

## Cooperation in Environmental Governance – a New Tool for Environment Protection Progress

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*The idea of harmonizing economic growth with the laws of society development and the environment is expressed in the concept of sustainable development. The environmental approach of sustainable development gives most attention to stability of natural systems, links between economic activity and environment health. The present governments and international organizations facing the risk of environmental destruction, have realized that environment protection issues are among the main problems to be solved in the 21st century. In the field of economics, these environmental problems have also been recognized as major economic problems. A number of studies have analyzed environment protection instrumentality and possible effects of environmental regulation on economic and social welfare. Both direct regulation and market-based instruments ignoring their defects have positive impacts on environment state. However, the need to achieve environmentally friendly economic performance requires broadening the range of environment management instruments.*

*This paper examines cooperative regulatory enforcement in which companies self police their environmental actions and government provides regulatory relief. There are many forms of environmental cooperation known as codes of conduct, self declarations or commitments, voluntary auditing, voluntary environmental reporting and in most cases they are defined as voluntary environmental agreements (voluntary initiatives). Agreements are aimed to find flexible mechanisms that put more responsibility on producers, but also leave more ways for individual solutions that can improve operation efficiency. As there are various forms of voluntary environmental agreements (voluntary initiatives) their individual aims also differ (publicity, benefits of shared information, pre-emption of government regulation, etc.), but they all share one special feature – a positive effect on the quality of the environment.*

*Voluntary agreements (initiatives) as a new instrument in environmental policy produce a lot of scepticism, mainly from environmentalists, who argue that “command and control” regulation with strict monitoring system fits environment demands in the best way, when regulatory relief is a dangerous distraction from effective environmental regulation.*

*Cooperation in solving environmental problems can give “best available results” only in the case of flexibility and mutual trust between companies and governments, in some cases trust between companies and environmental groups.*

*However, environmental agreements are not a panacea and need to be applied in a mix of environmental management instruments, i. e. as a supplement to direct regulation and market-based instruments.*

**Keywords:** *direct regulation, market based instruments, enforcement, self policing, cooperation, voluntary environmental agreements, voluntary environmental initiatives.*

### Introduction

By accepting the idea of sustainable development we recognize, that preservation of the environment is an integral part of society existence, so investigating the relationship between instruments of environmental regulation and running business is a topical issue. Maintenance of environment quality, i. e. environmental protection and conservation needs money. Without doubt, ignoring environmental regulations will not be cost free – progress toward cleaner air, water, and land will be slowed significantly or stopped, if not reversed. Therefore, both the use and the conservation or protection of the environment are bound up with economic gains and losses. A question arises, what methods of environment protection could be used to get double benefit, i. e. economic efficiency and environment quality at the same time.

Historically, “command and control” regulation of environment quality has been the dominant approach in U.S. and in most European countries. In this approach, regulators specify pollution-control technologies (such as “best available technology”) and how much pollution can be emitted or discharged into the atmosphere. Complying with requirements means the installation and maintenance of new monitoring equipment, regular reporting on emissions, obtaining of operation permits, which must be periodically updated. Parallel governments have to inspect and audit companies in order to find and punish violations. But even if governments set severe penalties for all violations, enforcement may not deliver expected results, unless regulations could be enforced at a low cost.

Practice shows that compliance costs are high, so they decrease productivity and profits. This in its turn raises incentives to evade regulations (Majumdar, Marcus 2001). Further, deterrence enforcement may contribute to the adversarial relationships among regulators, firms, and environmental groups, risking more lawsuits and larger societal costs (Vogel, 1986; Kagan, 1991; O’Leary, 1993; Reilly, 1999).

As direct environment regulation lacks flexibility,

this defect is compensated by a wide spectrum of market-based instruments. The fundamental aim of market-based instruments is to internalise all external environmental costs so that environmentally friendly products will not be at a competitive disadvantage in the market place in comparison to products, which cause pollution and waste. The introduction of new forms of environmental taxes, charges and fees demonstrate strengthening tendencies in eco-taxation.

Increasing tax burden has negative effect on company's income. Nevertheless, heavy taxation of externalities, due to growing concern about environment conservation, may have no influence on income if other taxes become lower when eco-taxes come into effect or are increased. Unfortunately, implementation of green tax reform is rather complicated and slow.

The degree to which environmental quality can be improved by public policy depends not only on the wisdom inherent in policy design, but also on the effectiveness of policy enforcement. Policies, which initially seem to offer promise may in the glare of hindsight, prove unsuitable if enforcement is difficult or lax (Tietenberg, 1996). So the role of enforcement of regulations is significant in environmental policy instrument choice. Practice shows that a considerable amount of non-compliance exists throughout, but disobligations are chiefly caused by the defects of regulations themselves.

