

## TOP-DOWN AND BOTTOM-UP POLICY IMPLEMENTATION APPROACH – THE CASE OF WIND POWER DEVELOPMENT IN THE NORDIC COUNTRIES AND THE REPUBLIC OF SERBIA

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**Abstract.** *Environmental policy integration (EPI) is the incorporation of environmental concerns in sectoral policies outside the conventional environmental policy domain. Dealing with such concerns is necessary because research indicated that the institutional specialization of policies for specific sectors has resulted in insufficient consideration of environmental impacts, as sectoral policies might have objectives in conflict with environmental objectives and are able to influence the root causes of environmental pressure. There is a consensus that the link between environment and energy policies has transformed and modified the energy policy in Europe, not the least by the potential of renewable electricity (RES-E). Therefore, studying the RES-E perspective within an EPI initiative is relevant and the present article aims to contribute to a more sector-specific understanding of EPI. More precisely, by focusing on the conditions for the expansion of wind energy in the Nordic countries and Serbia, the present research aims to illustrate the necessity of understanding the national, regional and local contexts for more effective RES-E implementation.*

**Key words:** *Environmental policy integration, renewable energy, wind power, policy implementation, top-down, bottom-up.*

### 1. INTRODUCTION

Environmental policy integration (EPI) is the incorporation of environmental concerns in sectoral policies outside the conventional environmental policy domain [1]. Dealing with such concerns is necessary because research indicated that the institutional specialization of

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policies for specific sectors has resulted in insufficient consideration of environmental impacts [2], as sectoral policies might have objectives in conflict with environmental objectives and are able to influence root causes of environmental pressure [1]. Studies on EPI suggest that only modest levels of policy integration (PI) have been achieved. In fact, little is known about how to promote EPI and what factors stimulate or obstruct the incorporation of environmental concerns in sectoral policies [2].

There is a consensus that the link between environment and energy policies has transformed and modified the energy policy in Europe [3], not the least by the potential of renewable electricity (RES-E). Empirical studies have shown that the phase-in of new RES-E production to a large extent depends on stable, long-term and technology-differentiated incentives which can complement market mechanisms and technology development [see 4, 5, 6]. Studying the RES-E perspective within an EPI initiative is thus relevant and the present article aims to contribute to a more sector-specific understanding of EPI.

More precisely, by focusing on the conditions for the expansion of wind energy in the Nordic countries and Serbia, the present research aims to illustrate the necessity of understanding the national, regional and local contexts for more effective RES-E implementation.

## 2. LITERATURE

### 2.1. Definitions

The integration of environmental policies or “environmental policy integration” is defined as “the incorporation of environmental objectives into all stages of policy making in non-governmental policy sectors, with a specific recognition of this goal as a guiding principle for the planning and execution of policy” [2]. This principle should further be “accompanied by an attempt to aggregate presumed environmental consequences into an overall evaluation of policy, and a commitment to minimize contradictions between environmental and sectoral policies by giving principled priority to the former over the latter” [2].

The Brundtland Commission’s report defined the term “sustainable development” as a “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” [7].

According to Lund [8], the term “renewable energy” is defined as “energy that is produced by natural resources—such as sunlight, wind, rain, waves, tides, and geothermal heat—that are naturally replenished within a time span of a few years”.

### 2.2. Policy framework

EPI strategies discussed in the literature range from organizational and institutional to financial and regulatory. The emphasis is typically on strategies where a (central) public actor is governing, e.g., Sustainable Development Strategy (SDS) [see 9, 10, 11, 2, 12]. Yet, no commonly accepted classification of these strategies has been developed so far. The more general environmental governance literature indicates other modes of governance, e.g., voluntary initiatives to reduce CO<sub>2</sub> (carbon dioxide) emissions [see 13, 14, 15, 16, 17, 18].

