

DECISION-MAKING FOR SUSTAINABLE DEVELOPMENT: HOW ASSESSMENT CAN HELP

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INTRODUCTION

For over 20 years Governments have recognized the need to achieve development “that meets the needs of the present without compromising the ability of future generations to meet their own needs”.³⁹ But unsustainable development continues apace in the UNECE region. Governments and civil society can, however, influence decision-making – from government planning to individual consumer choices – in favour of sustainable development by a wide variety of means, notably by raising awareness and, in the case of Governments, imposing constraints and providing incentives.

This essay begins by considering these various influences on decision-making, before focusing on the role of assessment processes in raising awareness and guiding development towards sustainability. The essay has an environmental perspective, because society and the economy are dependent on a healthy environment, and because the poorest in society are most dependent on environmental services and the most exposed to environmental hazards. It is above all the poor whose water supplies are contaminated with sewage, who breathe debilitating indoor air pollution, whose income is further eroded by resulting ill-health, and who are most vulnerable to the floods, droughts and other hazards arising from climate change.

The essay goes on to discuss integrated approaches to assessment, the importance of stakeholder participation, the use of assessment in addressing climate change, and capacity-development efforts. The final section looks beyond assessment as a distinct process to full integration of sustainability into policymaking.

CONSTRAINTS, INCENTIVES AND AWARENESS

Constraints on decision-making include regulations that guide and limit development options, such as emissions standards, permitting, land-use controls and substance bans. Legislation may also provide incentives towards sustainable development (and disincentives away from unsustainable development), by influencing markets with economic instruments, including carbon taxes, market instruments and tax breaks for “greener” development options (e.g. wind farms) and goods (e.g. low-emission vehicles). Markets may act in favour of sustainable development but, unregulated, generally favour unsustainable consumption. Ill-considered legislation and economic instruments can likewise encourage unsustainable development paths, for example by promoting unsustainable natural resource use (i.e. perverse subsidies).

The availability of alternatives – provided by markets, through Government action or by grass roots initiatives – may also provide incentives, encouraging changes in behaviour. To be attractive, alternatives must offer opportunities that lead to an equal or better quality of life. For example, a shift by commuters from private cars to public transport may be facilitated by convenient and affordable public transport options. Often, alternatives can only be implemented if they go hand in hand with restrictions as, for example, increased levies on private car use where public transport is offered.

Nature imposes its own constraints on development in terms of the availability of natural resources, such as minerals, hydrocarbons, timber and unpolluted soil, air and water. Natural resource constraints may be strengthened by legislation (e.g. quotas and bans) and amplified through markets, with more scarce commodities attracting higher prices. One example of the effectiveness of such constraints was the 12 per cent drop in fuel consumption by French drivers between August 2007 and August 2008 as prices at the pump rose steeply.

So, for example, deteriorating urban air quality, tighter emissions standards and increasing fuel prices and taxes will all encourage the search for cleaner urban mass transport options. This will influence urban and transport planning and consumer choice.

³⁹ *Our Common Future, United Nations World Commission on Environment and Development, 1987.*

The effects of these constraints and incentives can be further magnified by the transparency of markets, by market prices that rapidly reflect changes in natural resource availability, and by the absence of direct subsidies (e.g. fuel subsidies, and water charges that fail to reflect the full costs of supply).

Awareness may be raised through education and training (the focus of work under UNECE and the United Nations Educational, Scientific and Cultural Organization (UNESCO) on education for sustainable development). But it may also be raised by providing more targeted information, through advertising and campaigns (dissemination, or “propaganda” in its original sense, and recent media innovations such as “edutainment” – educational entertainment). The certification of products and production processes, and the labelling of goods and services, can also play an important role. Labelling can indicate, for example, the environmental footprint or energy efficiency of goods (e.g. white goods, cars, homes), the sustainability of sources of raw materials, or how much carbon dioxide was emitted in goods’ production and in their transport to the supermarket shelf.

