Assessment of global megatrends — an update

Global megatrend 11: Diversifying approaches to governance

European Environment Agency

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Europe is bound to the rest of the world through an enormous number of systems — environmental, economic, social, political and others. Such networks enable complex flows of materials and ideas across the globe, producing uncertain feedbacks and knock-on effects over time. Greenhouse gas emissions in Europe today can affect the climate in distant locations and far into the future. Land management choices on the other side of the world can influence food and energy prices in Europe. Global communication and trade networks fuel innovation — sometimes boosting efficiency, sometimes creating new environmental pressures.

Most of these interactions are intimately linked and set to unfold over decades. All are likely to have important implications for living standards and well-being.

The European environment's status, trends and prospects have always depended in part on events outside its borders. Yet the growing importance of global networks and flows has augmented this interdependence, creating complex challenges for traditional governance systems framed within national or regional territories. To design effective ways to manage the environmental changes ahead, societies and governments need to understand the global drivers at work and their potential implications.

With this challenge in mind, the European Environment Agency in 2010 produced its first assessment of emerging global trends as part of its five-yearly flagship report on the European environment's state and outlook (SOER 2010). The exploratory analysis summarised 11 global megatrends grouped into five clusters — social, technological, economic, environmental and governance. Introducing the issues succinctly, it sought to trigger a discussion about how Europe should monitor and assess future changes in order to better inform environmental policymaking.

In preparation for its next report on the European environment's state and outlook (SOER 2015), the EEA has initiated an update of the assessment of global megatrends, analysing each of these drivers in a little more detail than previously in terms of their impacts on the European environment and well-being. During the second half of 2013 and 2014, the EEA is reassessing the 11 megatrends and publishing the updates separately on its website. The chapters provide the basis for the analysis of megatrends included in SOER 2015 and will be consolidated into a single EEA technical report in 2015. The present chapter addresses megatrend 11: 'Diversifying approaches to governance'.

Again, it needs to be emphasised that the complexity of highly interconnected human and natural systems introduces considerable uncertainty into projections and forecasts. As much as anything, the assessment of megatrends aims to encourage readers to acknowledge this interdependence and uncertainty. In so doing, it may help point the way towards systems of planning and governance better adapted to meeting the challenges ahead.

Global megatrend 11
Diversifying approaches to governance

In the context of rapid globalisation, governments are facing a mismatch between the increasingly long-term, global, systemic challenges facing society and their more national and short-term focus and powers.

The need for more coordinated governance at the global scale has been reflected in the proliferation of international environmental agreements, particularly during the 1990s. More recently, businesses and civil society have also taken an increasing role in governance. This broadening of approaches is welcome but it raises concerns about coordination and effectiveness, as well as accountability and transparency.

11.1 Co-evolution of contrasting forms of governance

11.1.1 Interdependence of hierarchies and markets

Across the world, the transition from predominantly agricultural, rural societies to modern urbanised economies has had enormously wide-ranging social and environmental impacts. These changes have been accompanied by a steady evolution in systems of governance, i.e. the mechanisms used to steer society away from collectively undesirable outcomes and towards socially desirable ones (Young, 1999). In particular, two contrasting forms of governance — state hierarchies and markets — have incentivised and organised the socio-economic change, as well as managing the social and environmental harms that have accompanied that process.

These two governance approaches differ in numerous respects (Meuleman, 2014). Hierarchies (as exemplified by the Weberian bureaucracy) are characterised by top-down, rigid, authoritative planning and transfer of information; markets are individualistic, flexible, competitive, decentralised and efficiency driven.

