

Growth, employment and climate protection – irreconcilable?

September 2012

Authors: Sebastian Hach, Dr Jochen Harnisch
 Edited by: Felicitas Birckenbach

Climate protection and qualitative growth

In order to effectively protect the climate and limit global warming to 2°C, it is important to also include emerging and developing economies in the climate protection efforts. This is the context in which climate protection projects aim to not only reduce greenhouse gas emissions in absolute terms but to increasingly contribute to placing the economic systems in developing and industrialising countries on a generally more environment and climate friendly basis (also an element of the "green growth" and "green economy" approaches). In this way, development and economic growth on the one hand and rising greenhouse gas emissions on the other are to be more strongly dissociated in the future, and ambitious climate protection is to be achieved as an important element of sustainable development (see box "Sustainability and qualitative growth"). In this context it will be necessary above all to explore and identify the positive secondary effects of climate protection projects in the specific partner context and to support them as important partial objectives in the implementation of projects with, among others, appropriate complementary measures and financing instruments.

In promoting sustainable development, KfW (business area development finance) supports growth and economic activity that respects the climate and the environment, and helps to demonstrate that experience and approaches tried and tested in Germany can be applied as elements of a sustainable growth path outside Germany as well (see box "Energy turnaround and green technology in Germany").

Accordingly, more than 60 % of KfW's commitments, or around EUR 2.7 billion, have a relevance to the climate and environment (as at the end of 2011).

Sustainability and qualitative growth

Sustainability has been an important objective of KfW's work for many years, and it is essential to its promotional mandate. In KfW's understanding, sustainability comprises ecologically sound, socially just and economically efficient development that improves the living conditions of the people and creates future prospects also for coming generations in Germany as well as in the developing and industrialising countries. An important topic in this context is climate and environmental protection.

Qualitative growth designates a development process aimed at achieving sustainable progress. Qualitative growth means increasing the prosperity of society as a whole, which is also expressed in improved distributional justice, equal opportunities, social protection, peaceful coexistence and the preservation of the environment.

The expressions "sustainable development" and "sustainable growth" consider that the concepts of sustainability and quality growth pursue similar intentions.

Climate-friendly growth and employment

In the context of climate protection as a crucial element of sustainable development and qualitative growth, the concept of green jobs is increasingly being used in analogy to the concepts of green growth and green economy.

Employment as one of the most important effects of growth can be achieved in two ways. In particular, climate protection projects can have positive secondary effects in the form of direct short and medium-term em-

ployment effects (e.g. for the sustainable management of forests or the construction and operation of facilities that generate electricity from renewable energies).

Besides direct employment effects, however, sustainable growth can also generate indirect, long-term employment effects. These occur particularly when structural effects emerge in the job market of a partner country as a result of transformations in industrial processes.



Water as basic resource.

Source: KfW Photo Archive / Fred

This can be the case, for example, when environmental technology enterprises are established, the necessary preconditions for qualifications and training are created and the economy as a whole increasingly adapts to sustainable practices. A familiar example is the renewable energies sector. Another is the transport sector because it helps create corresponding development and growth opportunities which, in turn, can have employment effects.

Although the sustainable growth concept usually places an emphasis on projects in the area of climate protection, projects in climate change adaptation can also have employment effects in the sense that they can safeguard existing sources of income and employment. For example, measures such as irrigation projects in regions particularly affected by climate change can help to sustainably secure

employment in agriculture which would otherwise be threatened in the near term by the consequences of advancing climate change.

In connection with employment effects generated by sustainable growth, the focus is often on aspects such as export opportunities and leadership in innovative technologies. In this context, Germany, which in recent years has created considerable employment in environmental technology enterprises and considers this high-technology sector an important element of future economic growth, can indeed be mentioned as a positive example. (See box "Energy turnaround and green technology in Germany"). Accordingly, the effects of the energy turnaround, among others, will also be assessed from this perspective.



Wind energy contributes to sustainable energy concepts. Source: KfW Photo Archive / Thomas Klewar

However, in analysing employment effects it must generally be taken into account to what extent existing jobs are replaced and new jobs are actually created. For example, when renewable energy systems are constructed, new employment will be created only if the same number of jobs are not lost at the same time by substituting fossil fuel-based generation capacity.