Ideally, the performance of EPI strategies is evaluated in terms of environmental quality, CO<sub>2</sub> emissions, reduction of climate risks or other physical indicators [1]. Given that this is rather difficult, reported levels of EPI in the literature usually relate to policy processes and outputs only, i.e. the extent to which environmental or climate concerns are considered in decision-making), and in qualitative terms. A variety of explanations for the level of EPI achieved have been found, emphasizing governance of EPI as the most important obstacle in further progress, i.e., in trade-offs, sectoral objectives are often favored and there is frequently a lack of political will to give priority to environmental concerns. A fundamental barrier may thus be viewed as a lack of legitimacy for EPI.

### **2.3. Policy implementation**

Most of the early literature represents an analysis of a single case about the ability of governments to effectively implement their programs [see 19, 20, 21, 22]. The latter studies are more analytical and comparative [see 23, 24, 25]. Common to these studies is that they retain the “top-down” approach, i.e. they start with a policy decision and examine the extent to which its legally-mandated objectives are achieved. A different approach emerged in the late 1970s and early 1980s, however. These “bottom-up” studies begin with an analysis of the multitude of actors who interact at the operational (local) level. In the process, the focus is on the strategies pursued by actors to their objectives. Such studies indicate that local actors often deflect centrally-mandated programs toward their own ends [see 26, 27, 28, 29, 30, 31, 32, 33].

Accordingly, strategies that can be pursued are to indicate the conditions under which each approach is more appropriate and to develop one or more syntheses of the competing approaches.

### **2.4. Research question**

Under what conditions the policy implementation approach become more effective?

## **3. METHODOLOGY**

### **3.1. Research design**

Research is a process of finding solutions to a problem after a thorough study and analysis of the various factors. Similarly, business research can be understood as a methodical and organized effort to examine a particular problem encountered in the work setting that requires a solution.

The present research is an exploratory study conducted into a research problem as if there were no or very few earlier studies about the problem. As such, it will look for patterns and ideas. It is designed to deal with the research question and will involve collecting both quantitative and qualitative data. The data will be analyzed using interpretative methods. The data collection instrument is case studies. Furthermore, the present research is deductive research in which a conceptual and theoretical structure is developed and then tested by empirical observations. Particular instances are thus deducted from general inferences. Finally, the present research is designed to apply its findings to

solve a specific problem. As such, it represents the application of existing knowledge to improve management practices and policies.

### 3.2. Case studies

The case study method in the present research is viewed as useful for trying to test theoretical models by using them in real-world situations, i.e. to analyze a phenomenon, to generate hypotheses, and to validate a method. Even though they are used rather extensively, there is no accepted systematic case study method used by researchers.

#### 3.2.1. Sweden

In 2017, installed wind power capacity in Sweden was 6691 MW. Sweden has a RE goal of at least 50 percent of total energy use by 2020. New targets were announced in 2016 for 100 percent of RE production in 2040. According to the Swedish Energy Agency, the country will need to install an additional 2.5 to 6 TWh of RE generation capacity per year between 2030 and 2040 to reach that objective, and wind power will considerably take part in it.

Accordingly, the Government of Sweden appointed four wind power coordinators in 2006 in order to support interaction between wind power project planners, authorities and other operators at regional and local levels. In 2008, the Swedish Energy Agency defined 423 areas of national interest for wind energy in Sweden. In 2009, the country adopted a national planning framework for wind power in the amount of 30 TWh by 2020 which was split into regional planning frameworks so that every county administrative board was given a regional planning framework to relate to. The county administrative boards have all prepared regional planning for the expansion of wind power. Accordingly, comprehensive municipal planning for wind power has been carried out, primarily centered on onshore sites. Planning was also important for generating dialogue, participation and acceptance of wind power among the general public and various stakeholders.

The electricity certificate system in Sweden is a market-based support system for the expansion of RES-E and peat and is comprised of biofuels, wind power, some hydropower, solar energy, wave energy, geothermal energy and peat in CHP stations. Accordingly, electricity producers are given electricity certificates from the state for each MWh of RES-E they produce. The quotas are fixed until 2035 and have been designed to promote a sufficient increase in RES-E generation in accordance with the government's stated objectives.

The environmental effects of wind power have been comprehensively examined. Conventionally, the authorities in Sweden have focused on conservation interests in the fields of nature and culture, rather than on SD or RES-E. There is still a need to increase focus on the general understanding of the value of wind power, particularly for local usage in relation to the establishment of wind power in the community. Also, it is necessary to further increase the general public's participation and access to information.

