

THE EU ENVIRONMENTAL PROTECTION POLICY CHALLENGES IN THE INTEGRATION PROCESSES

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Abstract. The main goal of the publication is to present the problems and tasks of environmental protection policy in the EU-countries. One of the most important aspect of this question is the coordination of this policy at the EU-level with the national and local level. It could be help in determining of its basic tasks and in increasing the effectiveness of the leading by particular countries policy in this scope. It should give the opportunity to improve the condition of the environmental as well as positive influence on the economic growth, especially in long-term perspective.

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Reikšminiai žodžiai: aplinkosaugos politikos integravimas, tvari plėtra, integraciniai procesai, ES šalių ekopolitika.

1. Introduction

Environment protection policy has crucial importance in the stimulation of economic growth in the EU-countries. Progressing devastation of the natural environment, increasing use of non-renewable energy resources and climate changes cause these problems to become more and more fundamental. It is very important to determine the scope of the competences of this policy and the level of its working out and implementation (community, national or local), taking into account the effectiveness of the proposed solvings. The EU worked out many law acts and conceptions, which goals was to regulate the problem of environmental protection, but there are still many difficulties to coordinate it with national policies in this scope.

2. The EU main documents forming sustainable development policy

In 2001 European Commission published strategy: “A Sustainable Europe for a Better World: A European Union Strategy for Sustainable Development” (COM 2001 264). The

Strategy focused on six priority threats to sustainable development: climate change, threats to public health, poverty and social exclusion, increasing pressure on some vital natural resources, an ageing population and transport congestion. EPI has played central role in the Strategy (Persson 2004). Göteborg Summit recognised in 2002 the need for a more developed external dimension of the Strategy (Dalal-Clayton, 2004; Tanasescu, 2006) and in 2002 Commission published the next document: “Towards a Global Partnership for Sustainable Development (COM (2002) 82),” which included more links of the frameworks: Seven EAP. The sixth EAP (2002-2012) focuses on four priority issues: climate change, nature and biodiversity, environmental health and natural resources and waste (COM, 2001). There were proposed a number of strategic approaches, mainly connected with fully integrating ecological policy into other EU policies. It states that there is a strong need to support Cardiff process (COM 1998). The sixth EAP would contribute to Cardiff process by effective assessment of new policy proposals from the Commission and further efforts on the definition of indicators to measure progress (COM 2001). It includes seven Thematic Strategies: air quality, marine environment, sustainable pesticide use, urban environment, sustainable resource use, waste prevention and recycling, soil management). The opportunities for EPI differ between sectors because they are structured and governed in different way and also depend on the extent to which environmental impacts are inherent to the sector activities (EEA 2005). The main differences are presented in table 1.

The document Europe 2020 sets out a vision of Europe’s social market economy for the 21st century. (Europe 2020 2010) puts forward three mutually reinforcing priorities:

- smart growth: developing an economy based on knowledge and innovation,
- sustainable growth: promoting a more resource efficient, greener and more competitive economy,
- inclusive growth: fostering a high-employment economy delivering social and territorial cohesion.

Table 1. Addressing EPI – differences between selected sectors (Source: EEA, 2005)

	Target actors	Number of actors	Technological/scientific issues	Member state level intervention	EU level intervention	Policy instruments at EU level
Agriculture	Producers Processing consumers	Many but cohesive	Low Significance	High	High	Financial support
Transport	Governments Producers Oil Industry Operators/ Public	Many	Long lead time for change	High (national, local)	Low	Limited financial support Regulation

	Target actors	Number of actors	Technological/scientific issues	Member state level intervention	EU level intervention	Policy instruments at EU level
Energy	Governments Producers Consumers	Few	Long lead time for change	High	Low	Financial support Regulation Fiscal measures
Industry	Producers Consumers	Few (but varies among sectors)	Medium lead time for change	Medium	Medium	Regulation
Internal market	Producers Consumers	Many	Medium-scientific issues	Low	High	Regulation
Development	Governments Producers NGOs/ Public	Relatively few	Low	Medium	Medium	Financial support/ trade
Economics and finance	Governments Public/Tax payers	Few	Low	High	Low	Fiscal measures/regulation
General affairs and external relations	Governments (regional policy) Governments and international organisations (trade/foreign policy) Producers Consumers	Relatively few	Low	Low (trade) High (regions) High (foreign policy)	High (trade) Medium (regions) Low (foreign policy)	Financial support, trade, diplomacy
Fisheries	Producers Processing Consumers	Many but not very cohesive	Science-high significance	Low	High	Regulation