The nature of voluntary obligations (voluntary initiatives) is wholly different, because there is no need to create an enforcement techniques. Voluntary initiatives and voluntary obligations together with governmental regulations expand regulation limits by employing business potentialities to participate in environment conservation.

The **aim** of the article is to identify the nature of cooperation in environmental management, analyse the multiplicity of voluntary environmental agreements (initiatives) and to evaluate their role as part of the broader environmental governance instrumentality.

The **tasks** addressed for achieving research aim are as follows:

- to generalize arguable items of environmental regulations;
- analyze the scope of voluntary agreements (initiatives) and test them;
- formulate the main statements for participating in voluntary environmental programs.

The **methods** of the research – logical and comparative analysis of scientific literature. Cooperation in environmental governance in the form of environmental agreements (initiatives) are relatively recent in the policy arena, so the available literature on the subject is scarce and consists mainly of theoretical studies with very little practical application of these instruments. In most cases it is impossible to make a quantitative assessment of the environmental effectiveness of the agreements due to the lack of reliable monitoring data and consistent reporting, which prevented comparisons being made between the current situation and what would most likely have happened if no agreement had been concluded.

## Arguable results of environmental regulations

Introducing regulations is aimed at changing companies behaviour by making them reduce pollution or include negative externalities into product cost. However, the question of how environmental regulations affect the general economic situation, market structure, activity results of certain companies is of no smaller importance. J. T. Scholz points out, that successful implementation of regulations depend on how governments enforce regulations and how firms respond to them, this is also determined by the nature of government–firm interactions, whether they are cooperative or conflictual, based on confidence or false (Scholz 1991).

Traditionally three basic versions are distinguished: 1) companies can be ruined by environmental regulations; 2) companies comply with regulations, but that requires big investments and limits development; 3) environmental regulations stimulate innovations.

To confirm or to refute each of the versions the traditional economic approach is used. One needs not only to evaluate changes of environmental quality (in money terms) but also assess how much they will cost for companies and how it will influence companies activity results in a long term. Propositions, that modern environmental regulation can reduce costs for industry and business, can help create markets for goods and services, drive innovation, can help create and sustain jobs, improves the health of the workforce (McGlade, 2005), suggests that environment regulations can generate a multiple positive effect, but the concept that can generate is not equal to the one that really generates.

M.E. Porter and C. van der Linde (1995) have developed the statement maintaining that, properly designed environmental standards can trigger innovation that may partially or fully offset the costs of complying to regulations. Certainly, direct environmental regulations can be a good business opportunity for some companies, even with the higher costs they imposes. Producers who are the first to discover better ways to reduce pollution can profit by keeping costs down, they may profit by selling new technologies to other producers. There are concrete undeniable examples, that companies made money from pollution control or material reduction. The profit motive has been a steady contributor to cleaner industry (Shaw, Stroup, 2000). Some firms found it profitable to become first-adopters of new and costly monitoring and control technology for other reasons – they wanted to raise barriers to the entry into a specific branch. Large enterprises seek tougher regulations as a means of raising the costs of their smaller competitors more than their own. But shifts in the costs of entry and investment can lead to markets with fewer firms and lower production. The resulting increase in market concentration can have far-reaching welfare effects beyond the initial costs of compliance. This is a particularly topical problem for environmental regulations in many of the largest polluting industries as they are highly concentrated (Ryan, 2004.)

If it is true, that direct regulation leads to cost-reducing innovation and increase of profits, tighter regulation or more environmental regulation is nearly always a good thing (Shaw, Stroup, 2000). Nevertheless, it is

widely recognized that emission regulations which have desirable effects on the environment, usually encounter strong opposition because they are likely to introduce further financial burdens on the companies (Szlavik, 2000). Expenditures on new or extra control and monitoring equipment devised to mitigate impacts of economy, increase prices thus causing discontent in society especially in developing countries.