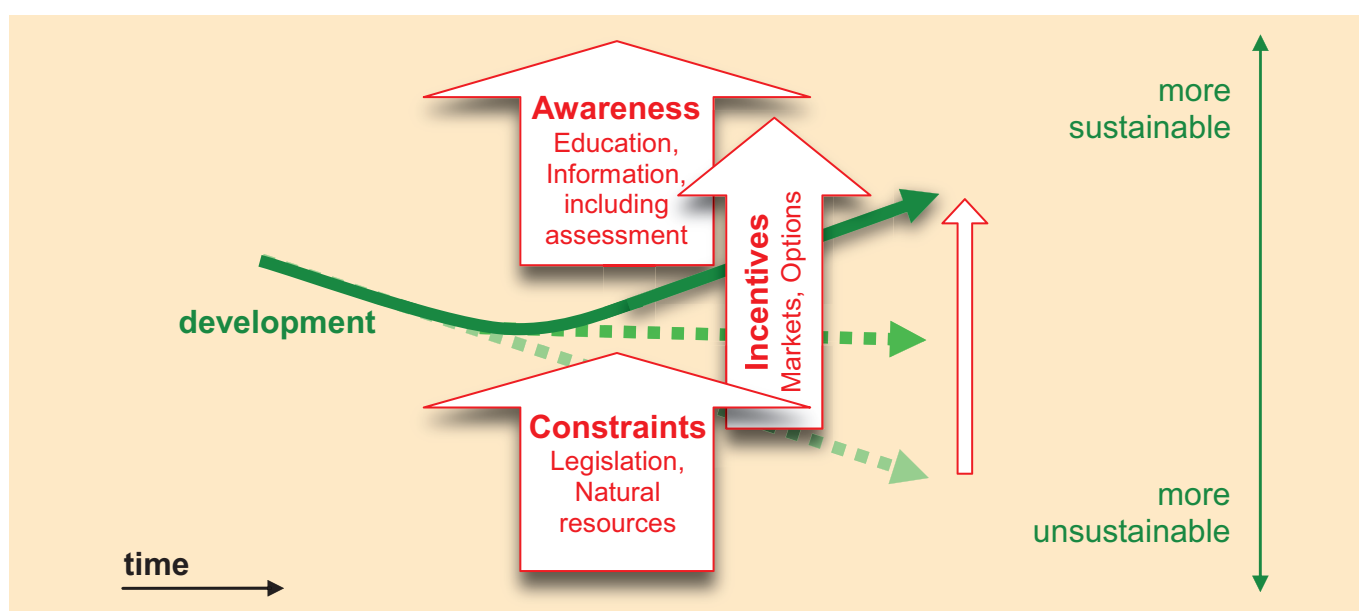
Markets can also raise awareness among consumers by promoting green goods over alternatives, for example, though the green qualities of products and services are sometimes exaggerated. Markets are created by consumers and by producers, so both need to encourage sustainable production and consumption.

Certain civil society organizations, such as consumer associations, have an especially strong role to play in raising awareness, applying pressure on producers, consumers and Governments. They can push producers to change suppliers and to modify products. At the same time, campaigns can encourage consumers to reject certain products and activities (whether polluting stoves or fuel inefficient cars) or to choose others (such as low-energy light bulbs).

Impact assessments also provide a means of raising awareness of the sustainability of different options, notably in planning and policymaking. They supply information to stakeholders who can in turn use this information to encourage the implementation of plans and policies in favour of sustainable development. Assessment processes may play two major roles in raising awareness. Firstly, a plan or policy may be developed with sustainable development objectives in mind as a result of an ex ante assessment. Secondly, an assessment may ensure that an eventual planning or policy decision is better informed of the consequences for sustainable development. These roles are discussed in the following sections.