The EU needs to define where it wants to be by 2020. To this end, the Commission proposes the following EU headline targets:

- 75% of the population aged 20-64 should be employed,
- 3% of the EU's GDP should be invested in R&D,

- the “20/20/20” climate/energy targets should be met (including an increase to 30% of emissions reduction if the conditions are right),
- the share of early school leavers should be under 10% and at least 40% of the younger,
- generation should have a tertiary degree,
- 20 million less people should be at risk of poverty.

3. The environmental policy intergration (EPI) conception in the EU policy

In 1990s environmental policy integration (EPI) at EU level was pursued by non-hierarchical modes of governance (Wilkinson 2006-2008), but since 2000 it was dominated by a new paradigms, what was connected with emerging new pressures. They resulted mainly from external factors (connected with EU enlargement process). In a consequence the Lisbon Strategy for Growth and Jobs was worked out and it has brought the introduction into EU policy development of a number hierarchical, top-down modes of governance which have forced bottom-up approaches to EPI into retreat. Other emerging pressures derive from foreseeing by EPI a sharing responsibility for the development of environment related policies with non-environmental subjects. It was reflected in creating and development of the seven Thematic Strategies worked out in the framework of the Sixth Environmental Action Programme. In connected with it the EU environmental policy has begun to consider if a more hierarchical, top-down approach is necessary to advance EPI at EU level. In 1997 it was observed that: “succesfull integration entails a fundamental redefinition of the role of environment departments, and some loss of control over environmental policy. The dilemma that this poses is that the focus for advancing integration ...may therefore become less distinct” (Wilkinson 1997).

3.1 Communicative governance and voluntarism

(Jacob and Volkery 2006) include the following EPI instruments/tools in their analysis: sustainability strategy, national environmental action plan, constitutional provision, independent institutions for EPI, sectoral strategies, amalgamation of departments, green budgeting, green cabinet, interdepartmental working groups, reporting obligation, strategic environmental assessment, and appraisal of policy initiatives. A large share of these instruments may be indicators for communicative governance (Knill 2005), which is information and learning based. Three instruments: sustainable development strategies, national environmental strategies, and sectoral strategies may indicate the presence of voluntarism. A green cabinet or constitutional provisions for sustainable development/ EPI may be interpreted as indicators of hierarchical governance (Knill 2005), while independent advisory institutions would suggest the presence of targeting which is characterised, among other things, by legally non-binding, but quite specific standards. On the whole, Knill’s typology of modes of governance

which includes hierarchy, communication, and the market appears to reflect the mix of policy instruments selected by Jacob and Volkery (2006) best, mainly because many instruments seem to be indicative of communicative governance. However, there are also instruments which seem to indicate the presence of voluntarism and targeting—two modes of governance featured in (Treib et al. 2005) typology. Other instruments may fit best with modes belonging to two or more typologies—including the ones developed by (Knill, Treib et al. 2005) but also others. For at least three reasons the high number of instruments that seem to indicate communicative governance does not mean that communicative governance is the dominant EPI mode. First, policy instruments are only one among several components of modes of governance. In fact, the relatively good fit between Knill's and Treib et al.'s typologies and the policy instruments selected by Jacob and Volkery may in part reflect the fact that these two typologies are biased towards policy instruments. Unlike other typologies, both typologies deliberately emphasise the policy or implementation aspects of governance which are closer to policy instruments than the polity and politics aspects stressed by other typologies. Second, the number of policy instruments pointing towards a particular mode of governance does not say much about whether or not these instruments are actually applied in different countries.