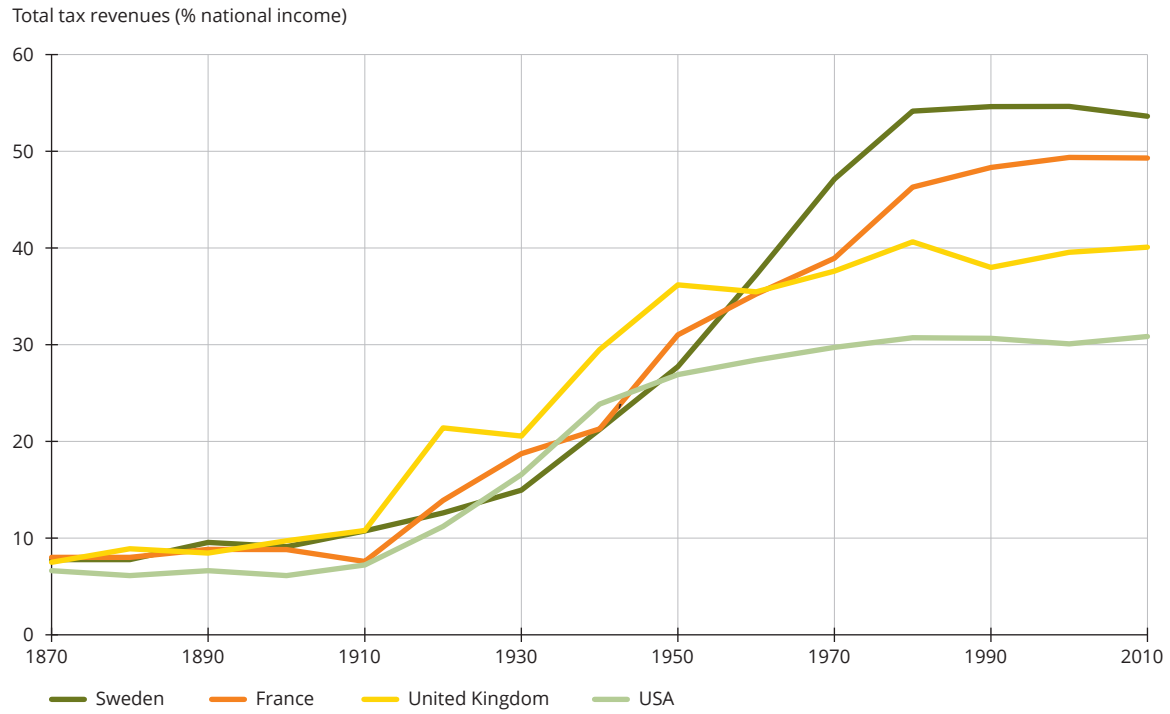
Partly because of these stark contrasts, the two forms of governance are often seen as alternatives. Indeed, this perception has been reinforced in recent decades as a result of neoliberal thinking in the UK and the US, particularly during the 1980s, which emphasised the advantages of markets in delivering efficiency and innovation, and characterised the state as an obstacle to the operation of the market (Meuleman, 2014). In reality, however, state hierarchies and markets are strongly interdependent. As Rodrik (2011) notes: 'Markets and governments are complements, not substitutes. … Markets work best not where states are weakest, but where they are strong.'

The importance of governments partly lies in their ability to take collective action in instances where individuals or groups in a society lack the resources or incentives to act. In performing this role, governments have catalysed the emergence of competitive markets, for example by providing the infrastructure (e.g. transport networks), rules (e.g. restrictions on monopolies and cartels), institutions (e.g. well functioning law courts) and information (e.g. product standards) that enable complex systems of commerce to function. In many countries, governments also play a major role in boosting human capital, for example by guaranteeing universal education and health care. Governments are also needed to respond to undesirable outcomes that can result from the operation of the market, such addressing environmental degradation or unfair income inequality.

Beyond the state's role in fixing market failures by supplying public goods and correcting externalities, there is growing recognition that governments play an essential role in driving innovation because they have the willingness and resources to invest in research where the potential gains are hugely uncertain. Government investments have played a dominant role in many of the most important innovations of recent decades, including the computer, nuclear energy, the internet, biotechnology and nanotechnology (Janeway, 2012; Mazzucato, 2013).

The juxtaposition of state hierarchies and markets is therefore misleading, disguising the reality that the two have developed in tandem. Governments have created the conditions for markets to operate; markets, in turn, have helped generate the financial resources to support expanding state competencies. As illustrated in Figure 11.1, the government's role in the economy (expressed as government

Figure 11. 1 Tax revenues as a percentage of national income in selected countries, 1870–2010



Source: Piketty, 2014a.

revenues as a proportion of national income) grew very substantially in France, Sweden, the United Kingdom and the US in the century after 1870 — a period of huge technological change and economic expansion. It has stayed stable in the years since 1980, despite the ideological shifts towards privatisation and liberalisation of markets that have occurred since then.

11.1.2 Emergence of network governance

While recognition of the contrasting competencies and characteristics of state hierarchies and market governance can be traced back to the 1700s, there has been growing recognition in recent decades of a third governance approach. In contrast to the authoritarian or individualistic traits of hierarchies and markets, 'network governance' is characterised by trust, partnership, diplomacy and lack of structure. Meuleman (2014) argues that although network governance has always existed, it emerged as a powerful force in environmental governance the 1990s as an expression of the rising education levels in the general public, and related demands for public participation and consultation in decision-making.

