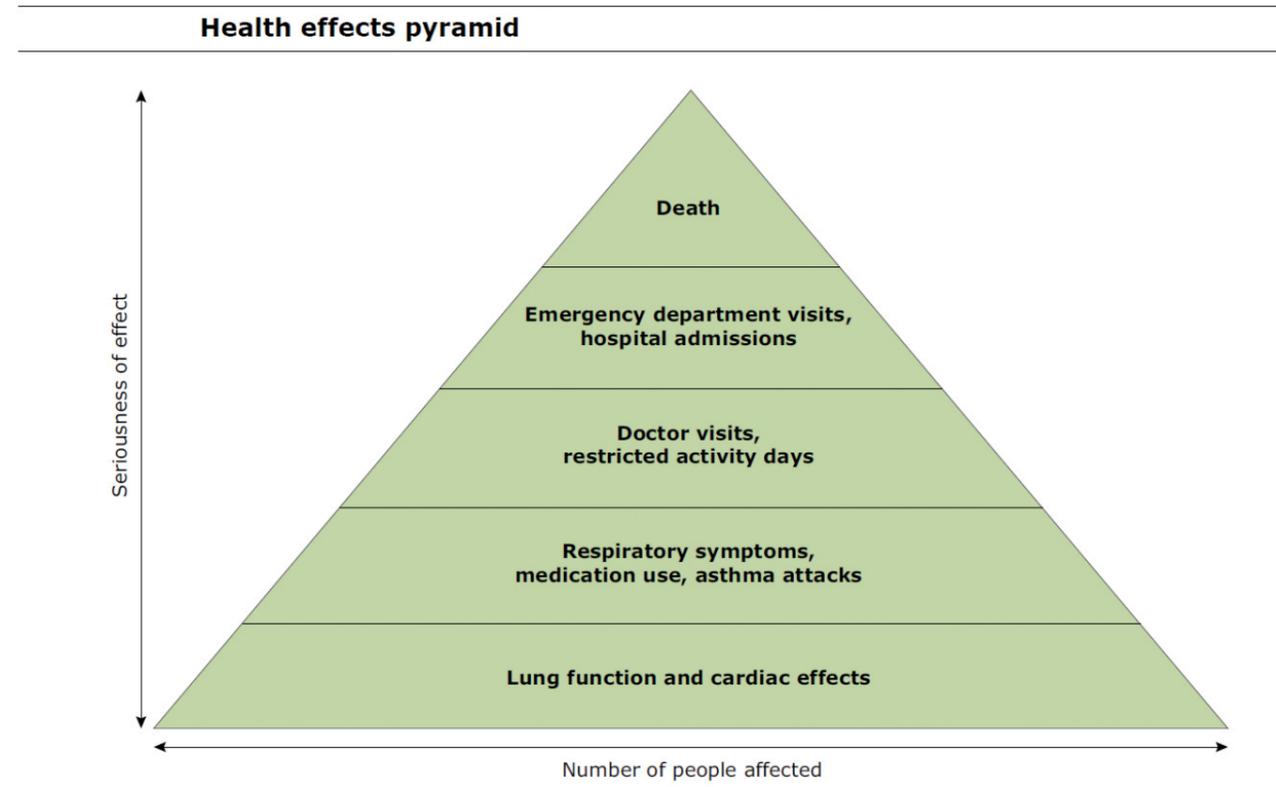
CHRISTER ÅGREN
Clean air campaigner

Representing the Air Pollution and Climate Secretariat (AirClim), Christer Ågren has more than 30 years experience of working with air pollution, including being an NGO-observer to the Convention on Long-Range Transboundary Air Pollution and to the air quality policy processes of the European Union.

Additional work experience includes being Head of Section at the Swedish Ministry of Environment and designated expert to the Environment Directorate of the European Commission, with the main task of developing an EU Strategy to Combat Acidification.

Christer was editor of AirClim’s quarterly magazine Acid News from 1982 to 2012, and is author, co-author and editor of numerous articles, reports, and books on air pollution policies and related environmental problems, such as health impacts, acidification and eutrophication.

AirClim is a Swedish environmental organisation focussing on reducing emissions of air pollutants and greenhouse gases. AirClim is a member of the European Environmental Bureau. More information: www.airclim.org.



Source: Based on US EPA.

At the very end of the EU's "Year of Air", on 18 December 2013, the Commission finally presented its long-awaited new clean air policy package, including a proposal for Member States to further cut their national air pollutant emissions up to 2030 by revising the National Emission Ceilings (NEC) Directive. The proposal is currently being debated in the European Parliament and the Council.

It has been speculated that one possible motive for the Commission's lack of ambition in the proposed new NEC Directive is that the costs of implementing stricter emission ceilings would be high and that they would particularly affect the newer Member States.