3.2. Market-oriented governance

Tradeable pollution permits, environmental charges and the abolition of environmentally harmful subsidies are examples of relevant instruments in this scope (EEA 2005). There are two arguments in favour of market-oriented environmental governance:

- economic instruments are able to increase efficiency because they allow polluters to choose the most efficient way of preventing pollution. Besides, polluters with relatively low abatement costs have incentives to make a disproportionate contribution to emission reductions. However, the relevance of the efficiency argument for EPI is somewhat limited because increased efficiency does not automatically translate into better environmental protection.
- application of the polluter pays principle promises to integrate environmental concerns into economic activities by forcing economic actors to take into account the costs of environmental degradation in their economic calculations - including costs of pollution that would be permitted if emission limits were used (Knill and Lenschow 2005, pp.124-125). Despite their theoretical benefits, the use of economic instruments also has serious disadvantages from a governance perspective. As with other instruments, the advantages of the use of economic instruments only materialise if these instruments are not watered down in the phases of the policy process preceding implementation. However, market-oriented governance seems to be particularly prone to this danger. As Foxon et al. (2004, p.7) put it: “[moves to introduce market-based instruments will inevitably be politically contested, as they effectively create and distribute new ‘property rights.’” Other factors may further add to these problems. For ex-

ample, at the EU-level national sovereignty concerns strongly mitigate against a shift towards governance by competition (Knill and Lenschow 2005, p. 125).

3.3. Network governance, corporatism, and the coordinated market economy

The (EEA, 2005) considers public participation as well as transparency and the provision of information to be important means of improving EPI. With respect to the establishment of relevant procedures, the agency states that “public consultation in Europe has developed considerably and now takes place in almost all OECD countries” (EEA 2005, p.24). At the same time “much progress has also been made in relation to access to environmental data that is held by public authorities” (ibidem). Involvement of non-state actors may serve different purposes with respect to EPI. For example, broad stakeholder participation may help to counter-balance established actors which try to preserve a status-quo that takes little account of environmental concerns (Foxon et al. 2004, p.10; Durant et al. 2004, p. 13). It may also be necessary to overcome political blockades, especially whenever “no one is capable of enforcing co-ordination against the will of other actors” (Durant et al. 2004, p.4). Foxon et al (2004, p. 9) argue that stakeholder participation in sustainable innovation policy (SI) is necessary to establish politically, economically and technically viable strategic options. Involvement of non-state actors may serve to mobilise additional resources needed for successful EPI. Perhaps most importantly, involvement of non-state actors may transform adversarial relationships into more deliberative ones (Durant et al. 2004, p. 4) and support collective learning processes that may result in the sort of structural changes needed to improve EPI (Van Humbeeck et al. 2004; Loorbach 2004). From a governance perspective, the involvement of non-state actors in policymaking corresponds to modes of governance such as new governance, but also pluralism, corporatism, and network governance. If consultation and participation primarily serves purposes of information provision and balancing, this might indicate pluralism. However, efforts to increase stakeholder participation frequently are more ambitious involving, for example, “slowly working towards a shared agenda” (Loorbach 2004) or the emergence of “collaborative partnerships imbued with a results-based sense of common purpose among the government, the private sector, and civil society” (Durant et al. 2004, p. 4).

3.4 Framework legislation

Framework legislation (Treib et al. 2005), which only sets out broad objectives but not included detailed implementation to be worked out in other contexts, may not be as directly relevant to EPI as some of the governance modes discussed above. However, the functioning of some of these modes may depend on the combination of legally binding rules and flexibility that characterises framework legislation. Durant et al. (2004) and Knill and Lenschow (2005) argue that flexible framework legislation is required for competition-based governance. Types of governance relying on involvement of non-state and regional and local actors in the formulation and implementation

of measures to boost EPI may frequently have to resort to framework legislation to provide the flexibility that is needed to accommodate the specific knowledge, resources, and preferences of these actors. Emphasising implications for learning, innovation and adaptation to local circumstances, Watson et al. (2004) reach similar conclusions with respect to the failure of EPI in the case of municipal waste management policy in the UK: “In addition, more flexibility and the establishment of channels of communication allowing for bottom-up learning would allow for the implementation of innovative and locally well adapted solutions.”