Finally, awareness can lead civil society to pressurize Governments – ultimately through the ballot box – to impose further constraints in favour of sustainable development, where democratic governance is strong. Governments can enable better governance, by legislation and by their own behaviour, providing for public participation in decision-making, access to information and access to justice (for example, in environmental matters, provided by the UNECE Convention on Access to Information, Publication Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention)).

Figure 1 Influencing decision-making in favour of sustainable development



So why does development continue to be unsustainable? Where are the weaknesses in the paradigm outlined previously (and summarized in figure 1)?

The constraints identified above often fail. Natural resources are still seen – though to an ever decreasing extent – as common goods or free services, to be extracted or polluted, for which we do not pay (in the short-term). And legislation is sometimes poorly drafted, poorly implemented, has weak enforcement, compliance or limited penalties.

The incentives are insufficient. Dirty and unreliable public transport is unattractive, and household energy efficiency measures are often seen as too costly, with a long period before a return on the investment.

Awareness is imperfect. Poor information leads to poor decisions and good information, if poorly packaged, is not taken into account. Further, a lack of transparency and accountability in decision-making and weak democratic institutions break the link between civil society and policymakers. And we are all – individuals and politicians alike – focused on short-term gains and our needs alone, at the expense of future generations and other peoples.

These weaknesses need to be addressed by internalizing environmental costs (for example, by payment for ecosystem services), removing perverse subsidies, promoting education for sustainable development, applying the precautionary principle more readily, and building democratic institutions and governance.

IMPACT ASSESSMENT

As noted above, impact assessments can play an important role in raising awareness of the sustainability of different planning and policymaking options, and so in promoting sustainable development. Impact assessments take many different forms, from project-focused environmental impact assessment, through strategic or sustainability assessments of policies and plans, to regulatory impact assessment, as discussed below.

Impact assessments usually also identify existing constraints (legal, policy, physical), and they impose additional procedural and design constraints. Procedural constraints arise because the assessment requires certain actions, such as the distribution of information and the participation of the public. These may result in delays and additional costs as well as bringing planning benefits. Design constraints may be imposed by measures to prevent or reduce adverse impacts, though usually these are only confirmed by a subsequent planning or policy decision.

Regulatory impact assessment provides information on the likely economic, social and environmental impacts of different regulatory options intended to achieve particular policy objectives. They thus allow decision-makers to see the advantages, disadvantages and risks of each option.

Somewhat similarly, environmental impact assessment is a tool that has long been used to identify and assess the environmental, and often selected socio-economic, impacts of planned projects, to provide opportunities for comment by the authorities and the public, to allow for measures to be introduced to prevent, reduce or mitigate impacts, and then to provide an environmental report to the decision-maker. Environmental impact assessment is now provided in the legislation of all but a very few States. In practice it is sometimes combined with cost-benefit analyses to provide an economic dimension.

The assessment process for an airport development project in Denmark (Box 1) provides an example of how effective these assessments can be. Indeed, the procedure of environmental impact assessment occasionally results in major changes to, or even the cancellation of, projects likely to be particularly unsustainable. But commonly, project-level assessments have more subtle effects on project design early on, with developers seeking to avoid environmental impacts and resulting public criticism and delays in project approval. The result might be more environmentally-benign projects.

Box 1. Example of effective project-level assessment

An extension of the runway at Billund Airport (Denmark) was foreseen to reduce noise nuisance to the local community. As a consequence of the environmental impact assessment, consultations and public participation, the project was revised to provide for new operating procedures without a runway extension. This resulted in:

- € 40.4 million saved
- 350 hectares of farmland and an old forest preserved
- More than 2,000 people no longer exposed to noise above the recommended thresholds
- The number of homes exposed to noise reduced from 1,290 to 328
- Environmental approval of the airport published and no complaints lodged

Source: Press Briefing – European Commission's 5 Years Report on Environmental Impact Assessment, Brussels, 23 June 2003.