However, the Commission's analysis shows that the incremental annual air pollution control costs for the EU as a whole would amount to €3.3 billion

in 2030, which would equal just 0.02 per cent of the EU's GDP in that year. In everyday terms, this would cost each EU citizen just €6 each year, or less than two eurocent per day.

Comparing the estimated costs with the monetised health benefits of implementing reduction targets proposed by the Commission shows that the benefits of action exceed the costs by up to 40 times.

Moreover, the EU's new climate and energy policy for 2030 opens the way for setting more ambitious clean air targets and at the same time cut air pollution control costs, as shown by a new impact assessment prepared for the European Parliament. Phasing out fossil fuel use by improvements in energy efficiency and increased use of less- or non-polluting renewable sources of energy will result in significantly lower emissions of the key air pollutants

sulphur dioxide, nitrogen oxides, PM and mercury.

Practical application of new and improved emission control techniques must be part of the solution, but minimising the use of fossil fuels is key to resolving both climate change and air pollution.

An ambitious revised NEC Directive would spur necessary emission abatement action across the EU, thereby facilitating compliance with the air quality standards. It would also bring significant health, environmental, and socio-economic benefits. Whichever way you look at this problem, the benefits of clean air far outweigh the costs.

Percentage of the urban population in the EU-28 exposed to air pollutant concentrations above EU and WHO reference levels (2010–2012)

Pollutant	EU reference value	Exposure estimate (%)	WHO AQG	Exposure estimate (%)
PM _{2.5}	Year (25)	10–14	Year (10)	91–93
PM ₁₀	Day (50)	21–30	Year (20)	64–83
O ₃	8-hour (120)	14–17	8-hour (100)	95–98
BaP	Year (1 ng/m ³)	24–28	Year (0.12 ng/m ³)	85–89
NO ₂	Year (40)	8–13	Year (40)	8–13
SO ₂	Day (125)	< 1	Day (20)	36–43
CO	8-hour (10)	< 2	8-hour (10)	< 2
Pb	Year (0.5)	< 1	Year (0.5)	< 1
Benzene	Year (5)	< 1	Year (1.7)	10–12

Colour coding: < 5 % 5–50 % 50–75 % > 75 %

Note: The pollutants are ordered in terms of their relative risk for health damage, with the highest first.

Source: European Environment Agency: <http://www.eea.europa.eu/publications/air-quality-in-europe-2014>

10 WAYS to UNLOCK PRIVATE FINANCE for the NEW EUROPEAN ENERGY UNION



SANDRINE DIXSON-DECLÈVE
University of Cambridge
Institute for Sustainable
Leadership

by Sandrine Dixson-Declève

Europe's energy system faces a challenging risk landscape that threatens security of supply, economic prospects, and our ability to address climate change. The Energy Union concept is, at its core, recognition that these risks cannot be contained within national borders or managed in isolation from each other.

The Energy Union Strategy Framework is a unique political opportunity to ensure adequate and sustainable finance is made accessible to deliver a secure, competitive and decarbonised energy future.

The scale of the challenge calls for a collective, integrated and coherent response, based on better demand management and the development of low-carbon infrastructure.

Government action is needed now to drive solutions on the demand-side of the energy system as well as on the supply-side.

GRAND MARSHALL PLAN

To my mind, the Energy Union could work as a 'Grand Marshall Plan', with the clear purpose of driving forward low-carbon investment and creating new jobs. It could unite Member States around one single vision, as long as we include transition plans for those countries and industries that have a large carbon footprint and core energy security concerns. There is particular scope to link up the Energy Union concept with President Juncker's Jobs, Growth and Investment Package and the Capital Markets Union process. We need a European energy

investment strategy and a structural reform package to take all of these different initiatives into account and kick-start a competitive EU-wide market for renewables, energy efficiency and carbon capture and storage.

Finance risk should be shared between governments and investors. For this to work however, we need to develop a privatised energy market that is more inclusive of prosumers and citizens, alongside institutional sources of investment and finance products such as green bonds.

UNLOCKING PRIVATE CAPITAL

The importance of private capital in financing the transition to a low-carbon economy is widely acknowledged, yet most private capital is invested in the existing economy, and shows little sign of moving. Government action is needed now to drive solutions on the demand-side of the energy system as well as on the supply-side.

Here are ten actions policy-makers should undertake in the short-term to unlock capital flows towards medium and longer-term energy investments and help to create a resilient Energy Union:

1 Redirect savings: Huge pools of finance managed by European institutional investors, many of them in public or near-public schemes, or private companies benefiting from tax subsidies, should be mobilised much more effectively behind Europe's low-carbon energy and economic goals.

2 Increase transparency: Investors must be in a position to discriminate between high-carbon and low-carbon assets and, in particular, to understand their exposure to 'carbon risks' as well as 'carbon impacts'. Governments should make it compulsory for relevant companies to disclose their carbon risks and impacts using standard methodologies.