#### 3.2.2. Denmark

In 2017, wind power capacity in Denmark increased by 275 MW, bringing the total to 5521 MW. With a 41 percent share of the total electricity consumption, wind power is the most important energy source in the Danish power supply. Following the initiatives

that have been taken in recent political agreements, wind turbine generation capacity is set to increase, particularly through the setting up of additional offshore wind farms.

In Denmark, the local authorities are responsible for designating areas for the settlement of onshore wind turbines. In 2007, the government's planning committee presented a range of recommendations related to long-term wind turbine planning on land. In connection with the municipal plan audit in 2009, the committee recommended for local authorities to incorporate an overall plan for the long-term expansion of wind power in order to identify sites for the settlement of wind turbines and evaluate the total estimated capacity in the designated areas. Following the recommendation of the committee, the Danish Ministry of the Environment held a workshop for the local authorities jointly with the Ministry of the Environment, the Danish Energy Agency and Local Government Denmark and with the participation of the Danish Wind Industry Association, centered on the planning of wind power on land. A number of dialogue forums were set up based on the workshop, which the local and state authorities used to promote information, the exchange of experience and the build-up of competence in the local authorities. In collaboration with the Danish Wind Industry Association and the Danish Wind Turbine Owners' Association, in 2010 the Danish Ministry of the Environment conducted a study of the progress being made in the local authorities' planning for onshore wind turbines which revealed that local authorities were making good progress on their planning and that many opportunities had been created.

Similarly, 12 offshore wind farms have been built in Danish coastal waters so far. In 1997, an "Offshore turbine action plan for Danish coastal waters" was prepared at the request of the Ministry of Energy and the Environment. The report identified the potential for large-scale expansion with 4000 MW of offshore turbines and emphasized several areas for first-stage demonstration projects. In 1998, the Danish government directed the electricity companies to set up five large-scale offshore demonstration projects with a combined capacity of 750 MW. In 2007, the committee has updated the Offshore Turbine Action Plan from 1997 and has published a report entitled "Future offshore turbine locations 2025", evaluating societal interests concerning grid transmission conditions, navigation, nature, landscape, raw material extraction, etc. The committee has described scenarios for the technological development of the wind turbines and has also revealed the technical, financial and planning-related options for bringing the electricity produced ashore. The committee has unanimously identified main areas that provide sufficient space for the settlement of up to 23 offshore wind farms, each with 200 MW of installed capacity.

A financial subsidy is paid to new wind turbines as a supplement to the market price. A tender process with special tariffs has been prepared concerning the establishment of new large-scale offshore wind farms. The settlement terms for wind power depend on when the turbine is purchased and installed.

### *3.2.3. Serbia*

The energy generation sector in Serbia is controlled by the state-owned company Elektroprivreda Srbije (EPS). Thermal power dominates the electricity generation mix, amounting to 74.5 percent of total production in 2017. Hydro-power accounted for 25.4 percent of production, while other renewables contributed less than 1 percent. Serbia submitted its NREAP according to which the largest increase in RES-E will come from 500 MW of new wind power capacity.

Following the signing of the Energy Community Treaty in 2005, Serbia has become a full member of the energy community of Southeast European (SEE) countries. The treaty represents an obligation for Serbia to open completely the market of electric energy and gas. The necessity of establishing the Energy Community is illustrated in the creation of a market and regulative framework for the production of electric energy and transmission network, which is necessary for a stable and continuous supply, as well as through the creation of a single market and improvements in environmental protection.

The energy sector is of considerable importance in the accession process of Serbia and other countries of the region to the EU. In addition to the relevant directives, the deregulation of the energy sector is managed in the local legislations of individual countries. Demonopolization, price policy, restructuring and privatization processes, increasing energy efficiency and production of electric energy from RES are the most important issues. The result of changes in Serbia is that the EPS will face the competition on the wholesale market, which will force the company to improve its business and apply measures necessary for achieving sustainability of business and for the protection of its position on the market. For this reason, sustainability of such a concept requires complex processes of structural modification.