3.5. OMC-type governance

The OMC and OMC-type governance (Eberlein and Newman 2006) appear to be special cases of new governance (Börzel 2006), voluntarism (Treib et al. 2005), and communicative governance (Knill and Lenschow 2005). OMC-type governance aims to inspire social learning by setting broad, common goals and establishing procedures for comparison and measuring their achievement (Sabel and Zeitlin 2006). Durant et al (2004) find “conventional administrative rationality inadequate to the task of advancing social learning” and suggest an alternative approach that relies on a “results based common sense of purpose”. In a broadly similar vein, Briassoulis (2004) proposes “adaptive management” as a mode of governance suitable to improve EPI: “Based on learning-by-doing and experimentation, can be viewed as an approach to managing risks associated with uncertainty. Resource policies are considered as hypotheses and management as experiments from which managers learn from their successes and from their failures. It stresses the importance of two-way feedback between management and the state of the resource in shaping policy, followed by further systematic experimentation to shape subsequent policy. Its flexible, iterative, co-evolutionary and science-based character allows for institutional learning.” Van Humbeek et al. (2004: 12) describe transition management as a “deliberate attempt to bring about a structural transformation of the economic system, in an iterative and interactive manner, involving sequential and participatory decision-making. It is a collective learning process, facilitated by government who aims to shorten the desired transition and prevent the lock-in in disadvantageous and not-desirable development paths.” Similarly, Loorbach (2004) considers transition management to be “a form of multi-level governance [...] whereby state- and nonstate actors are brought together to co-produce and co-ordinate policies in an iterative and evolutionary manner on different policy levels.” At the EU-level OMC-type mechanisms are also used to some extent to improve EPI. The Cardiff Process (COM 1998) seems to be the most prominent example. Starting in 1998, the Cardiff Process required several sectoral formations of the Council of Ministers (for example, the Economic and Financial Affairs Council) to develop strategies - including targets and indicators—how to integrate environment concerns into their respective activities. However, once more or less ambitious sectoral environmental integration strategies had been developed, the process began to falter due to lack of political support for the adoption of follow-up measures. In many ways the partial integration of

the EU Sustainable Development Strategy into the 2000 Lisbon Strategy which pursued the strategic goal of turning the EU into “the most competitive and dynamic knowledge-based economy in the world ...” had the hallmarks of OMC governance. However, like the Cardiff Process, the integration of the SDS into the Lisbon Strategy soon ran out of steam and eventually failed (Homeyer 2005). Less ambitious OMC-type processes, such as the Common Implementation Strategy (CIS) of the Water Framework Directive appear to have been more successful (Scott and Holder 2006). At the international level, the OECD’s peer review processes may also be viewed as OMC-type governance mechanisms using credible information and learning to improve EPI. Yet, the production of the OECD’s environmental policy reviews as well as the integration of a sustainable development section into the OECD’s flagship Economic Surveys have so far hardly led to EPI improvements (Lehtonen 2004).

3.6. Institutional approach

Institutional approach offers a different ways to solve above mentioned problems. It emphasises that organisational behaviour as well as its development are the consequence of a number of related influences including inter alia: rational decision making, rules, norms and symbols according to the political behaviour (March, Olsen 1989). Institutional theories point to the various ways in which organisations can change (March 1981; Bulmer 1997; Scott 1995). Adaptation can be rule following and leading to new routines, calculated adaptation, conflict settlement and based on learning. Besides, as many authors point out (March, Olsen 1989), the Commission can stimulate member states to use national impact assessments systems for analysing EU policies. Applied to EPI “integration” may be a major innovation for some in the administration. It remains only one of the many intermediated variables that influence the correlation between many competing values. This applies not only to organisations but also to individuals and their capacities to learn and to act upon what they learned (Radaelli 2001). Neo-institutional theories often underline the meaning of stability, mainly according to: internal power balances, rule and value systems. Path dependency is a major theme in the neo-institutional theory (North 1991). Institutions make organisations robust (Selznik 1957) but also implies that they create potential incompatibilities with new demands (March, Olsen 1989). The initiation of the Cardiff process (COM 1998) shows that the level of activity significantly increased after leadership moved from environmental ministers and officials in the EU Commission to heads of state and government (Lenschow, 2003). However, this leadership depended on the priorities of six-monthly presidences and it is felt that the resulting inconsistency of support has been in part responsible for the weakening of this process (Wilkinson et al. 2002; COM (2004), p. 394).