Equally, impact assessment processes promote public participation in government decision-making. In the longer term, impact assessments promote good governance with, for example, public hearings – a common feature of development planning processes – providing “important indirect benefits that can contribute to the capacity for democratic governance and an active civil society”.⁴⁰

Typically, however, project-level assessments result in minor measures to reduce rather than prevent impacts on the environment. A common difficulty with assessments at the project level is that too many decisions have already been taken. People may object to a new highway being routed through their neighbourhood but, if decisions have already been taken to promote or ease road transport and a network improvement plan has been adopted, only minor adjustments to reduce damage will be possible. It is certainly too late to envisage alternative transport modes.

Similarly, if policies have been made that require the supply of gas to satisfy energy needs, gas pipelines need to be laid or facilities for liquefied petroleum gas need to be built. The public, and sometimes Governments, may have their choices and influence on decision-making constrained.

A family of tools, often grouped under the banner “strategic environmental assessment” (SEA), tries to influence the making of all those plans, programmes and policies that have to be decided upon before physical projects appear on the drawing board. (The “SEA” label may mislead as these tools often consider social and economic aspects of development, as well as environmental ones.)

The Paris Declaration on Aid Effectiveness committed donors and their partner countries to develop and apply common approaches for SEA. In response to the Declaration and to promote the use of SEA, OECD’s Development Assistance Committee (OECD/DAC) has developed guidance on SEA. The guidance defines SEA as an analytical and participatory approach that aims to integrate environmental considerations into policies, plans and programmes and evaluate the inter-linkages with economic and social considerations.

The purpose of SEA is thus to encourage sectoral (energy, water, transport, etc.) and spatial (regional, national, provincial, local) plans to work in favour of sustainable development. To be effective, SEA needs to influence the development of the policy (or plan, etc.) from its earliest stages (when only a glimmer in the policymaker’s eye) through to any final decision or adoption. SEA may facilitate consideration of the environment during planning and policymaking in relation to fundamental issues (why, where and what form of development) rather than addressing only how an individual project should be developed. Thus, SEA should lead to proactive seeking of sustainable solutions rather than end-of-pipe fixes to newly introduced problems. (See Box 2 for more principles of good SEA.)

Box 2. Principles of Strategic Environmental Assessment

A good-quality SEA process:

Is integrated: ensures an appropriate environmental assessment of all strategic decisions relevant for the achievement of sustainable development; addresses the interrelationships of biophysical, social and economic aspects; is tiered to policies in relevant sectors and (transboundary) regions and, where appropriate, to project environmental impact assessment and decision-making.

Is sustainability-led: facilitates identification of development options and alternative proposals that are more sustainable.

Is focused: provides sufficient, reliable and usable information for development planning and decision-making; concentrates on key issues of sustainable development; is customized to the characteristics of the decision-making process; is cost- and time-effective.

Is accountable: is the responsibility of the leading agencies for the strategic decision to be taken; is carried out with professionalism, rigour, fairness, impartiality and balance; is subject to independent checks and verification; documents and justifies how sustainability issues were taken into account in decision-making.

Is participative: informs and involves interested and affected public and government bodies throughout the decision-making process; explicitly addresses their inputs and concerns in documentation and decision-making; has clear, easily-understood information requirements and ensures sufficient access to all relevant information.

Is iterative: ensures availability of the assessment results early enough to influence the decision-making process and inspire future planning; provides sufficient information on the actual impacts of implementing a strategic decision, to judge whether this decision should be amended and to provide a basis for future decisions.

Source: SEA Performance Criteria, International Association for Impact Assessment, 2002, available in English at <http://www.iaia.org/>.

⁴⁰ Almer, H.L., Koontz, T.M. (2004), “Public hearings for EIAs in post-communist Bulgaria: do they work?”, *Environmental Impact Assessment Review*, Vol. 24 pp.473-93.