The statement that direct regulation can cause cost effective innovations may be true, but it works in particular situation. M. E. Porter and C. van der Linde have drawn their conclusions after investigating special cases under narrow circumstances. Proposition that in a global economy, with increased foreign trade, wider markets in nearly every industry, and thriving merger-and-acquisition activity, surviving firms are lean, mean, and innovative without regulation – is more realistic (Shaw, Stroup, 2000)

Independent economic analyses pointed out that no lasting macro-economic gains from direct regulation will be forthcoming. Focusing on a number of different industries, using a variety of economic indicators, and covering different time periods these studies determined that economic performance wasn't significantly or systematically affected by environmental regulation (Meyer, 1995). Despite the fact, that emission regulations are strengthened in many states, economic growth raises per capita income and emissions increase is significant. This is because the responsiveness of regulations to income changes, which is inferred from the Kyoto Protocol - type regulations, is too weak to restrain emissions (Takeda, 2002). The same is with material use. Though material inputs and outputs per unit of GDP are decreasing, both material inflows and material outflows of industrialised societies are increasing. Studies show that both in the use of primary materials and in industrial production there are clear examples of dematerialisation per unit of product, on the other hand, consumers tend to have increasing material wants which are closely connected to economic growth and increasing wealth (Voet, Oers, Nikolic, 2004).

Taxes function more efficiently than norms and are the leading market-based instruments. Taxes to be paid remind polluters that decreasing the amount of pollution will lower their costs as well. Once the environmental taxes are settled, it is the polluters' interest to reach the optimum level of pollution. Launching of new forms of environmental taxes shows increasing attention to ecotaxation and herewith the increasing tax burden on companies. Taxation of externalities may have little influence on income if other taxes are lowered when eco-taxes are brought to use.

As emission taxes and permit trading often yield additional revenues to the government, with these additional revenues, the government can reduce existing tax levels without reducing revenue. Since most existing taxes, such as corporate income tax, property tax and labour income tax are considered to be distortionary, reducing these taxes can correct distortions in the economy and thereby improve the efficiency of the overall tax system. If the government can improve efficiency by replacing the existing distortionary taxes for emission regulations, introduction of emission regulations improves not only the environment ("the first win") but also the efficiency of

tax system ("the second win"). A company paying lower environmental taxes other condition having not changed can reduce its tax burden. The implementation of green tax reform is rather slow, so the "win win" effect is only forthcoming.

Given cases and the fact of ongoing European debate about "better" regulation, "proper" regulation, "modern" regulation and also about "effective" regulation (McGlade, 2005), proves, that there is room for further improvement and that the present situation requires supplementary regulatory means. It were not right to keep to the logic that better regulation equates with less regulation, however, better environment management can be obtained using instruments of other character – cooperation through regulatory relief programs in the form of voluntary environmental agreements. Regulation manifests itself through direct or economic compulsion, when voluntary agreements are of a completely different nature. Possibility for companies to choose and accept decisions on environment protection on their own enables them to undertake pollution prevention measures.

### **The scope of voluntary agreements**

Environmental policy in latter years is changing its nature – alternative approach to environmental regulation is presently developing. Two key trends are excluded. First, thousands of businesses have joined voluntary environmental programs sponsored by governments and non-state actors (Gibson 1999; Haufler 2001). The second trend is governments' experiments with regulatory relief programs. The rationale for these programs is intuitively appealing: Environmental protection agencies offer businesses incentives for complying with regulations, including greater flexibility in how they meet regulations, technical assistance, and sometimes even forgiving violations and eschewing punishments and sanctions; in return, businesses voluntarily work to achieve superior regulatory compliance (Potoski, Prakash, 2004).

By now there are over 40 voluntary environmental programs and thousands of participating firms. Voluntary agreements in U.S. are set in different environmental areas: Agriculture, Air Quality, Energy Efficiency and Global Climate Change, Labelling, Pollution Prevention, Regulatory Innovation, Sector Programs, Technology, Waste Management, Water, Agriculture, also Regional Voluntary Programs. The increase of use of environmental agreements as policy tools in EU Member States is especially in industry and waste management. Nowadays, voluntary initiatives number in thousands: over 300 negotiated government-industry agreements have been surveyed in 15 European Union countries. The priority areas for voluntary instruments in EU are in the sectors of PVC, Integrated Product Policy, Waste Management and Climate Change.

Voluntary environmental agreements are a form of co-regulation that can complement the traditional environmental regulations, encourage holistic strategies to environmental protection, and give more flexibility in meeting environmental objectives. Many different names and tools are used to define voluntary environmental agreements (VEAs) and voluntary environmental initia-

tives (VEIs): 1) codes of conduct and responsible care programmes; 2) voluntary measures, such as self declarations or commitments; 3) implementation of environmental management systems, such as ISO 14001 or EMAS; 4) voluntary auditing; 5) eco-labelling; 6) voluntary environmental reporting; 7) green purchasing and ethical investment; 8) public voluntary and technology support programmes; 9) multilateral environmental agreements (MEAs); 10) gentlemen's agreements; 11) covenants. This shows that the term "voluntary agreements" refers to a multitude of approaches in environmental protection management.