3.7. The problems of the green employment’s creating

The future goals in the scope of EPI should also include changes which take place in strategic sectors of the economy. The substance elements of these amendments is

structural conversion of the industry which is based on increasing of the participation of the renewable energy in production at the Cost of declining of Sector producing traditional energy resources. It should find reflection in the change of employment structure for more modern.

Table 2. Coordination policy in chosen countries and EU institution in the aspect of institutional approach to the EU-EPI (Source: Schout, Jordan, 2007)

	GER	NED	UK	COMMISSION	PARLIAMENT
Trad.	Fragmented	Fragmented	Integrated	Fragmented	Fragmented
Type of coordination	- passive coordination - in addition to informal relations: coordination based on interministerial teams (matrix structures)	- passive coordination - in addition to informal relations: coordination based on interministerial teams (matrix structures)	- active coordination - in addition to informal relations: coordination based on interministerial teams (matrix structures)	- passive coordination - in addition to informal relations: coordination based on interministerial teams (matrix structures)	- coordination mainly within the political groups
Reform	- more matrices - more detailed rules	- more matrices - more detailed rules	- less matrices - central role for general rule ("active coordination") - more subsidiarity	- not matrices - more detailed rules (IA) and general rules (Codes) - additional co-ordination roles (SG, IA co-ordinators)	-
Outcome (OD)	perverse	perverse	fitting	fitting	standstill
Neo-institutions	path-dependent	path-dependent	path-dependent	- structural change (from "simple structure" to bureaucracy)	- not even path-dependent
Fitting with EU-EPI	no	no	yes	yes	no

Source: (Schout, Jordan, 2007)

Accessible analyses (UNEP 2008; ILO 2010) show that these tendencies are dominating not only in the EU-countries but also all over the world. Leading by the EU and

its member countries ecological policy should include all these aspects as well as stimulate creating the new green jobs, which will substitute traditionally working places. It should lead to changing of the employment structure for more modern and competitive. It ought to stimulate decrease of unemployment rate and boosting employment rate in the EU-27 countries mostly by improving of the labour market effectiveness in the consequence of better adjusting the labour demand structure to the labour supply structure in particular countries and their regions. The expenditures for creating new ecological jobs should reflect in accelerating of the economic growth and development and improving of the international competitiveness of the EU economy.

4. National Sustainable Development Strategies (NSDS)

The NSDSs reviewed cover a wide variety of social, economic and environmental issues, including:

- **sectoral issues** such as sustainable energy, transport, agriculture, industry, chemicals, SMEs, development of service sectors, government, tourism, fisheries, forestry, water, etc.,
- **cross-sectoral issues** such as biodiversity, climate change, atmosphere, noise, soil, radioactivity, marine environment, waste, nature protection, desertification, environment and health, ageing, gender equity, poverty, employment, education and training, social cohesion, cultural diversity, minority groups, security, research and innovation, governance, competitiveness, trade, overseas development aid, production and consumption, corporate responsibility, etc.,
- **territorial issues** such as regional, urban and rural development, landscapes, coastal zones, spatial planning and land use change, infrastructure, etc.

In an attempt to increase policy coherence and to prompt mobilisation, countries usually cluster the policies contained in their NSDS into a limited number of categories. The following types of policy cluster were identified:

Broad cross cutting objectives: an example of this approach is given by Austria that clustered its priority areas around achieving (1) a better quality of life, (2) becoming a dynamic business location, (3) protecting the living space and (4) fulfilling Austria's international commitments. Within each broad category several thematic, sectoral and geographic issues work together towards the common objectives. Others took a similar approach, including, Sweden, Denmark, Portugal, Estonia (draft plan) and the Czech Republic (draft plan).