3 Stress-test: To be able to define appropriate regulation, financial regulators should recognise that the economy's structural bias towards high carbon infrastructure may pose threats to financial stability. Established stress-testing regimes (e.g. within Basel III and Solvency II) should be harnessed to develop better understanding of such exposures, and new techniques developed where necessary.

4 Invest wisely: State-owned finance institutions should ensure that their investment strategies are consistent with the goals of both the EU 2030 Climate and Energy Package and the Energy Union. Equally, government-enabled mechanisms designed to channel alternative flows of private finance, such as the European Long Term Investment Funds (LTIF), should be required to direct funds into low-carbon investment.

5 Incentivise public participation: Governments should encourage Europe's citizens to invest their savings in developing low-carbon infrastructure. For example, policy-makers could require financial intermediaries to provide greener alternatives to mainstream retail finance products and incentivise their uptake through improved rates of return; and facilitate the smooth implementation of regulations to ensure clean energy investment funds are able to grow.

6 Make low-carbon investments more attractive than business-as-usual: Governments must agree long-term, stable policy conditions that do not compromise the economics of low-carbon projects during their lifetime. We need a high carbon price, and the introduction of a Market Stability Reserve (MSR) to the EU Emissions Trading System as soon as possible. Fossil fuel subsidies should be phased out to provide a level playing field with cleaner energy alternatives. Depending on oil markets and pricing, we may also require well-designed feed-in tariff schemes for renewables (including clear phase in and out timelines).

7 Provide greater clarity: It should not be assumed that the customers of the finance sector deeply understand climate change policy. Clearer standards, support mechanisms and examples are therefore required for the industry to play an effective role. Policy-makers could introduce a label indicating the carbon risk and impact of an infrastructure project; standardise the rapidly growing green bond market; and take action to prevent barriers to investment.

8 Introduce risk-sharing mechanisms: As a transition measure, risk-sharing mechanisms such as public guarantees and 'first loss' finance would speed up capital flows. Clarity on such mechanisms available from EU institutions is required, with new (or rationalisation of existing) mechanisms introduced if they are found to be inefficient or sub-scale.

9 Utilise procurement and planning policy: Within their own estates governments can directly choreograph the low-carbon development of schools, hospitals and transport. Beyond this, interventions may be required to drive demand-side innovations such as large-scale retrofit of buildings, where aggregation is key and planning challenges can bring progress to a halt. Clear procurement and planning policies will give long-term investment signals thus enhancing investor interest and capital flows.

10 Take a joined-up approach: Private finance owners need to be convinced by governments that there is an overall plan, that the EU collectively understands what it wants out of the Energy Union, and will work systematically to achieve it. This will entail an integrated policy-making process from the start, spanning all national and EU governing departments dealing with energy, climate, markets, industry and finance.

LOOKING AHEAD

The list may be long, but if we get this right, private capital will flow in the right direction and help to develop a low-carbon, secure and future-proofed European energy system – as well as hundreds of thousands of jobs.

The companies CISL works with through The Prince of Wales's Corporate Leaders Group (CLG), the Green Growth Platform and our finance platforms, all believe that a low-carbon Energy Union done well could reinvigorate Europe's stagnant economy and keep business in Europe.

What we need now is the political will, courage and leadership to make sure it happens.

“If we get this right, private capital will flow in the right direction and help to develop a low-carbon, secure and future-proofed European energy system – as well as hundreds of thousands of jobs.”

HOW the ECONOMIC SYSTEM HAS CONTRIBUTED to INEQUALITY

by Jacques Peretti

We think of inequality as the unfortunate by-product of a market-driven economy, but it isn't. The near unfathomable disparity in wealth between the 1% richest and everyone else – described by President Obama and Christine Lagarde of the IMF as the greatest threat facing democracy in the 21st Century - is the direct consequence of not just structural change, but I would argue, a profound psychological shift in the way society perceives itself.



“ The 65 richest plutocrats now have the same wealth as 50% of the world’s population. It’s a staggering statistic, yet is so oft repeated, its been normalised. ”



JACQUES PERETTI
Broadcaster and journalist

Jacques Peretti is a broadcaster and journalist. His most recent BBC series *The Super Rich & Us* (about inequality), *The Men Who Made Us Fat* (about the food industry’s role in creating the obesity crisis) and *Spend* (about the political role of consumerism) have been shown around the world.

Jacques is a Ted talker and writes for *The Guardian* and *The Independent*. He is writing a book about the hidden story of global capitalism and his next BBC series will air later this year.

In the early 1980s, the mind set of government in the UK and US was quite simply re-programmed. The post-war social contract, bought into by successive Labour and Conservative governments, had been predicated on two intertwined ideas: fairness, and social cohesion. But with the collapse of the social contract and collective bargaining in the 70s, de-regulation of Wall Street and the City appeared to offer a bright new future. Markets not manufacturing were the future. Bankers not trade unions would power the economic recovery of the 80s. President Reagan and Prime Minister Thatcher carried out a neo-liberal pincer movement. By openly talking of government as the enemy: the reason for economic collapse, and hindrance to entrepreneurialism, public belief in government evaporated. The locus for who knows best for society shifted from government to business. Ironically, many in business were concerned about this. Society was no longer to be based on fairness but on competition, but for brutal competition to be sold to everyone as good for society as a whole, a new redistributive economic principle was needed. It came to permeate every strata of society, and was so widely believed, it was almost seen as natural law. It was called 'trickle down' and it would be the key driver for the inequality we face today.