Like hierarchies and markets, the emergence of network governance is a consequence of both changing needs for mechanisms to manage human interactions and new opportunities. The remainder of this chapter will argue that the global demand for new governance approaches is continuing to evolve rapidly, in particular due to the emergence of systemic challenges associated with globalisation and the growing scale of humanity's aggregate burden on the environment. At the same time, new technologies, values and social norms are creating opportunities to coordinate and organise human interactions. The result is a diversification of approaches to governance, bringing together new combinations of hierarchical, market and network governance.

11.2 Drivers

11.2.1 Unmet demand for global governance

Interdependence and demand for governance

As illustrated in GMTs 1–10, humans are increasingly linked as a result of the integration of economic, social and technological systems. Like other regions, Europe is potentially affected by increasing movements of people, infectious diseases,

financial resources, materials and pollution, as well as the impacts of global greenhouse gas emissions. This clearly implies a changing need for governance. As Young (2009) notes: 'Ultimately, the demand for governance arises from the existence of interdependencies between human actors. […] It is therefore important to observe that interdependence is rising rapidly and occurring at a larger scale as a consequence of both global environmental change and global social change in such forms as globalisation.'

In recent decades, the rapid globalisation of economic, social, technical and environmental flows has not been matched by the emergence of effective global governance mechanisms. Held (2006) and Goldin (2013) point to a variety of issues where interconnectivity, complexity and risks have grown and the available governance tools and institutions remain 'weak', 'incomplete' or 'unfit for purpose'. These issues include pandemics, cybersecurity, nuclear proliferation, intellectual property rights, financial markets and taxation of multinational enterprises.

Challenges managing the global environmental commons

The deficiencies of existing governance approaches are particularly clear in the context of global environment management – an area where the scale of humanity's burden on the environmental commons and the impacts of globalised production processes are greatly increasing human interdependencies. The failure of market prices to internalise all the costs of resource use and pollution mean that market forces are unlikely, in themselves, to produce sustainable and socially beneficial outcomes. This is particularly apparent in the area of climate change, which the Stern Review describes as 'market failure on the greatest scale the world has ever seen' (Stern, 2006). Governments face major constraints in correcting the failings of the markets, in part because of the obvious mismatch of scale between the increasingly long-term and transboundary challenges and their more limited focus and powers (Held, 2006).

For example, integration of global markets means that many effects of resource use are felt far from where products are consumed (GMT 6). As a result, governments may have little awareness of the impacts of domestic consumption, and little ability to influence them because of the territorial limits on state authority. Additionally, global trade agreements further limit the ability of individual governments to manage the impacts of their consumption because they prevent states from differentiating between imports based on production methods (WTO, 2014).

Other challenges relate to the incentives for sustainable management of common property resources, such as the global atmosphere, where shared exploitation of the atmosphere's function as a sink for greenhouse gases or pollution results in a 'tragedy of the commons'. Greenhouse gas emissions affect the atmosphere as a whole, with related impacts often falling far from the source of emissions, and potentially falling most heavily on future generations (Cole, 2011). Mitigating climate change requires coordinated action worldwide and individual governments may have little motivation to take unilateral steps to reduce emissions if they suspect that other states will simply 'free-ride' on their efforts.

While climate change is the most serious transboundary environmental challenges, it is not the only one. Long-range transboundary air pollution can travel thousands of kilometres before being deposited. In addition, water resources are often transboundary. Approximately 300 aquifer systems are cross national borders (UN Water, 2008) and 148 states share water basins with their neighbours (UN World Water Assessment Programme, 2012), with actions in one country having potentially devastating effects on another.

Comparable problems arise in the management of global environmental public goods. Individual countries may lack incentives to protect public goods such as rainforests because the benefits that they provide, such as storing carbon and hosting biodiversity, are very widely distributed and long term compared to the short-term financial gains that other land uses could generate.

Electoral incentives and government failure

The shortcomings of government responses to long-term, global environmental challenges may be further undermined by domestic political interests. Behavioural economists have demonstrated the human tendency to disregard the long term when making choices (Ainslie, 1992), and this tendency can be exacerbated by electoral cycles. The result can be short-termism in policymaking, deterring action that delivers benefits in the future and encouraging ones that result in delayed costs.