An important aspect is a price analysis of electric energy. The price policy for energy and services is relevant from the stance of investors, consumers and the electric industry as establishing parity of the electric energy price is the prerequisite for improving the efficiency of the electric energy sector. Given that EPS is a monopolistic company owned by the Republic of Serbia, the issue of efficient financial management and profitable business performance has been transferred from a former government to a new one.

The Energy Regulatory Agency of the Republic of Serbia (AERS) is the administrative body regulating the electricity sector. It establishes the general terms for the electricity market, issues licenses for energy activities, sets prices, settles appeals and implements measures within ratified international agreements. It also plays a considerable role in the development of RE, issuing the generation licenses and resolving appeals against the failure to release a decision or rejection of connection applications. Similarly, the Serbian Energy Efficiency Agency (SEEA) is a special state-funded organization that aims to promote the use of renewables and improve energy conservation.

Serbia adopted a new energy law that makes the development of the economic, financial and commercial framework for the generation of RES-E a priority and also sets up a support mechanism for RES-E producers. Accordingly, the power market operator is legally obliged to conclude a long-term power purchasing agreement (PPA) with RES-E producers that have obtained privileged status. Feed-in tariffs (FIT) are guaranteed over a 12-year period and are not indexed to inflation. A maximum of 450 MW is currently available for support from the FIT. Due to the limited scope of the support mechanism, the PPA is not bankable for large projects given that investors would have to undertake numerous costly and time-consuming procedures without the certainty of fitting within the cap.

Serbia has a technological wind potential of about 2.3 TWh and, given the untapped potential, the country is set to attract investments once legal issues are resolved. However, the lack of an integrated legislative framework and delays in the adoption of decrees are the main barriers to the development of wind power. Considering the relatively recent introduction of incentive mechanisms and commitment to international environmental protocols, authorities have had limited opportunities to evaluate the effects of different legal provisions. Major modifications to renewable regulations are still ongoing.

#### 4. RESEARCH FINDINGS

The case studies indicate that Sweden and Denmark are more successful in providing new RES-E production capacity compared to Serbia. Sweden and Denmark show how EPI can constitute a framework illustrated by the more consistent procedural and institutional linkages between the strategic level and related follow-up mechanisms in the two countries, although in different ways.

The Swedish approach is characterized by a more sector-encompassing strategy within a relatively centralized bureaucratic framework and a strong top-down approach. The top-down approach stands for the view that power is with the central decision-makers at the top, who define clear policy objectives and hierarchically guide the process of putting these objectives into practice. Implementation means the establishment of bureaucratic procedures to guarantee that policies are executed as accurately as possible. The success of a policy or program implementation is evaluated by the extent to which a policy is put into effect. Two core aspects of the Swedish governing tradition appear to correspond to such practice: a well-established system of corporatist-pluralist representation and a “seminar culture” under bureaucratic guidance. This is shown by the fact that most of the energy policy reforms in Sweden have been preceded by broad commissions and committees followed by representation from different experts and stakeholders in a search for different policy alternatives. Such an approach is consistent with overhead democracy in which elected officials delegate implementation authority to non-elected public servants, thereby minimizing the number of actors involved and promoting accountability and proper evaluation. Such an approach is also fraught with criticism. Accordingly, by emphasizing the role of central actors, it ignores the importance and initiatives of the local actors who have the required knowledge and expertise and are in a position to propose and implement needed policies. Also, it may be difficult to achieve a perfect hierarchical control and structure of the implementation process, as implied by the approach. A variance from the hierarchical structure and original design may thus be labeled as a policy failure.