'Trickle down' economics is nothing new. In the old days, it was called Divine Right. The idea that I matter and you don't. These are not the words of a rabid Socialist, but Nick Hanauer, the internet billionaire, who invested in Amazon. Part of a growing number of the 1% richest, deeply concerned about the damage to the fabric of social cohesion that he attributes directly to 'Thatcher-Reaganism'. So how did we come to accept it as 'natural'? A key component was the mathematization of economics. In order for society to believe inequality was a natural outcome of markets working well – the by-product of individual success and failure, economics was sold no longer as a political tool that can be manipulated, but immutable scientific law. In the early 70s, Wall street had pressed its own psychological reset button, in order to embrace the idea of risky

trading. It was sold to Wall Street not as gambling but as a complex mathematical equation: the Black Scholes formula.

Fischer Black and Myron Scholes were two Harvard economists who essentially said everything you know about trading



is wrong. All trading is essentially risky, they said, and the best way for Wall St to make serious money is to embrace risk rather than be cautious. By risking big, you win big.

By encapsulating their theory in a formula, they mathematised profit, but more importantly decoupled the financial sector from having any responsibility for its actions. Irresponsible, even criminal behaviour was above and beyond the

law, because it was economic law. Banking could now seal itself off from scrutiny. It was a license not just to print money but risk everyone's future.

But the turning of gambling into a science would go up a notch with Robert

Dall, a mortgage broker on Wall Street, who was the first to bundle mortgages together into a giant ball of debt that could then be used as a financial asset for trading. Dall had invented securitization - pass-the-parcel debt that would lead inexorably to sub-prime and the financial crash of 2007.

Just as traders were to be allowed to act as an independent state, so business should be encouraged to pay as little

tax as possible. The theory had a simple rationale: Instead of taxation being progressive, corporations and the rich should effectively calculate their own tax bill. As ex-HMRC tax inspector Richard Brooks puts it, a 'partnership' between business and the revenue was fostered.

Chancellor after chancellor lowered the corporate tax threshold, giving the nod and wink to companies to evade tax. It was no longer a civic duty to pay your taxes, but an entrepreneurial duty to avoid them.

A revolving door between the HMRC and the big tax firms concocting tax schemes for wealthy clients was created. Tax officials trying to do their job were, Brooks says, effectively passed over for promotion.

Trickle down had been endorsed as macro-economic policy. A justification for supply side neo-con economic policies in Britain and the US. But inequality was propelled in the 90s and 00s by massive differentials in pay and bonuses. The moment at which this changed was the Greenbury Report, set up by the UK Labour government to put a cap on 'fat cat' bonuses, but which had the opposite effect by tying executive pay to shares. When executives aligned themselves with shareholders rather than with their staff, a bridge was crossed. There was no longer a corporate culture of 'in it together', but a direct economic incentive in management extracting wealth by making job cuts and holding down wages for staff. Management culture had been reprogrammed to see competition as natural, just as government and society had been.

But thirty years on, economists believe we quite simply got it wrong. Wealth didn't 'trickle down' but in fact trickled up, from us - the 99% to the 1% richest: small businesses and ordinary tax payers picking up the tab big corporations and wealthy individuals were actively encouraged by successive governments not to pay.

Countries like Germany and Denmark that maintained higher taxes for the wealthiest grew no slower. Companies were willing to pay their way because they acknowledged their social role, and polls regularly showed 88% of the population were happy with paying their way too, because they saw the clear social benefit.

But here, of course, we went the way of reprogramming ourselves to believe in the natural law of 'everyone in it for themselves'. Not only were businesses given the tacit nod to avoid tax as a branch arm of entrepreneurialism, a raft of 'rent seeking' industries such as pay day loans were created, cynically extracting wealth from the very poorest in society.

The pinpointing of escalating inequality as a business opportunity has a distinct starting point. In 2005, Citigroup Bank in New York presented a report to their biggest clients, urging them to take advantage of the two fastest growing sectors of the 21st century: the super rich and the super poor.

Citigroup described the coming unequal society as an hourglass. In this theory, there would be economic opportunities at the top and bottom, but effectively be no more middle class - they would be squeezed out of existence.

Investors across the world took their advice, further fuelling inequality by pinpointing the chasm to make vast profits. But inequality really went into overdrive after the '07/'08 crash, fuelled by QE, 95% of the profits from which went to those with financial assets.