Actor-centred strategies: the French strategy is an example of this approach, in which some actions are clustered around the role of citizens, regions and provinces ("territoires"), economic actors and Government. Poland followed a similar approach, focussing on actions by society, the economy and the state. Belgium added a section to its NSDS dedicated to strengthening the role of key groups (women, children, foreigners and refugees, in accordance with the provisions of Agenda 21).

The classical three pillar approach: that is the addition of social, economic and environmental objectives. The United Kingdom distinguishes between objectives and measures for a sustainable economy, for building sustainable communities and to manage the environment and resources. It adds a fourth category of objectives and measures for international co-operation and development, as well as a category for horizontal measures. Other countries that follow this approach are Belgium, Greece, Finland, Lithuania (adding a regional dimension). There are many cross references between the three clusters.

The National Sustainable Development Strategies (NSDS) reviewed are intended as either framework plans for future policy making or concrete action programmes, but usually contain elements of both.

- **framework strategies** set out general policy directions and guidance for sustainable development, combined with broad lines of action for specific problem areas. Their main objective is to change the processes of policy development and implementation. They are often complemented by separate, more detailed (sectoral) action plans or annual working programmes,
- **action programmes** contain concrete, short and medium term objectives, with strict timetables and detailed measures. A few NSDS belong to this category,
- **Mixed approaches** describe those NSDS, which are intended to be framework documents, but which also contain very detailed policy actions.

Table 3. Tentative classification of National Sustainable Development Strategies
(Source: NSDS, 2004)

	Framework strategies	Action Programmes	Mixed
EU-15 Member States	Austria, Denmark, Finland, Greece, Spain, Portugal	The Netherlands	Belgium, France, UK, Germany, Ireland, Luxemburg, Sweden
EU-12 Member States	Cyprus, Czech Republic, Estonia, Latvia, Poland	Lithuania	Slovakia

4.1 Horizontal integration.

The search for more policy coherence and better integration of social, economic and environmental development goals is stated by many countries as one of the explicit aims of the NSDS. Countries have had varying degrees of success in providing institutional and procedural arrangements and policy measures to enhance horizontal and vertical policy coherence in their strategies. Horizontal measures include tools such as guidelines for policy (Belgium), the use of Impact Assessment (United Kingdom), SWOT analysis (Ireland, Portugal, Cyprus) or spatial planning (France), as well as cross-sectoral policy measures such as fiscal reforms, education and training, capacity building and communication, and stimulating the production and dissemination of technical innovations (NSDS 2004).

4.2 Vertical integration

The main ways of vertical integration of the EU sustainable development policy are the following initiatives:

a) EUSDS – NSDS coherence

Despite having been adopted prior to the EUSDS, the NSDSs from Belgium, Finland, Ireland, Luxemburg, the Netherlands and the United Kingdom. Poland did not include climate change because they already have achieved their emission reduction target under the Kyoto protocol. On the other hand, the NSDSs of Austria, Denmark, France, Germany, Greece, Italy, Latvia, Lithuania, Slovakia, and Sweden were established after the EU SDS was adopted. They all contain references to the EU SDS and include the four European environmental priority areas in their own priorities, sometimes explicitly, sometimes as part of a broader policy area. Belgium and Estonia go even further and explicitly base their new draft NSDS on the content of the EUSDS.