On the other hand, the Danish approach is more sector-specific and includes a stronger interaction with stakeholders in bottom-up processes. The bottom-up process emerged as a critical response to the shortcomings of the top-down approach. Accordingly, the bottom-up process argues that policy formation cannot be separated from policy implementation. It rejects the idea of hierarchical management and shifts the analytical attention away from the actors at the top to the field actors. These field actors or “street-level bureaucrats” are networks of actors from various agencies. The bottom-up approach assumes that policies are determined by autonomous political decisions of these street-level bureaucrats and Danish cultural and administrative traditions fit such practice. The historical ownership and management structure of energy production, with local cooperatives as core entities, facilitates a centrally coordinates policy-planning approach in Denmark that achieves high legitimacy through decentralized participation. This has been manifested through open dialogue and bottom-up inputs to the national energy plans. These historically anchored structures also provide a reason why Denmark was the last Nordic country to deregulate its energy sector. The autonomy held by street-level bureaucrats comes from a considerable amount of discretion at their disposal which distinguishes policy-making roles at the bottom and the top. The bottom-up approach takes into consideration that one measure does not fit all the cases consequently and that street-level bureaucrats work in situations that necessitate different responses to different

aspects of the situation. Their role as local agents urges for observation and judgment which are not reducible to hierarchically structured formats.

In Serbia, accession negotiations with the EU entail RES-E targets and adoption of similar electricity market legislation as the Member States. Accordingly, Serbia has set an attractive FIT mechanism limited to 450 MW of total wind energy capacity with currently a 2.6 GW wind energy project pipeline. Nevertheless, important permitting and land use legislation is currently incompatible with RE legislation, resulting in wind energy projects being blocked.

## 5. SUMMARY, DISCUSSION, IMPLICATION, CONCLUSIONS

By focusing on the conditions for the expansion of wind energy in the Nordic countries and Serbia, the case studies reveal the necessity of understanding the national, regional and local contexts for more effective RES-E implementation.

The case studies indicate that Sweden and Denmark are more successful in providing new RES-E production capacity compared to Serbia, and show how EPI can constitute a framework illustrated by the more consistent procedural and institutional linkages between the strategic level and related follow-up mechanisms, although in different ways.

Accordingly, the Swedish approach is a top-down approach characterized by a sector-encompassing strategy within a relatively centralized bureaucratic framework. Two aspects of the Swedish governing tradition correspond to such practice: a system of corporatist-pluralist representation and a seminar culture under bureaucratic guidance. Most of the energy policy reforms in Sweden have thus been preceded by broad commissions and committees followed by representation from different experts and stakeholders in a search for different policy alternatives. This approach is compliant with overhead democracy in which elected officials delegate implementation authority to non-elected public servants, thereby minimizing the number of actors involved and promoting accountability and proper evaluation. However, by emphasizing the role of central actors, this approach ignores the importance and initiatives of the local actors.

The Danish approach is more sector-specific and includes a stronger interaction with stakeholders in bottom-up processes. Policies are determined by autonomous political decisions of street-level bureaucrats and Danish cultural and administrative traditions fit such practice. More precisely, the historical ownership and management structure of energy production, with local cooperatives as core entities, facilitates a centrally coordinates policy-planning approach in Denmark that achieves high legitimacy through decentralized participation. These historically anchored structures also explain why Denmark was the last Nordic country to deregulate its energy sector. The bottom-up approach establishes that one measure does not fit all the cases and that street-level bureaucrats work in situations that necessitate different responses to different aspects of the situation.

As a potential member of the EU, Serbia is required to take concrete and appropriate measures towards more sustainable energy use. In accordance with the Renewable Energy Directive (2009/28/EC), Serbia has committed itself to a relatively ambitious binding target of 27 percent of the energy generated from RES by the year 2020. Approximately 21 percent of the final energy consumed in Serbia is from RES, as it stands, with some increases in the past few years. The most effective area to reach this goal is certainly the electricity sector, where, systematic changes are needed to reach full compliance with the EU standards.



