The social contract for the transformation to a sustainable society proposed by the German Advisory Council on Global Change (WBGU) combines responsibility towards future generations with a culture of democratic participation.

Within the transformation towards sustainability climate protection has particular significance, for without abatement of anthropogenic climate change, the natural life-support systems of present and future generations are at risk. A primary goal for the transformation fields energy and urbanisation is therefore to switch to a development pathway with no greenhouse gas emissions from fossil fuel use, as far as possible, by mid-century, when the world’s population is expected to have increased to some 9 billion people (Box 2). A climate-friendly development pathway is also required for our land-use systems. To that end, a regulatory framework that is appropriate to deal with these challenges is required; this should be put in place following a broad social dialogue, leading to a consensus on the core issues facing society. In short, a social contract for sustainability is needed (Box 1). In this symbolic agreement, individuals and civil society groups, governments and the international community, business and science pledge to take on shared responsibility for protecting natural life-support systems through agreements on the conservation of global commons. A key element of this social contract is the ‘proactive state’ with greatly extended participation by citizens.

The key elements of the new social contract

- The aim of the new social contract is to preserve natural life-support systems for present and future generations.
- The social contract combines the ‘proactive state’ with more participation by civil society in a framework of local, national and global cooperation. Science has an important role to play in this context.
- The social contract should have a global reach. It should not be purely national in focus, as the major impacts of environmental change are transboundary in nature.
- In light of the inequalities in resource consumption, levels of development and development capacities within world society, the social contract must show due consideration for fairness, justice and equity.

Transformation as a democratic search process

The transformation to a low-carbon, sustainable society entails a searching and learning process and requires more democracy.

The historically unique challenge associated with the forthcoming transformation of society is that it is needed for reasons of insight, foresight and concern for future generations. The transformation should be rapid and should take place on a global and cross-sectoral basis. Efforts to address this challenge should not only focus on reducing greenhouse gas emissions, but should identify legitimate, equitable and durable solutions as the basis for sustainable development. Only a democracy can facilitate the debates that are the essential prerequisite for legitimate policy decisions. It provides the institutions vital to a transformation to a sustainable, low-carbon society. Only an open, democratic society can stimulate the necessary creativity in the search for the required solutions. The social contract proposed by the WBGU therefore envisages far more democracy. The democratisation trend which can be observed worldwide is likely to have a positive effect in terms of our capacities to manage the forthcoming transformation.
The concept of the social contract originates in modern philosophy, which provides the basis for our system of governance and political authority. In line with this model, individuals unite of their own free will in political communities, agreeing to uphold common rules and accept corresponding duties for mutual benefit. The social contract was a radical concept because it no longer saw the individual as part of a God-given order but as an autonomous being with responsibility for shaping society. Earlier versions of the concept can be found in the political philosophy of Ancient Greece. The concept of the social contract is a central element in social contract theory, indeed giving it its name. The foremost proponents of classical social contract theory are Thomas Hobbes (1588–1679), John Locke (1632–1704), Jean-Jacques Rousseau (1712–1778) and Immanuel Kant (1724–1804). Broadly speaking, there are three strands within social contract theory: the state-centric approach, which contains an inherent risk that the state’s apparatus will become overly powerful; the radical democratic approach of volonté générale (the ‘General Will’), which threatens to become debased as a ‘Reign of Virtue’; and property-owning individualism, which tends to ignore the divide between the weak and the strong. The sociologist and philosopher Ralf Dahrendorf, in his Fragmente eines neuen Liberalismus (Fragments of a New Liberalism), describes the social contract as an ongoing task for civil societies to guarantee ‘all the fundamental freedoms for everyone, to remove the barriers to personal development for as many people as possible, and to create an encouraging climate for creative innovators’. The WBGU’s own proposals for a social contract tie in with these components of Dahrendorf’s model.

The proactive state with more participation

The central element in a social contract is a proactive state which gears its actions towards sustainability and involves its citizens in decision-making to a greater extent.

The state has a key role to play in the transformation process. The liberal constitutional state is primarily focused on maintaining public order, the welfare state’s main concern is the wellbeing of its citizens, while the enabling and guarantor state safeguards the fulfillment of public functions. The proactive state, as defined by the WBGU, actively sets priorities for sustainability (e.g. the Energy Concept adopted by the German government in 2010; the Federal Soil Conservation Law 1998) and flags them up by providing appropriate incentives. It sets itself targets for climate and energy policy or for the conservation of biodiversity, for example, creates an appropriate macro framework and establishes effective legal mechanisms. By doing so, the state safeguards long-term stability as the prerequisite for planning and investment, offers citizens and the business community options for sustainable action, and creates scope for appropriate experimentation. The proactive state thus upholds the tradition of the liberal constitutional democracy but develops it further with a view to achieving a sustainable democratic polity and free civil society. It also takes account of the natural environment’s limits (guard rails or planetary boundaries) as the framework for social and economic development. Whereas sustainability and climate protection are often seen as imposing limitations and requiring unreasonable levels of self-deprivation, the proactive state encourages citizens to take action, with the explicit aim of maintaining – and if possible expanding – the freedoms, scope and opportunities of present and future generations.

Strengthening democratic participation and a long-term orientation

The proactive state, as the WBGU sees it, is inseparably linked with active citizenship and more opportunities for public participation, access to information and legal redress.