Electoral cycles tend to be short, fostering policy debate that is often focused on short-term political gains and the satisfaction of the 'median voter' with a concentration on immediate concerns such as jobs and crime (Held and Hervey, 2011). Short electoral

cycles are also accompanied by increasingly frequent opinion polls and longer election campaigns, which lead to a general preference of sound bites over detailed analysis (OMCFG, 2013). Due to the spatial and temporal lag of some of the most important environmental challenges, they are rarely considered voters' priorities and are hence less likely to be addressed by politicians (WBGU, 2011).

In some instances, government decisions reflect the interests not of society as a whole but rather those of particular segments. Policy is susceptible to bias resulting from collective action by well-resourced interest groups (Olson, 1965), regulatory capture or corruption. Powerful sectors possess significant economic and informal political power, potentially enabling them to influence regulatory or fiscal regimes in ways that enhance private gains while transferring risk or costs onto society at large.

Economic power here has a twofold meaning. First, lobby groups advocating on behalf of a sector can point to the earnings and employment that a sector generates as a basis for arguing against policy constraints. Second, these groups are often well resourced and can spend considerable amounts of money on their lobbying activities. Many lobby groups have good access to governments, meaning that they are likely to directly influence policy (WBGU, 2011).

11.2.2 New opportunities for governance

The shortcomings of markets and governments in addressing today's global challenges have created increasing demand for new responses. At the same time, a variety of social and technological changes may be facilitating the emergence of innovations in governance.

As noted in GMT 4, the three central functions of information and communication technologies (ICTs) — processing, storing, and transferring information — have all shown exponential increases in performance during recent decades and these trends are expected to continue. By 2030, it is estimated that computer memory costs will reduce by 95 %, raw data storage costs will fall to just 1 % of the price today, and network efficiency will increase more than 200-fold (NIC, 2013).

By facilitating the collection, storage and sharing of data, these advances can potentially support established government processes: informing policymaking, promoting successful and efficient implementation and building trust between governments and citizens (OECD, 2003). But ICTs also offer new ways to establish international communities and networks, encouraging collaboration and information sharing. For example, at a time when political party membership has declined sharply, online platforms such as Change.org and Avaaz have been highly successful in engaging the public in campaigning on specific issues (OMCFG, 2013).

Technological changes have also contributed to shifting expectations and values. Better-connected and informed people have become more active and discriminating citizens and consumers. Citizens increasingly demand transparency and accountability from governments (Bertot et al., 2010), as well as business. Media coverage of the social and environmental harm associated with globalised supply chains has grown. Negative news can reach an audience of millions within a very short amount of time, potentially causing long-lasting reputation damage (KPMG, 2012).

Recent decades have likewise witnessed a shift in attitudes towards humanity's relationship with nature, and the responsibility owed to vulnerable populations and future generations (WBGU, 2011). The environment is increasingly prioritised both in developed and developing regions. The fifth World Values Survey (2005–2008) found that 89 % of respondents in 49 countries consider global warming to be a serious or very serious problem. Moreover, 55 % of respondents stated that they would give priority to protecting the environment even if that slowed down economic growth or caused job losses. Many developing and newly industrialised countries, such as Argentina, China and Colombia also ranked environmental protection over economic interests (WBGU, 2011).

11.3 Trends

While governments are likely to remain the primary mechanism for coordinating human activity, more diverse governance approaches are emerging. Some can be seen as extensions of hierarchical state authority, while others involve non-state and government actors in 'network governance', based on informal institutions and instruments.

11.3.1 Intergovernmental processes

International agreements

An obvious starting point for overcoming the territorial constraints on government authority is

via international agreements, which coordinate hierarchical state governance. The number of international agreements has increased enormously in recent decades, particularly in the area of environmental governance. As illustrated in Figure 11.2, activity peaked during the 1990s, when more than 350 environmental agreements were adopted or amended (Mitchell, 2014).

The subsequent decline in new agreements reflects both the increasingly dense network of regimes in place and growing awareness of their limitations. Negotiations are often extremely complex and slow, and the policymakers involved may have strong incentives to defer costly actions that promise only distant benefits. Due to their focus on consensus finding, international agreements tend to reflect the lowest common denominator of all parties involved. The more parties are involved, the lower this denominator is likely to be (Cole, 2011). A lack of enforcement mechanisms further undermines their effectiveness and many international agreements are yet to be implemented (KPMG, 2012).