Particularly in the fast-growing emerging and developing economies there is considerable potential for designing necessary extensive new energy infrastructure investment in such a way that it contributes to climate and environment-friendly development. Then, if employment is created in environmental technology enterprises in particular, this can contribute at the same time to establishing climate and environmental protection practices sustainably in the partner country's economic structure. Overall, employment effects are a crucial element in the transition towards and acceptance of more sustainable economic practices.

Assessment from the perspective of climate policy

In general, the sustainable growth approach is suitable for supporting climate protection efforts in emerging and developing countries if the particular characteristics and priorities of a country are taken into account and integrated

Energy turnaround and green technology in Germany

Under the concept of the "energy turnaround", Germany is pushing ahead the gradual conversion of its energy supply on a sustainable and climate-friendly basis. The experience so far gathered in this regard may also be transferable at least in part to the development in industrialising and developing countries. According to the "Environmental Technology Atlas for Germany" published by the Federal Ministry for the Environment, "environmental technologies are among the most important future markets of the 21st-century. They ensure that environmental burdens are avoided from the outset or reduced, or that damage already caused is repaired. At the same time, their use supports enterprises in conducting their business efficiently and remaining competitive with scarce and increasingly more costly raw materials. Cost reduction potential can be tapped for enterprises in this area especially now, but also in the future. The Environmental Technology Atlas "Green Tech Made in Germany" has shown that environmental technologies and environmental innovations are important economic factors in Germany and that they have increasingly evolved into a motor for growth and employment. The global financial and economic crisis has done nothing to change this – the long-term trends remain stable.

into the country's own sustainable growth path. Pursuing this approach can also provide impetus for negotiations on a globally binding climate protection agreement that will include emerging and developing countries and will be necessary to reduce global warming to a sustainable level beyond voluntary climate protection commitments.

Despite the generally interesting elements of the sustainable growth concept, a variety of

obstacles hamper its implementation. Thus, a considerable part of the positive effects presented here, such as employment increases, must be considered rather as a long-term incentive.

What is problematic is that precisely countries with widespread poverty act or are forced to act in a more short-term manner and that, as a result, the idea of sustainable growth often provides what is at least initially only a limited incentive for investment in environmental and climate protection. Therefore, the concept tends to be more easily applicable to the more advanced industrialising countries, although in these countries as well the question must be asked to what extent the long-term positive effect to be achieved, such as employment increases, can offset the expected additional short-term costs and to what extent measures taken to bring about a transition to climate-friendly growth turn out to be economically



Sustainability requires protection of biodiversity. Source: KfW Photo Archive / Bernhard Schurian

attractive investments in the medium term. In order to help achieve climate-friendly development in emerging and developing countries and more strongly separate greenhouse gas emissions and resource consumption from economic growth, considerable additional costs will (therefore) initially have to be incurred. Consequently, development cooperation in environmental and climate protection must play the important role of financing part of this initial additional cost of sustainable development. To achieve this, however, it will be necessary to considerably increase financing amounts if projects are also intended to achieve transformative impacts in the meaning of a sustainable growth concept that goes beyond the immediate confines of the project. Also, long-term indirect employment effects that are particularly important for the sustainable transformation of the economic system will only come about, for example, if the industrial sector adapts to the changed requirements to a relevant degree. However, this can

only be expected to occur if instead of scattered environmental and climate protection investments large volumes of finance are made available to provide appropriate clear signals and investment incentives.

Another fundamental challenge is that transformative effects and, in particular, the employment effects produced by investment in environmental technology sectors have to be clearly evidenced. This would have to take into account, for example, the effects of the investments on other industrial sectors as well as the opportunity costs of an alternative use of the funds. Any existing fuzziness in the definition of which areas of employment can be classified as environment-friendly should

be clarified jointly between the donors and the recipient.

Conclusion

Climate-relevant projects and programmes can achieve positive growth and employment effects if the necessary preconditions are met, in particular in the areas of economic policy and education/qualifications (e.g. workers qualified in the use of the relevant technology). Initially, there will be additional costs in the short and medium term that should not hamper the financing of poverty reduction and development but should be covered by donor countries with funds that are proven to be additional.

Further information:

Competence Centre for Environment and Climate
info@kfw-entwicklungsbank.de

Internet:

[http://www.kfw-entwicklungsbank.de/ebank/EN_Home/Climate_Change/Climate -
_Facts and Figures/Documents/index.jsp](http://www.kfw-entwicklungsbank.de/ebank/EN_Home/Climate_Change/Climate_-_Facts_and_Figures/Documents/index.jsp)