VEAs are realized as an appropriate instrument to help to address environmental problems covering a broad range of pollutants and natural resources. They became substantial in the context of increasing concern that "command and control" legislation and regulation is too burdensome and that the use of economic instruments, such as environmental taxes, is too costly for industries in a rapidly globalising market. VEAs are potentially being instruments that can be finely tuned, quick to set up and help to achieve environmental objectives at lower costs. The motivation for VEAs is not only to avoid arguably cumbersome and slow-to-develop legislation or costly taxes, but also to reflect a number of other issues. Main of them are (Brink, 2002):

- *the concept* of shared responsibility, and the related concept of shared uncertainty, for the environmental problem, building on industry knowledge of what can best be done to address the problem that relates to industry's activities;
- *the concept* of stakeholder involvement, as it is the stakeholders who know best how they affect or are affected by the environmental issue. This also relates to the issue of equity, as affected parties should arguably have some say on matters concerning their welfare;
- *the principle* that a problem should be solved at the level that can most effectively address the problem, which has led to agreement that local initiatives are sometimes more appropriate than centrally co-ordinated ones.

Voluntary initiatives vary in form, substance and ultimately, in their effectiveness. The rich diversity of voluntary initiatives is essential to meet the different needs of an industry or country, which may vary according to their socio-economic context and stage of responsible entrepreneurship. Voluntary initiatives can turn to unilateral commitments or become voluntary agreements. Voluntary initiatives agreeably to undertaker can be ranked into five main categories (Carraro, Leveque, 1999; UNEP, 2000; Coglianesi, Nash, 2001; Kettl, 2002)

*Industry initiatives* may be company or industry specific, or cross sectoral. In every case it is the industry or company which unilaterally decides what goals to meet, how to meet them, and whether or how to monitor and report progress publicly. These initiatives get a form of *unilateral environmental commitments*, also called *own-initiative agreement*. Industry initiatives for self-regulation emerge when industry reacts in a field where a political debate and possible future legislation is. Self

regulation concerns agreements concluded among the social partners, economic operators, NGOs or associations in order to regulate and organise their activities. While self regulation does not involve the adoption of a legislative instrument, government institutions can nevertheless introduce an evaluation system. The only sanction for default is the threat of future legislation.

*Government initiatives* are initiatives in which governments set the goals to be met (usually with consultation with industry and other stakeholders) and monitor the performance of the companies that volunteer to take part. Such voluntary initiatives range from toxic reduction challenges to eco-labelling of products or environmental management systems, from regulatory relief conditions to technological upgrades and innovations.

*Joint government / industry (and tripartite) initiatives* are initiatives in which government and industry negotiate the goals to be met, how progress is to be monitored and reported. These initiatives get a form of *negotiated environmental agreements* (NEAs) or are named *co-regulation*. NEAs are considered to be the most meaningful in cooperation between government and business. They can be more fully defined as commitments undertaken by companies and sectors that are the result of negotiation with public authorities and/or are explicitly recognized by the authorities. NEAs are launched by central and / or local government or by industry.

Co-regulation concerns agreements in which the objectives to be achieved, the timetable to be met, monitoring methods and penalties to be imposed for non-compliance are appointed. Details for implementation are set out in the agreements. In general, government institutions take the initiative for such agreements.

*Third-party initiatives*, such as ISO 14000 and responsible investment standards can be just as / or more influential than industry and / or government voluntary initiatives in bringing about change in business practices. Third parties (non-government, non-business) develop and run the initiative although companies or industry associations are usually involved in an advisory capacity or as members of the organisation.

*UN and other international voluntary initiatives*, such as the Global Compact, UNEP Financial Institutions Initiative, and the Global Reporting Initiative, are distinct from other voluntary initiatives as they directly represent the moral authority of international commitments and globally accepted values. They also represent a new way of working for intergovernmental organisations, complementing formal intergovernmental decision-making and commitments with more flexible involvement of a broader range of stakeholders.

In addition to the form of the agreement, there are other important aspects that must be considered when concluding an agreement: first, agreements should aim at a high level of environmental protection, and they must set ambitious targets; second, agreements should comply with the internal market and competition rules; third, trade aspects should be considered when concluding agreements; fourth, information should be made available on the negotiations and public participation in decision-making; and fifth, monitoring and reporting systems should be well-designed.