There have been some clear successes. The Montreal Protocol, for example, proved to be a highly effective response to the problem of ozone-depleting substances. However, the characteristics of the problem were fairly unique. The problem of chlorofluorocarbons and the technological solutions were clearly defined and broadly supported by the commercial sector. Uncertainties were limited because the ozone hole could be measured and the associated dangers were expected to affect every nation (Evans, 2012).

In contrast, climate change is a very different issue. Both the problem and the solution are less clearly defined, and greenhouse gas emissions are closely tied to our systems of production and consumption, creating diverse social and economic lock-ins. Partly for these reasons, multilateral agreements have so far fallen far short of what is needed.

One approach that has emerged in recent years to facilitate intergovernmental collaboration is the establishment of long-term environmental targets, particularly addressing climate change mitigation. As noted, a significant part of the challenge in agreeing international measures to manage global environmental resources is the need for reciprocal commitments from most or all states and the strong incentives for 'free-riding'.

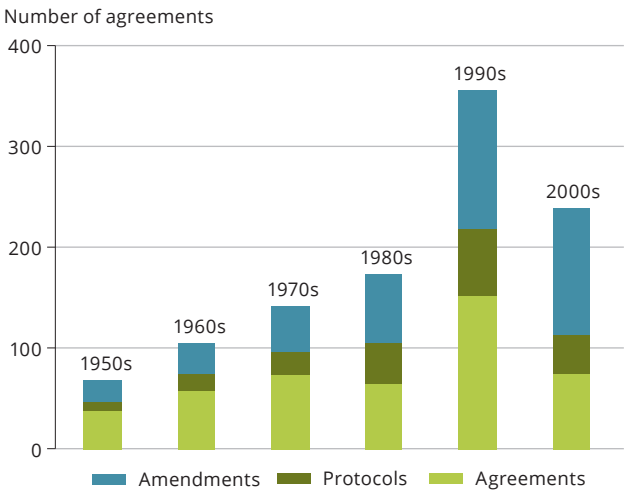
Countries appear to have responded to this challenge in recent years by adopting emissions-reduction targets stretching to 2050 (Climate Interactive, 2014). By signalling long-term ambitions, such targets potentially provide a way to secure commitments from other states, as well as helping to deter government short-termism by locking domestic policy into a long-term framework.

Supranational hierarchies

A second form of international policymaking is taking place in supranational blocs, with the EU providing by far the most advanced example. Partial pooling of state sovereignty and the establishment of effective enforcement mechanisms has enabled the EU to agree and implement some of the world's highest environmental standards. Despite the failings of global climate change negotiations, the EU and Member State governments have delivered significant reductions in greenhouse gas emissions (EEA, 2014), in the knowledge that their major trading partners are making similar commitments.

In contrast to the increased coordination of state actions at the regional level, governments have been reluctant to cede powers to global supranational hierarchies. The powers of international organisations are thus much more constrained. As the United Nations Environment Programme notes, 'Intergovernmental organisations are inadequately resourced, are not vested with the requisite authority, lack competence and coordination, and display incoherence in their policies and philosophies' (UNEP, 2012).

Figure 11.2 Number of international environmental agreements adopted, 1950s–2000s



Source: Mitchell, 2014.

11.3.2 Non-state actors and mixed governance approaches

NGOs and businesses as actors in environmental governance

The limitations of state and intergovernmental mechanisms in addressing global governance challenges have enabled non-state actors to assume an increasing role. Non-governmental organisations (NGOs) and businesses may lack the state's rule-making and enforcement powers but they enjoy some advantages in their ability to operate informally across state borders, influencing norms and incentives in diverse jurisdictions. In addition, civil society and business often benefits from substantial local knowledge and contacts (Evans, 2012).

The growing importance of network governance approaches can be partially explained by changes in the scale and focus of non-governmental organisations (NGOs). The number of international NGOs has increased from less than 5 000 in 1985 to more than 60 000 today (UIA, 2014).

This proliferation is reflected in NGO engagement in international environmental negotiations. For example, whereas 2 400 civil society representatives were present at the 1992 Rio Earth Summit, there were 9 800 at the Rio+20 Summit in 2012. For comparison, the number of governments represented increased by just 9 %, from 172 to 188 (OMCFG, 2013).