As economist Anatole Kaletsky has calculated, if the profits from QE had gone to British families rather than the rich, a cheque would have landed on every doormat in the country for £24, 000.

This would have kick-started a good old-fashioned Keynesian consumer boom because, unlike the super rich, whose money stays in the super rich bubble of Lear jets and Bentleys, we actually spend our money on stuff that puts cash back in the economy: fridges, cars, holidays.

As we are all now familiar, the 65 richest plutocrats now have the same wealth as 50% of the world's population. It's a staggering statistic, yet is so oft repeated, its been normalised.

Inequality, like global warming, has gone from an issue a handful of prescient experts such as Tony Atkinson (Thomas Piketty's tutor At LSE) identified in the 90s to unchallengeable mainstream thinking.

But to accept inequality as natural, or inevitable is, as Hanauer says, both 'economically idiotic, and morally wrong'.

The reason we have normalised inequality is because after decades of being told it is best for business, we all now view inequality as a natural, almost biologically determined inevitability, rather than the product of bad economics.



ACHIEVING SUSTAINABLE ENERGY for ALL

by Ana Pueyo & Emma Wilson

This year 2015 is critical for people working to deliver sustainable energy for all, with September's summit on the Sustainable Development Goals and December's Climate Change Conference of the Parties in Paris, where climate finance remains a key part of the agenda. The wide recognition of the importance of access to modern energy services for development is demonstrated by global initiatives such as Sustainable Energy for All (SE4ALL) or the Global Alliance for Clean Cookstoves. However, progress on global initiatives is slow due to rapid demographic growth and economic, political and cultural constraints. Much depends on national energy policy and regulation which can enhance or

constrain progress. In some cases, progress is happening faster at the local level where innovative enterprises can respond better to local needs and cultural norms to deliver locally appropriate energy services. A key challenge is striking a balance between public and private sector investment, and between the negotiation of large scale funds and the equitable dissemination of funds to reach small-scale entrepreneurs and low-income end users.

2.6 billion people, more than one third of the global population, currently rely on the traditional use of biomass for cooking and 1.3 billion live without access to electricity. The lack of access to modern

energy services is highly detrimental for development. It forces women to spend their days dealing with drudgery such as fuel and water collection, cooking with slow, inefficient and polluting fuels and stoves. It keeps children, mainly girls, away from school as support is required at home. It prevents school children from reading or doing homework after sunset. It keeps productivity levels low at home and at work, limiting opportunities to earn an income. Health impacts are critical, as the smoke from incomplete combustion of solid fuels indoors leads to high rates of child pneumonia, chronic obstructive pulmonary disease and lung cancer.

The situation is particularly acute in Sub-Saharan Africa where nearly 70% of the population lack access to electricity or face severe reliability constraints. Bad governance is a major barrier to further investment in electricity infrastructure. The public sector has been unable to guarantee adequate and reliable supply and regulation lacks the credibility to sustain long-term investments. Ineffective power sector reform resulted in hybrid power markets in the region with unclear responsibilities for state-owned utilities and uncertain access to the market for private actors. Low household consumption levels and artificially low tariffs – set to meet political promises – hamper cost recovery, while subsidies delivered through electricity tariffs are highly regressive. On the other hand, the cost of finance is high as a result of domestic capital scarcity and the requirement of high rates of return commensurate with high political, macroeconomic and regulatory risks. All this makes it extremely difficult for traditional electricity suppliers to balance affordability and financial sustainability.

The dramatic reduction of renewable energy costs (mainly solar), combined with dysfunctional African utilities and low rural consumption, challenges the traditional approach to electricity provision through a national grid as a solution to Africa's access gap. The International Energy Agency, for example, estimates that more than 50% of those without electricity could be served by off-grid alternatives. New decentralised models based on renewable generation and innovative payment schemes are gaining ground as a viable alternative. These initiatives frequently rely on government and donor funds for start-up and scale-up activities, research and development, and monitoring and evaluation. Exciting examples of these new business models include Azuri technologies, SunnyMoney, SteamaCo or Village Infrastructure, but there are many other entrepreneurs operating in the African market. These models make use of mobile phones for payment for services, crowdfunding for raising the initial capital, and/or pay-as-you-go schemes that remove the poor from the burden of up-front connection charges. Nonetheless, fossil fuels and a functioning national grid are still seen as key for African development and many governments place them at the centre of their economic growth and industrial development strategies – which poses a challenge to implementation of low-carbon

development pathways. Decentralised and centralised alternatives are expected to expand in parallel, which will require coordination from the national government.