As the OECD/DAC definition suggests, SEA is – or should be – more than a straightforward rational, quantitative analysis of the likely impacts of a planned policy on the economy, society and the environment. Rather it is an approach that is adapted to the form of the policymaking process. SEA should promote a dialogue – more than a negotiation – between the different stakeholders (the public, governmental authorities, the private sector, experts, non-governmental organizations, etc.) that is just as important as a technical analysis. And SEA needs to recognize the values and interests of the stakeholders, which may not necessarily appear rational to all. The insights of stakeholders are essential in finding sustainable policy responses to development needs and, just as importantly, developing a sense of ownership, acceptance and trust in the policymaking process.

INTEGRATION AND ASSESSMENT

The implementation of SEA provides a practical means of moving towards Millennium Development Goal 7 on environmental sustainability, which calls for the integration of the principles of sustainable development into country policies and programmes. The concept of “integration” may mean different things in SEA.

Integration can mean the assessment is carried out throughout the elaboration of a programme, plan or policy so as to influence its design, as intended in Goal 7. This is sometimes referred to as environmental or sustainability mainstreaming. The focus is not, therefore, only on influencing the final decision on the policy, but rather on the whole policymaking and decision-making process or cycle. In contrast, if an assessment is carried out in parallel with the policymaking, or once a policy has been drafted, it will only – at best – be possible to influence the decision on whether to go ahead. In such cases, it will rarely be possible to alter the policy significantly in favour of sustainable development.

Integration can also mean the collective consideration of the main dimensions of sustainable development: economic, social and environmental (or, indeed, however one labels different aspects of development). This too is intended in Goal 7, as it calls for the integration of the principles of sustainable development, not just environmental protection. Integration does not mean seeking trade-offs or doing balancing acts between the three dimensions. It is about seeking win-win sustainable solutions whenever possible. To differentiate a fully integrated approach, the term “sustainability assessment” is sometimes used (see Box 3).

Box 3. Core generic criteria for sustainability assessments

Socio-ecological system integrity: Build human-ecological relations to establish and maintain the long-term integrity of socio-biophysical systems and protect the irreplaceable life support functions upon which human and ecological well-being depends.

Livelihood sufficiency and opportunity: Ensure that everyone and every community has enough for a decent life and that everyone has opportunities to seek improvements in ways that do not compromise future generations’ possibilities for sufficiency and opportunity.

Intragenerational equity: Ensure that sufficiency and effective choices for all are pursued in ways that reduce dangerous gaps in sufficiency and opportunity (and health, security, social recognition, political influence, and so on) between the rich and the poor.

Intergenerational equity: Favour present options and actions that are most likely to preserve or enhance opportunities and capabilities of future generations to live sustainably.

Resource maintenance and efficiency: Provide a larger base for ensuring sustainable livelihoods for all, while reducing threats to the long-term integrity of socio-ecological systems by reducing extractive damage, avoiding waste and cutting overall material and energy use per unit of benefit.

Socio-ecological civility and democratic governance: Build the capacity, motivation and habitual inclination of individuals, communities and other collective decision-making bodies to apply sustainability requirements through more open and better informed deliberations, greater attention to fostering reciprocal awareness and collective responsibility, and more integrated use of administrative, market, customary and personal decision-making practices.

Precaution and adaptation: Respect uncertainty, avoid even poorly understood risks of serious or irreversible damage to the foundations for sustainability, plan to learn, design for surprise, and manage adaptation.

Immediate and long-term integration: Apply all principles of sustainability at once, seeking mutually supportive benefits and multiple gains.

Source: Gibson, R B, S Hassan, S Holtz, J Tansey and G Whitelaw (2005) Sustainability Assessment: Criteria and Processes, London: Earthscan.