At the same time, the goals and activities of NGOs have shifted. Whereas NGOs traditionally focused on influencing governments and intergovernmental processes, they increasingly undertake activities that bypass government (Delmas and Young, 2009). Functions today include informing agenda setting and policy development; collecting, disseminating and analysing information; defining norms and standards; and monitoring and enforcement processes (Biermann, 2012; Cole, 2011; Evans, 2012).

Businesses arguably have even greater potential to influence environmental impacts across borders. The size of some multinational businesses means that their supply chain and production process decisions can have significant environmental impacts. At the same time, multinational businesses have material power and organisational capacity that is not available to most other international stakeholders (Delmas et al., 2009), ensuring access to policymaking processes. Their expertise and the information they possess gives these businesses authority in international standard setting or in designing environmental programmes (Delmas et al., 2009).

Shared incentives for network governance approaches

Businesses become involved in governance processes for numerous reasons, including pressure from customers, investors and the public, the desire to manage environmental impacts on their operations, and the aim of pre-empting or influencing governmental action (Lyon, 2006). Crucially, businesses often have a commercial interest in adopting production standards. Network governance approaches can thereby operate by aligning the interests of different stakeholders — with NGOs proposing standards and business promoting them (Cashore and Stone, 2012), sometimes in collaboration with state bodies.

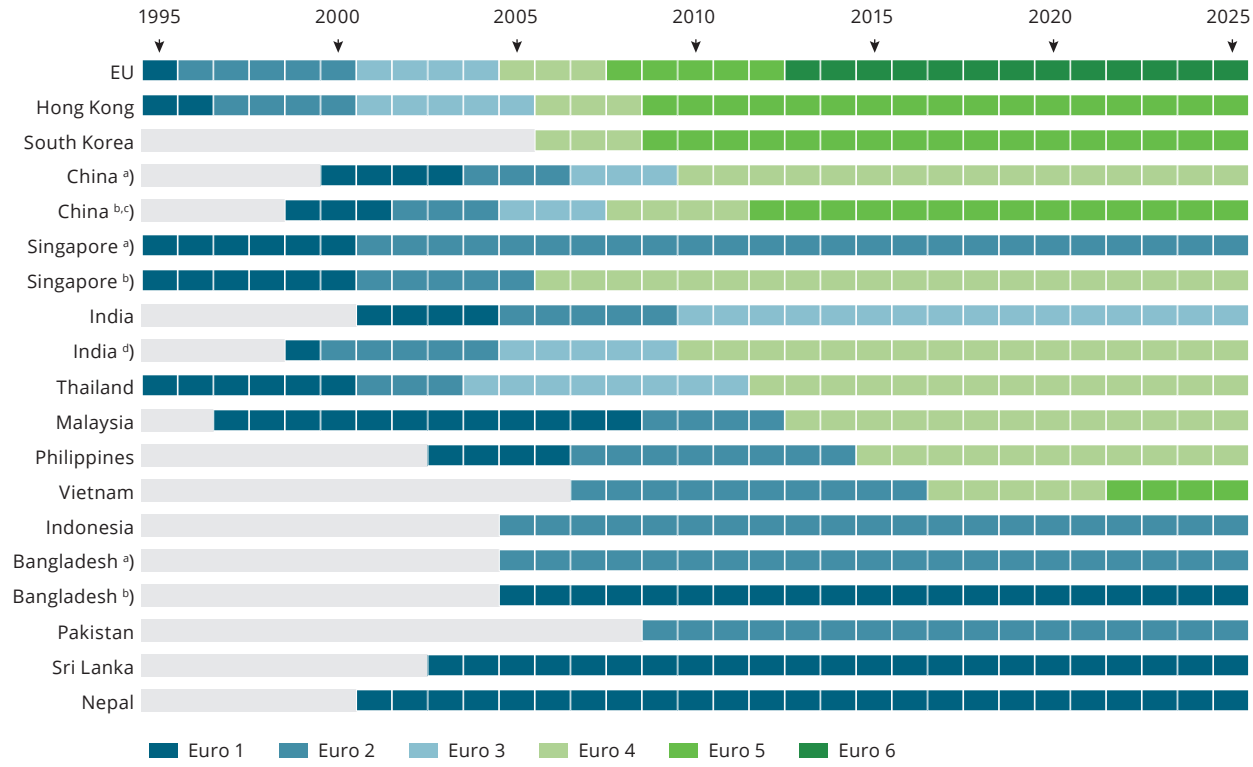
For example, companies may favour the harmonisation of standards to reduce production costs or achieve level playing fields with competitors. In such cases, business may have a strong incentive to lobby governments to formalise and enforce standards (Levin et al., 2012). The adoption of EU emissions standards for road vehicles across Asia (Figure 11.3) illustrates both the desire for standardisation in global production, and the interplay of state and non-state actors in environmental governance.