Access to clean cooking is also vital for development in Africa. More than 80% of the population rely on traditional cooking, mainly with wood. This has significant consequences for health and the environment, with fuel wood collection identified as one of the main causes of deforestation in the continent. A key challenge with stoves is adoption of new technologies. Unlike mobile phones, clean cooking stoves have not enjoyed broad uptake, despite the efforts of governments, NGOs and multilateral agencies over several decades. A report by the Global Village Energy Partnership International on stove programmes in Uganda, Tanzania and Kenya notes that programmes have often tried to 'educate' the consumer on a particular type of technology instead of listening and responding to consumer needs, which has hampered the success of projects. Supportive efforts, such as standard setting, local testing centres, and loan guarantees have proven effective in creating an enabling environment for stove programmes to operate. The level of subsidisation is critical. For example, the Indian national stoves programme apparently failed due to full subsidisation of stoves, a policy which failed to engender a sense of ownership for the product among the users.

There is momentum for the provision of sustainable energy for all, with more global awareness, competitive prices for renewables, innovative business models and the ubiquitous mobile phone that enables access to finance and pay-as-you-go opportunities for the poor. However, this coexists with decreasing prices of fossil fuels and new discoveries of oil and gas in Sub-Saharan Africa, which may lead to a lock-in of more mature high carbon technologies. The urgency of providing access to modern energy and eradicating poverty means that African countries cannot wait for the international community to agree on global emission reduction targets to achieve these goals. Therefore, urgent and pragmatic approaches to financing and transferring clean technologies are needed for African countries to develop clean energy infrastructures compatible with their development goals.



ANA PUEYO & EMMA WILSON

Ana Pueyo is a Research Fellow at the Institute of Development Studies at the University of Sussex. Her research is concerned with inclusive green growth, looking in particular at the promotion of investments in clean energy that maximise poverty impacts. She is currently working on research projects in Sub-Saharan Africa dealing with green investment diagnostics, poverty impacts of minigrids in Africa and pro-poor access to electricity in Kenya. She has a PhD from the School of Industrial Engineering at the Technical University of Madrid, a master's degree from the London School of Economics and a bachelor's degree from Madrid's Autonoma University.

Dr Emma Wilson is a senior researcher at IIED and heads the institute's Energy Team. Her research focuses on the ways that enterprise and investment can be directed towards sustainable use of energy, locally and globally. Emma has over 16 years' experience of working on issues related to the oil and gas industry, community relations and corporate responsibility. Her current work ranges from analysis of effective models for delivering sustainable decentralised energy systems and services to responsible practice in large-scale energy projects. Emma has worked in Russia, Kazakhstan, Azerbaijan, Nigeria, Ghana and Qatar. She holds a bachelors and Phd from the University of Cambridge.

COP21 in PARIS: EUROPE'S COMMITMENT will be DECISIVE

by Laurent Fabius

In December this year, France will be hosting the 21st world climate change conference in Paris. The aim is to produce a universal agreement limiting global warming to 2°C compared to the pre-

industrial era by the end of the century. The task is of course complex, and as future President of COP21 my role will be to facilitate an ambitious compromise between the 196 Parties: 195 countries and the EU.

The stakes are environmental, but not exclusively. Combating climate change contributes also to combating poverty, inequalities, food insecurity and the spread of new epidemics. Combating climate change is fighting for development and peace. Climate action and development efforts go hand in hand. And so we need to stop looking at the problems – and solutions – separately.

Despite the complexity of the problems and certain prior failures, the chances of an agreement on this issue, which is vital for mankind, are real, for at least three reasons. Science: nowadays nobody, or nearly nobody, in Europe, questions the reality of climate change and its human origin. Political will is also going to play a major role, with increasingly strong international mobilization as shown by the European Union's commitment and that of the United States and China, which are the two largest global emitters. Lastly, the context has changed, particularly in economic terms, as we now have technological solutions that will allow our societies to enter the era of low-carbon development. We know, as do the private sector, that this vital change of path is possible technically, is viable, and will create jobs.

We are seeking to build for COP21 a "Paris Climate Alliance" based on four pillars: a universal, differentiated agreement limiting global warming to 2°C, national contributions, financial support to ensure equity and credibility for an effective agreement, and an "Action Agenda" to bring together all stakeholders – cities, regions, private sector and civil society – who, along with governments, take concrete action on the ground.

Talks on the draft Paris agreement began in February in a constructive atmosphere, but essential decisions remain to be made. The European Union has placed itself on the front line of the fight against climate change. It now needs to play a major role in the construction of an ambitious, fair, international agreement for COP21.

The EU needs to ensure it takes into account the lessons of the past. The experience of Copenhagen in 2009 showed the difficulty of the task and the need to make progress well ahead of the final phase. The points of view of countries that are not on the same development trajectory as us need to be taken into account fully, and concrete solutions need to be provided to reach a universal compromise.

On 6 March, the presentation of the EU's contribution ahead of the Paris Conference was a turning point. The European Union is responsible for almost 10% of the world's total greenhouse gas emissions. In its contribution, the EU committed to reducing its emissions by 40%, compared to 1990 levels, by 2030. It confirmed its long-term goal of reducing emissions by 80-95%, compared to 1990, by 2050.