Table 4. Measures for horizontal integration in National Sustainable Development Strategies (Source: NSDS, 2004)

	Central guiding principles	SWOT analysis	IA		Spatial planning	Fiscal reforms	Education training & communication	Capacity building	Innovation and R&D
			SIA	SEA and IEA					
EU-15	Denmark Belgium	Ireland Portugal	Belgium Finland France Luxemburg The Netherlands Sweden UK	Denmark Italy Ireland Greece Spain Germany	Sweden France Greece Luxembourg	Sweden Belgium Denmark Finland Greece Ireland Italy The Netherlands UK	Sweden Greece Italy Luxembourg Portugal	Sweden Belgium	Italy Belgium
EU-12		Cyprus Slovakia Slovenia		Hungary Slovakia	Slovenia Lithuania		Cyprus		Lithuania

IA- impact assessment

SIA – sustainability impact assessment

SEA- strategic environmental assessment

IEA – integrated environmental assessment

b) Regional SDS:

- Nordic countries (Denmark, Sweden, Finland, Norway and Iceland) came together to draft a **Nordic strategy for sustainable development** (currently being revised for the 2005-2008 period), in which they coordinate measures of particular regional importance. Issues covered include climate change, biodiversity, natural and cultural environment, the sea, chemicals, food safety, energy, transport, agriculture, business and industry, fisheries, hunting and aquaculture, forestry, knowledge, instruments and resource efficiency, public participation and local agenda.
- a regional **Baltic Sustainable Development** process was initiated in 1996 between the 11 countries concerned (Denmark, Sweden, Norway, Iceland, Finland, Germany, Russia, Poland, Estonia, Latvia, and Lithuania) and the EU, together with a list of intergovernmental organisations (IGOs), international financing institutions (IFIs), and regional networks of cities and regions and international and regional non-governmental organisations (NGOs). The Baltic Agenda 21 project sets out future development visions for a number of key sectors of the economy, such as energy, fisheries, forestry, agriculture, transport, tourism, education and training, spatial planning and industry, and attaches specific action plans to them.

c) The sub-national governmental level

Mechanisms for establishing links between the national and local or regional level frequently mentioned in NSDSs are:

- support for the development of local Agenda 21 projects,
- support for networking between local authorities,
- funding and capacity building for local and regional SD,
- help in the development of local and regional SDS.

4. Conclusions

The most crucial problems connected with the level of leading ecological policy by the EU and its member states are:

- working out and implementation of the correct interrelations between vertical and horizontal interdependence. In order to “green” new EU Commission proposals, national environment protection officials have to monitor national experts in early stages of policy making,
- close co-operation between EU and national authorities,
- increasing co-operation between the national and European environmental impact mechanism. It is very difficult to carry out regional differences on the EU level because of high degree of differentiation,
- ensuring right quality of legislation, subsidiarity and consistency,
- monitoring of leading ecological activities and ensuring their stability,

- environmental factor according to the labour market policy.

The EU should still cooperate with its member-countries to be able find the most effective solvings in the scope of EPI, improving its effectiveness.

References:

1. Briassoulis, H. 2004. *Policy integration for complex policy problems: what, why and how*, paper presented at the IDHP Berlin Conference on the Human Dimensions of Global Environmental Change 'Greening of Policies –Interlinkages and Policy Integration', Freie Universität Berlin, 2004.
2. Durant, R.F., O'Leary, R and F., Daniel J. 2004. "Introduction," in: R.F. Durant, D.J. Fiorino and R. O'Leary (eds.) *Environmental Governance Reconsidered Challenges, Choices, and Opportunities*. Cambridge, Mass.: MIT Press, pp. 1-27.
3. European Environment Agency (EEA) 2005. *Environmental policy integration in Europe. State of play and an evaluation framework*, EEA Technical report No 2/2005.
4. *Europe 2020, A European Strategy for smart, sustainable and inclusive growth* <<http://ec.europa.eu/eu2020/pdf>>.
5. European Environment Agency (EEA) 2005. *Environmental policy integration in Europe. Administrative culture and practices*, EEA Technical report 5/2005, Copenhagen.
6. Foxon, T., Makuch, Z., Mata, M., Pearson, P. 2004. *Towards a sustainable innovation policy – Institutional structures, stakeholder participation and mixes of policy instruments*, paper presented at the IDHP Berlin conference on the Human Dimensions of Global Environmental Change "Greening of Policies—Interlinkages and Policy Integration," Freie Universität Berlin, December 3-4, 2004.
7. UNEP *Green Jobs: Towards Decent Work in a Sustainable, Low-Carbonated World* 2008<www.unep.org/labour_environment/features/greenjobs-report.asp>
8. Herodes, M., Adelle, C., Pallemarts, M. 2007. *Environmental Policy Integration at the EU Level—A Literature Review* 2007, Ecologic Institute for International and European Environmental Policy, Paper No. 5, Berlin
9. Jacob K., Volkery A. 2006. Institutions and Instruments for Government Self-Regulation: Environmental Policy Integration in a Cross- Country-Perspective, in: J.Martin and K.Jacob (eds.), *Environmental Governance in Global Perspective. New Approaches to Ecological and Political Modernisation*, Freie Universität Berlin, pp. 239-261.
10. Jordan, A., Schout, A. 2003. Governance for Environmental Policy: A multi-level network audit, paper for discussion at the workshop: *Environmental Policy Integration in the EU: Where Next for the Cardiff and Lisbon Processes*, Brussels, 14 March 2003.
11. Knill, C., Lenschow, A. 2005 Compliance, Communication and Competition: Patterns of EU Environmental Policy Making and Their Impact on Policy Convergence, *European Environment* 15, pp. 114-128.
12. Lenschow, A. 2002. *Environmental Policy Integration*. London: Earthscan.
13. Levy, R. 2005. *European Commission overload and the pathology of management reform*, UACES 35th Annual Conference and 10th Research Conference - The European Union: Past and Future Enlargements. Zagreb.
14. March, J.G. 1981. *Footnotes to organisational change*, *Administrative Science Quarterly* 2, pp. 563-577.

15. *National Sustainable Development Strategies in the European Union. A first analysis by the European Commission*,
16. Commission Staff Working Document, NSDS, April 2004
17. North, D.C. 1991. *Institutions, institutional change and economic performance*, Cambridge University Press.
18. Olsen, J. P. 2005. *Maybe it is time to rediscover bureaucracy*, Arena Working Paper No. 10.
19. *Partnership for integration. A Strategy for Integrating Environment*. Communication from the Commission to the European Council June 1998, Cardiff.
20. <<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:1998:0333:FIN:EN:PDF>>
21. Persson, Å. 2004 *Environmental Policy Integration: An Introduction. Policy Integration for Sustainability (PINTS)*. Background Paper. Stockholm Environment Institute. Stockholm.
22. Schout A., Jordan A. 2007. *EU-EPI Co-ordination and New Institutionalism*, Ecologic – Institute for International and European Environmental Policy, Paper No. 2, Berlin
23. Treib, O., Bähr, H., Falkner, G. 2005. *Modes of Governance: A Note Towards Conceptual Clarification*, European Governance Papers (EUROGOV) No. N-05-02. <<http://www.connex-network.org/eurogov/pdf/egpnewgov-N-05-02.pdf>>.
24. Von Homeyer, I., *Environmental Policy Integration and Modes of Governance – State-of-the-Art Report 2007*, Ecologic – Institute for International and European Environmental Policy, Paper No. 2, Berlin
25. Wilkinson, D. 1997. *Towards Sustainability in the European Union? Environmental politics*

AUKŠTŪJŲ TECHNOLOGIJŲ PRODUKTŲ VYSTYMUI ĮTAKOS TURINČIŲ MODELIŲ ANALIZĖ

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Santrauka. Straipsnis skirtas ES šalyse vykdomos aplinkosaugos politikos uždavinių ir problemų analizei. Kaip viena iš svarbiausių problemų išskiriama ir nagrinėjama ES lygmens, nacionalinio ir vietinio lygmens, vertikalių ir horizontalių ryšių koordinavimo ir derinimo problema. Nagrinėjami aplinkosaugos politikos aspektai svarbūs kiekvienos ES valstybės vykdomos politikos bendro efektyvumo didinimui, aplinkos sąlygų gerinimui, o tinkamai parinkti ir koordinuojami aplinkosaugos problemų sprendimo būdai skatina ekonomikos augimą ilgalaikeje perspektyvoje.

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