

A Green Deal will not work without refocusing productivity

Karl Aiginger argues that a welfare-oriented Green Deal
needs to focus on resource and energy productivity,
not raising labour productivity

The new president of the European Commission, Ursula von der Leyen, has announced a 'European Green Deal' as her concept for a new agenda. This makes sense: it promises to improve economic dynamics and to combat climate change, with its ever more visible consequences for all and particularly harsh consequences for the less-privileged.

The planned Green Deal, which supports wellbeing, is a coordination device and unifying programme for member countries. Its implementation calls for overdue fiscal reforms and altered behaviour on the part of politicians and citizens. However, the next climate summit in Glasgow will require better preparation than the one in Madrid in December 2019.

The European Semester as a policy implementation instrument

At first glance, it looks as if the European Commission's bureaucracy has understood this. In a recent Communication to the Parliament titled *Annual Sustainable Growth Strategy* (European Commission 2010, 2019), economic growth is declared to be not an end in itself; it is asserted that Europe has to develop a new growth model towards its ambition to achieve climate neutrality, and that it is the task of the European Semester — the institution providing annual economic guidelines — to monitor this new strategy and its implementation in the member countries.

However, what follows looks very out of date and will destroy all envisioned change. The core problem is the uncritical use of the notion of 'productivity', which dominates what should be a sustainable growth strategy. The long-term trend of *declining productivity growth* is carved out as the core of European problems. The document states that Europe needs a transformation of its society based on the quadruple goals of productivity, stability, fairness, and environment, but it uses the term 'productivity' at least ten times without ever defining it or at least admitting that there are very different types of productivity.

The components of higher productivity

Let us try to fill this gap. Productivity means more output per input. We set aside how output is measured, as this may be a task for specialists. But what is all-important is that productivity can be considered more output per worker, more output by capital investment, or more output per energy and resource input.

All these partial productivities, together with a residual that is understood to be the effect of the innovation system, yield 'total factor productivity'. Let us also set aside the factor capital which is again difficult to measure (though rules exist).

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The problem is that in this Communication, productivity is implicitly understood to be the *increase in output per worker*, which is a partial aspect of *labour productivity*. This term has been at the centre of policy for the last decades, and it still preoccupies the thinking of misguided experts in the European Commission.

They do not even realise its advantages and disadvantages, especially when the increase in labour productivity is larger than that of resource productivity.

The advantage of rising labour productivity is that it could lead to more leisure, and if this is not welcomed, it enables higher output and higher wages.

However, its disadvantage is that if it is not accompanied by higher resource productivity, higher output will raise emissions and accelerate climate change. And it is a factor increasing the necessity for growth, if unemployment is not negligible.

Alternatively, increasing output per resource input allows for higher output without higher emissions (Aiginger and Rodrik 2020). If this 'nice cousin' of labour productivity is strong enough, we can enjoy higher wages and well-being together with strictly lower emissions, which is called 'absolute decoupling'.

The goals of the Paris Agreement require deep decoupling. Without strongly increasing resource productivity, higher output will undermine the fight against climate change.

The policy-induced technology bias must change

Thus, in a recent paper (Aiginger 2019), I argue that a welfare-oriented Green Deal needs to focus on resource

and energy productivity, not raising labour productivity. This is not public policy interference in naturally given technology trends.

The current economic policy is by far not neutral. It favours labour productivity, an ideology implicitly bought by the experts who wrote the Communication. Taxes are primarily raised on labour, making this factor expensive and forcing the firms to increase labour productivity. Emissions are not as highly taxed; if we calculate the subsidies for fossil energy, net taxes on fossil energy might be near zero or negative.

Thus, current policy biases the technology into labour saving. If the European Commission uses the word productivity without defining it, we must suspect that the European Semester will not promote the Green Deal adequately.

A better European Green Deal in a nutshell

Today, scientists are unanimous in stating that climate change endangers our planet. Political leaders have followed, in principle, by signing the Paris Agreement. But limiting global warming to 1.5°C requires cutting greenhouse gas emissions by 80–95%.

Global trends are at variance with this path¹. The US has announced it would exit the agreement, Brazil has opened its rain forests to commercial activity, China is investing heavily in new coal plants, and Africa needs energy to feed its tripling population. Regions feel they are being 'forgotten' and support populist leaders who decry the importance of climate change.

In this environment, Europe must take the lead. This is an obligation arising from history and past errors, but also a chance to become a technology leader in a dynamic technology field. The positive message — not so well known

but empirically proven — is that the leader will enjoy net benefits through an ambitious strategy due to fewer costs, lower tangible and human damage, and ability to shape the next technology according to its own preferences.

The reluctant follower — who always demands that others take the lead — faces higher costs for patents, licenses, and imported machines. Repairs are costly and acting in a state of emergency requires strong public intervention.

Stern and Porter have argued and presented some evidence for the first-mover advantage in sustainability (Porter 1990, Porter and van der Linde 1995, Stern 2007, European Commission 2010). As additional evidence, in Aiginger (2016 and 2019) I show that the countries leading in environmental policy in Europe – such as Denmark, Sweden, and Switzerland – are also leading in income and well-being rankings.

In my 2019 paper, I carve out five principles for the European lead:

- Emissions must be priced; subsidies for fossil energy must be curbed.
- Globalisation must be reshaped based on higher social and ecological standards enabled by international trade and investment agreements that are different from today's.
- Eliminating emissions by 90% and achieving climate neutrality requires new technology and energy sources, as well as boosting energy efficiency.
- A new strategy requires the greening of finance, new funds, products, and labelling.
- Behavioural changes are necessary, which require changes in education and training.

Currently, neither the world nor Europe is on the path to Paris, although the best performers in Europe have curbed their emission by 20% since 2000. Fortunately, the new president of the European Commission has called for Europe to “*strive for more*” and to design a European Green Deal.

The European Semester is a necessary tool for monitoring the strategy, but this will not work if the experts designing the general policy guidelines and the country-specific recommendations do not respect that the different components of productivity growth have different implications for the Green Deal’s targeted goals. ■

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Endnotes

1. *Emissions are currently, at best, stagnating worldwide; they are decreasing by about 1% per year in industrialised countries and have doubled in emerging economies over the past two decades (Aiginger 2019).*

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