Despite some progress, efforts have been misguided and/or lacking in their impacts. Serbia is not on course to achieve its RE targets and, for this reason, it is important to evaluate how more effective promotion of a sustainable electricity market in Serbia should look like. There have been some notable efforts to develop RE in Serbia in recent years with a number of projects undertaken at both the private and public levels. Since 2009, the Government of Serbia has supported the development of RES with FIT, with higher prices paid for RES-E from 8 to 20 euro cents per kWh over the base power price, and thereby encouraging numerous “privileged producers” to supply energy from RES. However, there is a question of the quality and effectiveness of many such projects. For instance, the list of privileged producers published by the Ministry of Mining and Energy shows that many of them are small companies and entrepreneurs, often involved in other industries and, in some cases, with little interest in and knowledge of the implications and requirements of RE. Particularly controversial are proposed small hydropower plants, with more than 800 identified, often in or near protected areas. In fact, the Ministry of Environmental Protection has recently come out against a number of these projects, noting that in some areas they pose a massive threat to biodiversity as well the potential to water flows. The second-largest RES in Serbia is biomass, which is often used by individuals in rural parts of the country. Although marginal, the development of wind power has gone further than other RES, with plans for an approximate 500 MW in the coming years. However, permitting and land use legislation is incompatible with RE legislation, resulting in wind energy projects being blocked.

#### REFERENCES

1. Adelle, C., Russel, D. (2013). “Climate Policy Integration: a case of déjà vu? *Environmental Policy and Governance*”, 23(1): 1–12.
2. Lafferty, W.M., Hovden, E. (2003). “Environmental policy integration: towards an analytical framework”, *Environmental Politics* 12(3): 1–22.
3. Buchan, D. (2009). “Energy and Climate Change: Europe at the Crossroads”, Oxford: Oxford University Press.
4. Reiche, D. and M. Bechberger. (2004). “Policy differences in the promotion of renewable energies in the EU Member States”, in: *Energy Policy* 5/2004, S. 843-849.
5. Mallon, K. (2006). “Renewable energy policy and politics”, London: Earthscan
6. Lafferty, W.M., Ruud, A. (2008). “Promoting sustainable electricity in Europe: Challenging the part dependency of dominant energy systems”. Cheltenham UK: Edward Elgar.
7. World Commission on Environment and Development (WCED) (1987), “Our Common Future”, Oxford: Oxford University Press.
8. Lund, H. (2010). “Renewable energy systems: the choice and modeling of 100% renewable solutions”. Academic, Burlington
9. Jacob, K., Volkery, A., Lenschow, A. (2008). “Strategies for environmental policy integration in 30 OECD countries. In *Innovation in Environmental Policy? Integrating the Environment for Sustainable Development*”, Jordan AJ, Lenschow A (eds). Edward Elgar Publishing: Cheltenham; 24–45.
10. Jordan, A., Lenschow, A. (eds) (2008). “*Innovation in Environmental Policy? Integrating the Environment for Sustainability*”, Cheltenham, UK and Northampton, MA, USA: Edward Elgar Publishing.
11. Jordan, A., Lenschow, A. (2010). “Environmental policy integration: a state of the art review”, *Environmental Policy and Governance* 20(3): 147–158.
12. Mickwitz, P., Aix, F., Beck, S., Carss, D., Nils, Ferrand N., Görg, C., Jensen, A., Kivimaa, P., Kuhlicke, C., Kuindersma, W., Máñez, M., Melanen, M., Monni, S., Pedersen, AB., Reinert, H., van Bommel, S. (2009). “Climate Policy Integration, Coherence and Governance”, PEER Report No. 2. Partnership for European Environmental Research: Helsinki.
13. Betsill, M.M. (2001). “Mitigating climate change in US cities: opportunities and obstacles”, *Local Environment* 6(4): 393–406.
14. Collier, U., Löfstedt, RE. (1997). “Think globally, act locally? Local climate change and energy policies in Sweden and the UK”, *Global Environmental Change* 7(1): 25–40.