In other instances, firms may seek to adopt standards as a means to signal good practice to consumers and differentiate their products from those of competitors. Certification and labelling schemes exemplify this approach and today address some key environmental problems, such as forest degradation, ecosystem fragmentation and pollution (Ecolabel Index, 2014).

The Forest Stewardship Council (FSC) is an important example of a successful certification scheme, in which different stakeholders share common interests for different reasons. Established in 1993, the FSC has certified some 184 million Ha of forests in over 80 countries as sustainable. It certifies the supply chains corporate giants such as Home Depot and IKEA in the absence of any legal regulations.

Certification and auditing schemes are being greatly facilitated by technical innovations such as geographic information systems (GIS) and global positioning systems (GPS), which enable spatial mapping; mobile and smartphones, which render the collection and dissemination of information more efficient; and DNA and chemical testing, which allow

Figure 11.3 Adoption of the EU's Euro emissions standards for cars and vans in Asian countries, 1995–2025



Note: a) Petrol
b) Diesel
c) Beijing: Euro 1 (Jan 99); Euro 2 (Aug 2002); Euro 3 (2005); Euro 4 (1 March 2008); Euro 5 (2012).
Shanghai: Euro 1 (2000); Euro 2 (Mar 2003); Euro 3 (2007); Euro 4 (2010); Euro 5 (2012).
Guangzhou: Euro 1 (Jan 2000); Euro 2 (July 2004); Euro 3 (Sep-Oct 2006); Euro 4 (2010).
d) Delhi, Mumbai, Kolkata, Chennai, Hyderabad, Bangalore, Lucknow, Kanpur, Agra, Surat, Ahmedabad, Pune and Sholapur.

Source: Clean Air Initiative for Asian Cities, 2011.

for the determination of a product's species and geographic origin. (Auld et al., 2010). The growth of certification and auditing networks make them one of the most dynamic trends in environmental governance and this growth is estimated to continue into the future as the demand for disclosure is regarded as almost exponential (Evans, 2012).

Co-existing with certification and ecolabelling networks are auditing networks that measure sustainability achievements. Environmental and sustainability auditing is dominated by the EU Eco-Management and Audit Scheme (EMAS) and the UN Global Reporting Initiative but there are many other schemes (Evans, 2012).

113.3 Cities and networks

The rise of networks is also providing opportunities for state actors at the local level. Cities and networks of cities, for example, are expected to play an increasingly important role in environmental governance (NIC, 2012). Cities concentrate populations, economic activity and innovation of all sorts. This not only creates opportunities for resource-efficient ways of living but also means that changes at local scales can have far-reaching effects.

As noted in GMT 2, the percentage of the global population living in urban areas is projected to reach 67 % by 2050 (UN, 2012) and it is estimated that cities around the world account for 60-80 % of energy consumption and approximately half of anthropogenic CO_2 emissions (UNEP, 2011; Satterthwaite, 2008). Whilst each city has its unique set of environmental challenges, many core problems are shared, such as air quality concerns, noise pollution, traffic congestion and GHG emissions (EC, 2013b). At the EU level, the 7th Environment Action Programme identifies enhancing the sustainability of EU cities as one of

its nine priority objectives. It aims to ensure that by 2020 the majority of EU cities are implementing policies for sustainable urban planning and design (EC, 2013b).

Cities have policy options that are tailored towards the local context and potentially very effective. In the area of car use, examples include parking regulations, limiting road space, car-free areas or days, and local taxes and charges. At the same time cities can further the attractiveness of alternative options through, for example, bicycle infrastructure and effective public transport systems (Otto-Zimmermann, 2011). In order to promote and reward efforts made by leading cities to improve the environment, the European Commission launched the European Green Capital Award in 2008. This not only recognises past efforts but also aims to incentivise further efforts and boost awareness (EC, 2014).