Sustainability-minded actors in the economy, science and civil society have an important role to play as drivers of transformation, for they set the process in motion and endow it with the requisite legitimacy. Reformed approval procedures allow citizens to participate actively in the relevant planning and authorisation processes, and such participation from an early stage can help to speed up decision-making. An enhanced right of associations to take collective legal action and the appointment of ombudspersons will increase society’s opportunities to exert influence and control. In addition to expanding the processes for citizens’ participation, the WBGU proposes the establishment of a ‘future chamber’ as an extension to parliamentary procedure, in order to focus policy-making more strongly on sustainability and a long-term view, with membership of the chamber being decided by drawing lots in accordance with constitutional requirements. This ‘future chamber’ would have to be consulted on relevant policy agendas but the use of a veto by the chamber would, at the most, result in an item’s postponement. These proposals, as formulated by the WBGU, are intended to enhance the credibility and functionality of representative democracy and equip it to deal with future challenges.
Breathing life into the social contract: change agents

Change agents have a central role to play in the transformation process as pioneers and drivers of change. Change agents are defined as individuals or small groups which are initially involved as marginalised protagonists but gradually increase the impact of an innovation until it finally becomes established as a new social routine (Figure 1). Change agents pioneering the transition to a low-carbon society are now embedded in all sectors of society. Indeed, in many countries, they hold positions that can claim acceptance by the majority, and they are found in business, public administration and civil society. Many cities around the world are already implementing low-carbon, future-oriented strategies. In major corporations, the small departments originally set up to handle corporate social responsibility issues have in many cases evolved into ‘innovation centres for future-proof markets’. Consumers are showing a growing interest in the social and environmental conditions under which the products that they consume are produced. In the scientific arena, research networks have been set up to study the transformation to a low-carbon society. The proactive state, citizens and change agents are thus key players in the transformation process.

Box 2: Sustainability, climate protection and energy systems

The aim of the transformation to a sustainable society is to protect natural life-support systems such as soils, biological diversity and freshwater resources. Protecting the climate is especially important in this context, for compliance with the 2°C guard rail is a prerequisite for sustainable development. Global warming above 2°C would jeopardise natural life-support systems. But time is running out: the current greenhouse gas emissions trend must be reversed within this decade if the 2°C guard rail is not to be transgressed. The most important starting point for the transformation to a low-carbon society is reducing CO₂ emissions from fossil fuel use. In parallel to this decarbonisation of energy systems, the other main aim is to end energy poverty worldwide. The WBGU demonstrates that this energy turnaround is technically feasible and economically viable. The long-term economic costs of this transformation amount to a few percent of global gross domestic product (GDP). Faster reduction of CO₂ emissions per unit of economic output (carbon intensity) is essential to effect a successful transformation. The WBGU recommends a strategy which is primarily based on more rapid expansion of renewable energies, with a 100% renewable energy supply being the medium-term goal. To reach this goal, however, dramatic improvements in energy efficiency are also required.
Science and its role in the democratic process

The major transformations which took place in the past were generally the uncontrolled outcome of evolutionary change. By contrast, the forthcoming transformation requires forward-looking and knowledge-based management.

Scientific knowledge is an indispensable element of modern governance and is becoming increasingly important in our ever more complex world. This applies particularly to the present transition, which is beset by considerable uncertainties. The key to successful transformation lies in the linkage between invention, innovation and diffusion processes and the acceleration of these processes to make best use of the limited time available. The components shown in Figure 2 have a key role to play here. Scientific advice can make an important contribution to policy-making, by analysing the wealth of complex information, offering integrated solutions, exploring opportunities, and communicating the results effectively. The task of the scientific community is therefore to identify policy options; it is a matter for the democratically elected decision-makers to decide on the appropriate course of action.

Expanding international cooperation

The challenges posed by the transformation process require more international cooperation at all levels.

Within the European Union, significant progress in the fields of climate, environmental and energy policy has already been achieved. The European Union has set itself specific goals for the expansion of renewable energies and for improving energy efficiency, as well as for climate protection, although an all-embracing climate protection law for the EU as a whole is not yet in place. In the field of EU energy policy, more intensive cooperation – such as an energy partnership with Africa – and Community targets are required. At present, exemplary for informing and involving citizens and civil society groups is the Aarhus Convention, whose scope is limited to the continent of Europe. The Convention obliges States to inform the public about environmental matters and guarantees citizens’ rights of access to information, public participation in decision-making, and access to justice in environmental matters.

A governance regime is also needed at the global level. The global institutions which have a key role to play in the transition process are too weak to act with a vigour commensurate with the significance of the issue. For that reason, the United Nations Environment Programme (UNEP), for example, should be upgraded and more intensive efforts must be made to introduce a comprehensive and binding international climate protection regime. Institutional deficits also exist in relation to key transformation fields: energy, urbanisation, and land use. Far more emphasis should be placed on these topics at the global level, with a particular focus on expanding the cooperation with newly industrialising countries for this purpose.

National governments must also learn to take account of common global interests. The knowledge of global linkages and dimensions could, for example, be improved by giving government departments at the national level a more international profile, e.g. by ensuring that 10–15% of posts within their divisions are filled with staff from other OECD nations, developing countries and emerging economies in future.