15. Kousky, C., Schneider SH. 2003. Global climate policy: will cities lead the way? *Climate Policy* 3(4): 359–372.
16. Wejs, A., Cashmore, M. (2014). “Constructing legitimacy for climate change planning: a study of local government in Denmark”. *Global Environmental Change* (in press).
17. Wejs, A., Harvold, K., Larsen, SV., Saglie, IL. (2014). “Legitimacy building under weak institutional settings: Climate change adaptation at the local level in Denmark and Norway”, *Environmental Politics* (paper in press).
18. Bulkeley H.A., Betsill M.M. (2013). “Revisiting the urban politics of climate change”, *Environmental Politics* 22(1): 136–154.
19. Derthick, M. (1972). “New Towns In-Town”. Washington: Urban Institute.
20. Pressman, J., and Wildavsky, A. (1973). *Implementation*. Berkeley: Univ. of California Press.
21. Murphy, J. (1973). “The Education Bureaucracies Implement Novel Policy: The Politics of Title I of ESEA”, in *Policy and Politics in America*, ed. Allan Sindler. Boston: Little, Brown.
22. Bardach, E. (1974). “The Implementation Game”. Cambridge: MIT Press.
23. Van Meter, D., and Von Horn, C. (1975). “The Policy Implementation Process: A conceptual Framework”, *Administration and Society* 6 (Feb.): 445-88.
24. Sabatier, P., and Mazmanian, D. (1979). “The Conditions of Effective Implementation”, *Policy Analysis* 5 (Fall): 481-504.
25. Sabatier, P., and Mazmanian, D. (1979). “The Conditions of Effective Implementation”, *Policy Analysis* 5 (Fall): 481-504.
26. Lipsky, M. (1971). “Street Level Bureaucracy and the Analysis of Urban Reform”, *Urban Affairs Quarterly* 6: 391-409.
27. Berman, P., and McLaughlin, M. (1976). “Implementation of ESEA Title I”, *Teacher College Record* 77 (Feb.): 397-4515.
28. Hanf, K., and Scharpf, F. (1978). “Inter-organizational Policy Making: Limits to Coordination and Central Control”. London: Sage.
29. Ingram, H. (1977). “Policy Implementation through Bargaining: Federal Grants in Aid”. *Public Policy* 25 (Fall 1977).
30. Browning, Rufus, Marshall, Dale, and Tabb, D. (1981). “Implementation and Political Change: Sources of Local Variation in Federal Social Programs”, in *Effective Policy Implementation*, ed. by D. Mazmanian and P. Sabatier. Lexington, Mass.: D.C. Heath.
31. Barrett, S., and Fudge, C. (1981). “Policy and Action”. London: Methuen.
32. Hjerm, B., and Hull, C. (1982). “Implementation Research as Empirical Constitutionalism”, *European Journal of Political Research* 10 (June 1982): 105-16.
33. Hanf, K. (1982). “The Implementation of Regulatory Policy: Enforcement as Bargaining”, *European Journal of Political Research* 10 (June 1982): 159-72.

## **TOP-DOWN I BOTTOM-UP PRISTUP POLITIKE IMLEMENTACIJE – SLUČAJ RAZVOJA VETROELEKTRANA U NORDIJSKIM ZEMLJAMA I REPUBLICI SRBIJI**

*Integracije politike zaštite životne sredine (EPI) je uključivanje ekoloških odredbi u sektorske politike van domena konvencionalne politike zaštite životne sredine. Suočavanje s takvim odredbama je neophodno jer je istraživanje pokazalo da je institucionalna specijalizacija politika za određene sektore rezultirala nedovoljnim razmatranjem uticaja na životnu sredinu, a sektorske politike bi mogle imati ciljeve u suprotnosti sa ciljevima zaštite životne sredine i kao takve bi mogle uticati na osnovne uzroke pritisaka na životnu sredinu. Postoji konsenzus da je veza između politike zaštite životne sredine i energetske politike transformisala i modifikovala energetska politiku u Evropi, a svakako je u određenoj meri za to zaslužan potencijal električne energije iz obnovljivih izvora (RES-E). Proučavanje perspektive RES-E unutar EPI inicijative je stoga relevantno i cilj ovog istraživanja je doprinisati boljem sektorskom razumevanju EPI. Preciznije rečeno, fokusirajući se na uslove za širenje elektrana na vetar u nordijskim zemljama i Srbiji, ovo istraživanje želi prikazati potrebu razumevanja nacionalnog, regionalnog i lokalnog konteksta za efikasniju primenu RES-E.*

*Ključne reči: Integracije politike zaštite životne sredine, energija iz obnovljivih izvora, vetro-elektreane, politika implementacije, top-down, bottom-up.*