STAKEHOLDER PARTICIPATION IN ASSESSMENT

Projects are normally proposed within a setting of existing policies, both governmental and private sector, e.g. an energy policy or roads programme frames subsequent concrete projects. Public participation in decision-making at the project level is often the first opportunity that civil society has to question such policy decisions, or even to become aware that the policy choices have been made. The public may have been excluded from the earlier decision-making – if there is no legal or administrative requirement to involve the public – or the public may not have been aware of the concrete consequences of abstract policy decisions. This can lead to frustration with public participation processes, leading to more robust responses (e.g. direct action such as protests) or to disengagement (“What’s the point?”). Similarly, frustration and disappointment arise if the views and values (or views of what is rational) of some stakeholders are not respected, or if more powerful stakeholders dominate the process.

Conversely, equity among stakeholders, together with transparency and accountability, will encourage the participation of civil society in policymaking, strengthen democratic governance and build ownership and trust in decision-making. The further up the policy ladder that civil society is able – and willing – to participate, the greater these benefits. In certain circumstances, participation can also bring stakeholders into formal, regulated systems where sustainability can be addressed (see, for example, Box 4).

Box 4. Strategic Environmental Assessment for mineral policy development, Mongolia

A training workshop on SEA for artisanal and small-scale mining, held in Ulaanbaatar in September 2007, concluded that SEA had the potential:

- To provide for an integrated approach to artisanal and small-scale mining issues and to help achieve the goal of developing artisanal mining into a formal, legal and responsible sub-sector of mineral development
- To leapfrog project-level environmental impact assessment, which was out of reach of individual operators (and which would in any case be impractical for artisanal and small-scale mining), to the central and regional planning and programming levels.

Source: SEA Training for Mineral Policy Development: Workshop Outcomes and Evaluation, A practice-oriented workshop for participants of the Seventh Communities & Small-scale Mining Annual Meeting, M A Bouchard, consultant on behalf of BMZ/GTZ, 2007.


SEA of spatial and sectoral plans and programmes has become a legal requirement in Western and Central Europe. This is increasing the overall transparency of strategic decision-making and allowing the early consideration of the opinions of key stakeholders in the plan- or programme-making process, thus enhancing the credibility of plans and programmes, and contributing to mobilizing public support for implementation. A plan or programme is generally more effective when the values, views, opinions and knowledge of the public have become part of the decision-making process.

ROLE OF ASSESSMENT IN CLIMATE CHANGE MITIGATION AND ADAPTATION

At the High-level Event on Climate Change in September 2007 (The Future in our Hands), world leaders agreed that there was a need to reduce the risk of disasters and increase the resilience of communities to increasingly extreme weather phenomena through systematic planning and capacity building, and that this approach should be integrated into all development planning that countries do. Similarly, IPCC noted that one way of increasing adaptive capacity is by introducing the consideration of climate change impacts in development planning, for example, by including adaptation measures in land-use planning and infrastructure design. For land-use planning, SEA can provide the necessary tools, whereas for infrastructure design, both SEA and project-level environmental impact assessment might be appropriate.

UNDP has taken up these challenges. UNDP has recognized that climate change considerations – both mitigation and adaptation – must become a part of policymaking and planning across the board and that an integrative assessment approach, such as SEA, can incorporate climate change considerations, support adaptation and so reduce vulnerability to climate change. This new work is intended to lead to improved consideration of climate change-related and environmental risks in policies (etc.) and of the specific effects of policies on the climate vulnerability of relevant populations and stakeholders. Further, the work is meant to raise awareness of climate change, and of its impacts, among policymakers and the public, this being critical for effective mainstreaming.

At the same time, the OECD Development Assistance and Environmental Policy Committees have jointly established a Task Team to develop guidance on climate change adaptation. In addition, an advisory note on adaptation to climate change,



supplementing the afore-mentioned OECD/DAC guidance on SEA, was due to be published at the end of 2008. Further, a European Commission green paper of 2007 on adapting to climate change suggested that “climate-proofing” must be integrated into the EU Directives on SEA and on environmental impact assessment.