Better networking of cities has a crucial role to play in the diffusion and up-scaling of local innovations. For example, the Covenant of Mayors, launched by the European Commission in 2008, has created a network of cities commited to meeting or exceeding the EU's 20 % CO_2 reduction targets by 2020 through an increase in energy efficiency and the use of renewable energy sources. Similarly, the C40 Cities Climate Leadership Group is a network of megacities that combined have nearly 300 million inhabitants and represent 10 % of global carbon emissions. Member cities share technical expertise and best practice with the goal of reducing GHG emissions and climate risks. The actions they have initiated are being replicated by non-C40 cities (Bouteligier, 2013). As of 2014, fifteen C40 cities have made public commitments to reduce their emissions by 80 % by 2050 encouraging other cities to work towards the same goal (Bloomberg and C40 Cities, 2014).

Cities also form hybrid networks with organisations, financial institutions and businesses. The European Innovation Partnership for Smart Cities and Communities, for example, aims to establish partnerships between industry and European cities to develop sustainable urban systems and infrastructure.

11.4 Implications

The growing scale and complexity of humanity's interactions and environmental impacts suggest that the new governance models outlined are both necessary and desirable. It is clear, however, that they bring a variety of uncertainties and risks.

11.4.1 Engagement and representation of interests

The mixture of opportunities and risks is certainly apparent in the increasing involvement of civil society groups in international governance processes. Undoubtedly, such engagement can increase inclusivity, transparency and democratisation, as well as contributing to the development of networks and shared norms. NGO engagement in international negotiations can also ensure representation for perspectives and interests that might otherwise be excluded, and can also foster knowledge exchange (Evans, 2012; UNEP, 2012).

On the other hand, it is also likely that increased participation at these summits can make discussions more complex and make it harder to reach consensus (OMCFG, 2013). Moreover, political equality can be threatened through the over-representation of certain interest groups. The influence of lobbyists representing economic sectors is significantly greater than that of civil society industries or the 'green' industry.

Among environmental NGOs there is also a risk of over-representation of popular subjects. For example, NGOs from developed regions focused heavily on rainforest protection in the 1980s, which strongly contributed to the emphasis on tropical forests in environmental governance. Peatlands, which present larger global carbon sinks than rainforests, were not represented by NGOs and therefore hardly appear on the global agenda (Evans, 2012).

11.4.2 Lack of coordination

The dispersion of authority to numerous actors pursuing varied interests is already producing a profound shortage of coordination in governance. The work of many non-state actors is sector specific, which increases the risk that links between different policy areas will be missed (Grevi et al., 2013).

Worse than a lack of coordination is direct competition between actors, which can result in inaction, wasteful use of funding and complications in national and international policymaking. For the EU, as for other stakeholders, progress in environmental governance will therefore mean striking the right balance between inclusiveness and effectiveness (Grevi et al., 2013).

The increasing number and diversity of actors involved in global governance could also mean that stakeholders are confronted with an ever increasing array of legislation, standards, norms and labels. The Ecolabel Index currently tracks 459 schemes covering 197 countries (Ecolabel Index, 2014). While these have an important role to play in environmental governance, a plethora leads to confusion and loss of trust (EC, 2013a).

11.4.3 Undermining state authority and lack of accountability

The rise of business and civil society in governance can have a mixed impact on democratic processes. At one level, it enables a larger number of stakeholders to shape governance approaches, affording a greater voice to grassroots organisations with a keen appreciation of local realities. At the same time, however, the growing role of non-state actors could well undermine the authority of elected governments, potentially threatening democratic processes.

While changing technologies and rules on access to information mean that government choices are increasingly subject to the scrutiny of empowered and interconnected citizens, a shift to non-state governance may reduce the democratic legitimacy, transparency and accountability of decision-making.

In elected parliamentary systems, decision-making processes and debates take place in the public domain, and the representatives involved are accountable to voters. In contrast, non-state actors are unelected and unaccountable, with their workings not always transparent. The funding and expenditure of non-state actors, for example, cannot necessarily be traced by members of the public and debates on policy and strategy tend to occur behind closed doors. This is a particular challenge where civil society engagement takes the form of short-term coalitions directed at specific issues – a process termed 'bazaar governance' (Demil and Lecocq, 2006). As non-state actors become more important in global governance, they will need to improve their transparency and accountability.

The extent to which the environment is already regulated means that the focus of governance has increasingly turned to how to make existing standards and norms work better. Experience suggests a need for flexibility and the right mix of hierarchical, market-based and network approaches. Risk assessment that addresses the state of the environment, pressures and conduct is likely to point to the need for a range of responses. Openness to different and evolving governance approaches is therefore highly desirable.

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