In addition to that official contribution submitted to the United Nations, which was the second after that of Switzerland, the European Commission's communication of 25 February setting out the EU vision for the Paris protocol included several proposals. The first was the adoption in Paris of a more ambitious long-term goal than that of 2°C, in order to reduce global emissions by at least 60% compared to 2010 by 2050. It also proposed the establishment from 2020 of a transparent mechanism to review and follow up on national commitments. Lastly, it highlighted a commitment to mobilize more public and private funds for climate change in the countries of the South. The European Union thus confirmed its proactiveness in climate negotiations. Above and beyond those positive commitments, the European Union and all its Member States need to implement the international commitments they have made as soon as possible. That includes ratifying the Doha Amendment to the Kyoto Protocol, which extended the latter through to 2020.

All those actions are in the interests of both Europe and the wider world. Our future depends a great deal on the energy

transition begun in recent years. While contributing to achieving the 2°C goal of COP21, this major change in policy is an exceptional opportunity for all our countries. The energy efficiency measures that are being and will be implemented will help address numerous challenges, including cutting greenhouse gas emissions, reducing energy consumption and thus costs for citizens, and creating innovative jobs in Europe. That is the very aim of the "Energy Union" project proposed by the Commission.

In recent years, extreme climate events including heatwaves, floods and droughts have led to increasingly severe damage around the world (most recently in the South Pacific, in Vanuatu) and even in Europe. According to the European Environment Agency (EEA), the last decade was the hottest ever recorded in Europe, with European land area temperatures 1.3°C above the pre-industrial era average. The effects of climate change on health are also visible and concerning, with an increased spread of the vectors of infectious diseases in Europe. In short, Europe is not spared from the effects of climate change, and action is in Europe's best interests. The Commission and the Member States need to continue their advocacy work with regard to our international partners. The European Union has an essential role to play in the ongoing negotiations. On the strength of our experience in cooperation and our status as leading official development assistance donor worldwide, we have the responsibility to ensure the voices of the poorest, most vulnerable countries are heard. We need to ensure that the interests and needs of those countries are fully taken into account in the future agreement. We need to foster the establishment of financial and technological solidarity with them. We need to promote the expertise that has been acquired – particularly through the European Development Fund – in the implementation of projects with climate and development "co-benefits". Civil society, including young people, needs to be fully involved in our efforts.

The challenge is therefore considerable, and it is not an overstatement to say that mankind's very survival is at stake. The full commitment of the European Union and its Member States is a vital condition for the success of COP21.



LAURENT FABIOUS
French Minister of Foreign Affairs and International Development and COP21 President

Laurent Fabius was born in Paris on 20 August 1946. He is a graduate of the Ecole Normale Supérieure (ENS), attended the National School of Public Administration (ENA), and he holds an Agrégation in French language and literature. After ENA, he joined the French Conseil d'Etat as a Maître des Requêtes.

He was elected Deputy for the Seine-Maritime Department for the first time in 1978 and continually re-elected ever since. Laurent Fabius served two terms as President of the National Assembly, from 1988 to 1992 and from 1997 to 2000.

Laurent Fabius has held many ministerial positions during his career, including that of Prime Minister from 1984 to 1986. He was also Budget Minister from 1981 to 1983, Minister of Industry and Research from 1983 to 1984, and Minister for the Economy, Finance and Industry from 2000 to 2002. He is currently Minister of Foreign Affairs and International Development and has been in office since 2012.

Laurent Fabius is the author of six books and a specialist in economic and financial issues, European affairs, international relations, as well as paintings and sculpture. His latest book is entitled *Le Cabinet des Douze – Regards sur des tableaux qui font la France* (Editions Gallimard, 2010) and has won the Prix Montaigne award.



WHAT IS PROGRESSIVE ECONOMY?

Progressive Economy is an initiative launched in 2012 with a major objective: to generate a truly public and informed debate on **economic, social and environmental policy** at national, European and global levels and actively promote progressive thinking at academic and at political levels.

Initially a purely economic initiative, the scope has broadened to encompass the idea of sustainable development. We focus on the interplay between economic, social and environmental policies and how they work together in our progressive vision for Europe's economy.



In order to achieve this we organise **internal workshops** exploring the key issues in these workstreams, bringing together leading progressive academics, experts and politicians, both in the European Parliament and in national capitals across Europe. Alongside this we organise a number of **public conferences**, our largest being the **Annual Forum** which is attended by hundreds of people and webstreamed by thousands. Each year we commission the **Independent Annual Growth Survey** to be carried out by renowned economic institutes. It gives our political group a sound and credible basis with which to discuss the Commission's Annual Growth Survey. We also produce a quarterly **Journal** with to promote and publicise progressive ideas and have an active online presence through our website, Facebook and Twitter pages.



Through our work we have built and continue to build a **parliamentary network** of progressive MEPs and national MPs across the Member States of the EU. Through this we aim to strengthen the political cooperation between European and national parliaments to deepen the democratic input into European economic, social and environmental governance.