BUILDING ASSESSMENT CAPACITY

Many international organizations are working to promote SEA. The work of OECD is mentioned above, and this work has been followed up by various capacity development activities, including numerous training courses in over a dozen countries around the globe and, most recently, a series of multisectoral awareness-raising workshops in Zambia in September 2008.

With the support of UNECE, States have negotiated a Protocol on SEA to the UNECE Convention on Environmental Impact Assessment in a Transboundary Context (Espoo, 1991). The Protocol was adopted in 2003 at the Fifth Ministerial Conference “Environment for Europe”. Unfortunately the Protocol has yet to enter into force, with only nine of the needed 16 ratifications to date.

However, at the Sixth “Environment for Europe” Conference in 2007, Armenia, Belarus and the Republic of Moldova put forward an Initiative on SEA (the “Belgrade SEA Initiative”). The countries of Eastern Europe and the Caucasus met in Chisinau in June 2008 to decide how to move forward on this Initiative and elaborated a programme of work to support implementation of SEA and ratification of the Protocol. They are now seeking donor support. Further, the Meeting of the Parties to the Espoo Convention, in May 2008, welcomed the Belgrade SEA Initiative and added their own complementary activity to promote ratification of the Protocol.

The Aarhus Convention was adopted at the Fourth “Environment for Europe” Conference, held in Aarhus (Denmark) in 1998. The Aarhus Convention connects environmental rights and human rights and establishes that sustainable development can be achieved only through the involvement of all stakeholders. The Convention also links government accountability and environmental protection, and it focuses on interactions between the public and public authorities in a democratic context. The Parties to the Convention continue to develop knowledge of and capacity in public participation in strategic decision-making, including through a broad capacity-building framework.⁴¹

Further, UNDP has been running SEA training courses in the UNECE region, using materials to support both the OECD guidance and the UNECE Protocol. A first course was held in 2007 for countries of Eastern Europe, the Caucasus and Central Asia, a second one was held in September 2008 for the West Balkan countries. UNDP, together with UNECE and the Regional Environment Center for Central and Eastern Europe, provide the secretariat for the Belgrade SEA Initiative. The three organizations have worked together repeatedly to promote SEA.

Finally, UNEP has been particularly active in developing methods and practices for integrating – both the senses described earlier – sustainability into policymaking, with its Integrated Assessment and Planning approach being applied in over 30 developing countries and countries with economies in transition.

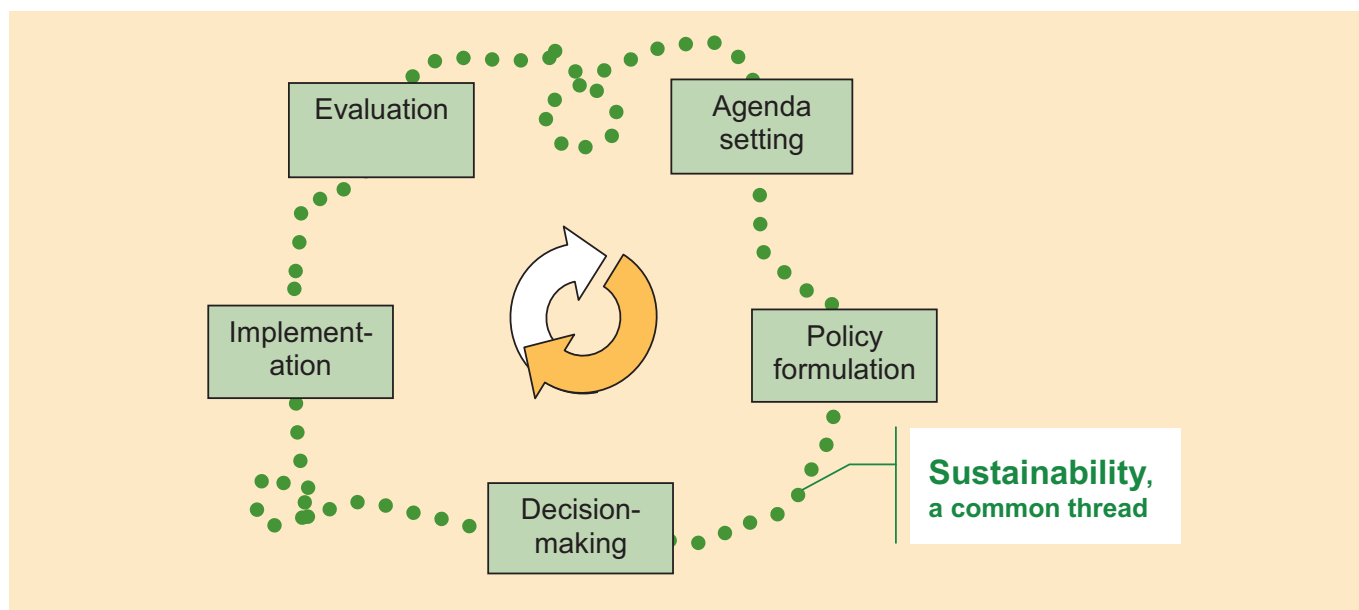
FUTURE DIRECTIONS – MOVING BEYOND ASSESSMENT TO SUSTAINABLE POLICIES

Although impact assessment, SEA and related tools are successful in identifying more sustainable development options, and in promoting good governance, they do not appear sufficient to achieve sustainable development. Many decisions and policies are made without ensuring their sustainability. Assessment arrives too late or, for higher-level decisions, not at all. And assessment usually remains a separate – even if closely-tracking – process from policymaking.

It is clear now that sustainability needs to be moved into the heart of all policymaking and to become a continuous narrative throughout the policy cycle: from agenda setting, through policy formulation, decision-making, implementation and evaluation, back to agenda setting for the next policy cycle (see figure 2). UNEP, along with others, is now formalizing this concept in an initiative on Integrated Policymaking for Sustainable Development (into which UNECE provides some input).

⁴¹ For more on the Aarhus Convention, see <http://www.unece.org/env/pp/>.

Figure 2 Sustainability as a continuous narrative in policymaking



The initiative breaks out of the usual range of impact assessment, which lies between policy formulation (after the agenda has been set) and decision-making (before the real work starts in implementation). The initiative has yet to be tested in practice, but it does build on UNEP experience with Integrated Assessment and Planning and on work on impact assessment carried out by other bodies, such as the World Bank, the European Commission and the International Institute for Environment and Development.

For example, in setting the policy agenda, the aim is to bring issues of public concern on to the agenda by defining them in relation to sustainable development priorities. This can be helped by framing the issue in sustainability terms, harmonizing the interests of different stakeholders, managing the entry of the issue on to the policy agenda, and seeking policy windows to get early resolution of the issue. The initiative proposes approaches and practical tools for each step in the policy cycle.⁴²

In conclusion, SEA and related tools are available now and can be applied to a wide range of policies and strategies. And they can be used to help bring about institutional change and to integrate climate change considerations into policymaking. The priority in the UNECE region is the application of SEA in South-Eastern Europe and Eastern Europe, the Caucasus and Central Asia, at the highest possible levels of decision-making and above all in the energy and transport sectors; the recent SEA of Montenegro's draft energy strategy illustrated how effective this approach is. This focus is particularly important with regard to climate change, as it is in these subregions that substantial climate impacts have been projected, capacity to adapt is most limited and awareness of climate change issues is lowest.

But to get sustainable development at the heart of policymaking needs greater understanding – and greater efforts to raise awareness – of the environment's importance in everything from trade and jobs to poverty reduction and human well-being.

⁴² More information on the initiative on Integrated Policymaking for Sustainable Development is available from the Economic and Trade Branch (ETB) of UNEP, Geneva.