Alongside our political network we have built a large **academic network**, led by our Scientific Board, which is co-chaired by Jean-Paul Fitoussi and Joseph Stiglitz. This network is always expanding, with more academics with expertise in sustainability and social issues joining as we widen the scope of our work.



www.progressiveeconomy.eu

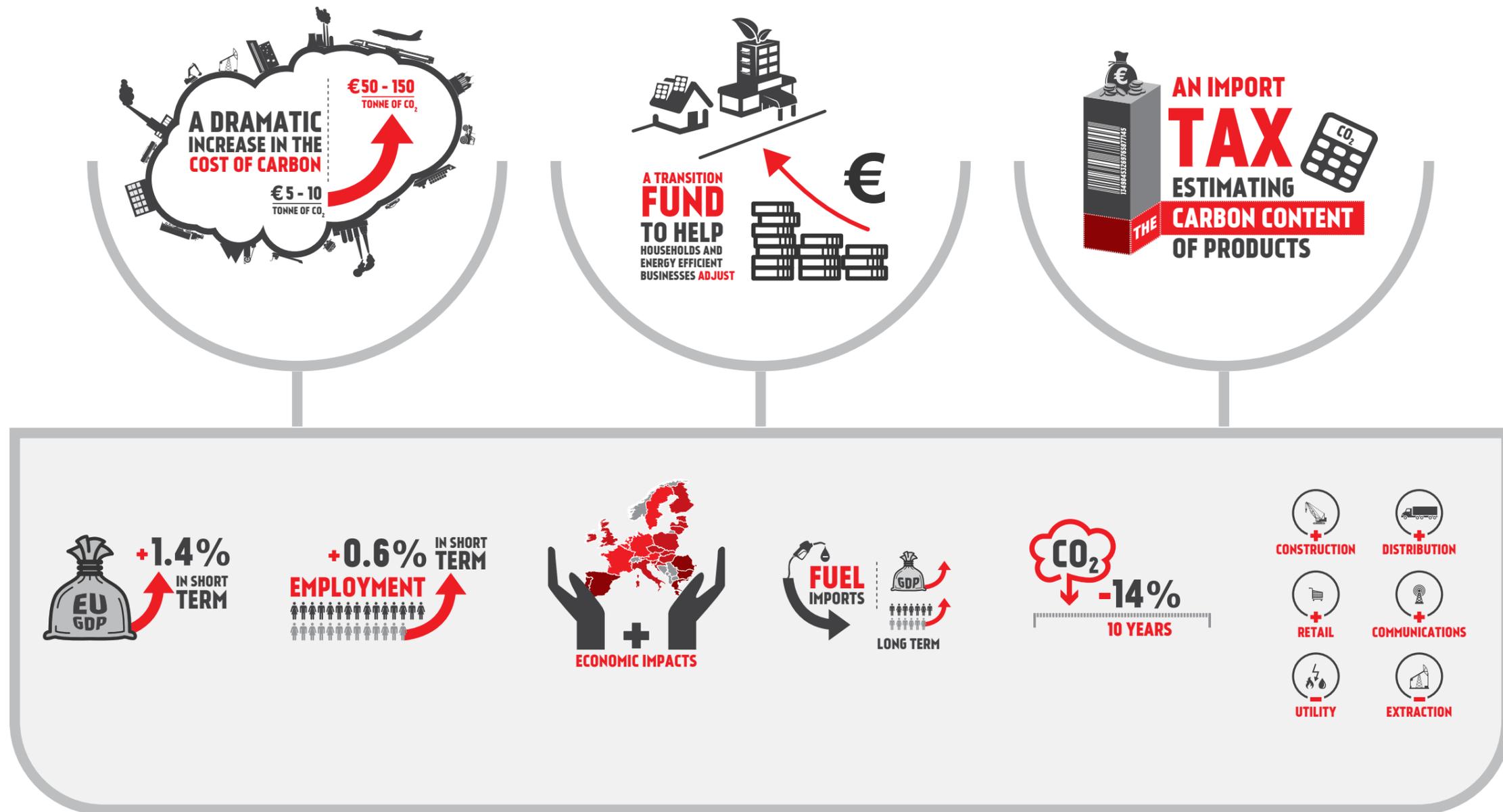


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Each year the Progressive Economy initiative commissions the *Independent Annual Growth Survey (iAGS)* to be carried out by renowned economic institutes. It has given the Socialists and Democrats Group a sound and credible basis with which to discuss the Commission's Annual Growth Survey, allowing us to gather an independent scientific alternative.

The *iAGS 2015* included a section on sustainability, and some of the main ideas are illustrated in this infographic. The full report can be downloaded at

www.progressiveeconomy.eu

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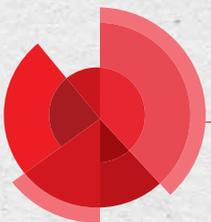
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