## Evaluation of voluntary environmental agreements

The analyses of the theoretical and empirical literature on direct regulation, introduction of taxes and permit

systems and voluntary environment programs enabled to test VEAs (Salop, Scheffman, 1983; UNEP, 1998; Borkey et al., 1999; Lefevre, 2000; Videras, Alberini, 2000; Brink, 2002). The key arguments for and against VEAs are given in Table.

Table

**Principal arguments for and against voluntary environmental agreements**

Arguments for	Arguments against
Flexible, can be tailored for each stakeholder and to a specific location; can build on business's particular knowledge of its realistic capacity to address environmental concerns, and respond to requirements of a locality.	Can be too flexible, if not defined properly. This may lead to lower effect and effectiveness than possible with other instruments.
Participatory, involving those affected by the agreement in negotiations and implementation.	Can be exclusionary to the extent that not all affected parties might be represented in negotiations and some concerns might not be reflected
Potentially easier to achieve agreement and quicker to implement than alternative instruments.	Negotiations take time. Agreements might be used as a means of buying time by forestalling regulation. Can not ensure global application.
Low costs of implementation; VEAs for companies' represent significantly lower costs than taxes.	Can be costly to implement: transaction costs and monitoring activities can be resource-heavy.
Cost-effective, as the industry can choose the initiatives reflecting the internal knowledge of the hierarchy of cost of initiatives; encourage innovation.	When VEAs are chosen as a substitute for environmental taxes, Polluter Pays principle is not upheld, as polluters do not pay for the remaining pollution.
Encourage dynamic efficiency, through setting targets without requiring an explicit set of measures.	Can limit technological change to rates which industry is comfortable with. Might lead to static efficiency gains if targets are not set appropriately and not revisable. Cannot be applied in areas where is no business self interest.
Bring industry on board, and can encourage greater appreciation of environmental issues. If appropriately designed, clarify and formalize responsibilities, rights and roles.	Need to monitor compliance, which can be resource-intensive. There also is continued interest and pressure from public authorities and NGOs to ensure that the VEAs can develop and improve set targets and realize additional potentials.
Greater stability provided through long term planning, and objectives set internationally rather than unanticipated external development.	May encourage free-riding, depending on institutional context, VEAs design, the level of incentives, size and structure of industry.
Contribute to the development of regulatory capacity through the increased awareness of impacts, measures to address impacts, and through the development of formal and informal networks available to the regulatory agencies.	Can lead to "non-level playing field" for signatories and non-signatories. This can be problematic where some parties are excluded from being signatories to agreements that benefit signatories; and some parties are not included where signatories face restrictions.
Improve dialogue and trust between industry and government; can address issues that are not covered by existing regulation; can help implement the precautionary principle, where there is a lack of scientific evidence required to allow taxes or regulation.	Can lead to reduced quality of regulatory control, where a move towards co-regulation leads to reduced regulation by the state and where the increased regulation by the private sector is inadequate.
Accelerated behaviour change towards sustainable development practice, building on shared responsibility at all levels of industry (economy), long-term cultural changes in business management.	Do not raise revenue that could be valuable for other environmental initiatives.

VEAs are regarded as a key new instrument for meeting environmental objectives in a flexible manner, as a perfect tool, limiting the use of other regulatory measures, but for sceptics, they are a dangerous distraction from effective environmental policy. Many environmentalists charge that regulatory relief constitutes a license to pollute, and voluntary codes are mere “greenwashes” that hide firms’ true pollution records. Because profit-seeking businesses look to skirt costly regulations, these groups argue, only “command and control” regulation with strict monitoring and enforcement can compel compliance (Steinzor 1998).

It would be difficult to find at least one new regulatory instrument that has no defects. There is always lack of confidence in innovations, especially when they threaten already settled things and require to change or restrict something. Companies can profit from governments’ regulatory relief by evading environmental regulations, while governments can exploit companies self monitoring by punishing for violations that are undertaken voluntarily and with good will. Governments may fear that firms will treat regulatory appeasement as permission to pollute, also environmental groups guess, that firms necessarily will overuse relief, that regulatory relief may mean little or no regulation. Firms also realize that environmental groups may make it politically and legally problematic for regulators to credibly commit to cooperation (Kollman, Prakash 2001, 2002).

As a result, VEAs may lead to lower environmental standards or the desirable environment quality can be achieved in a longer time. This means, that binding agreements provide more guaranties for reaching environmental aims, but without evaluating adjustment costs. It means that success of non-binding agreements depends on the simultaneous existence of a credible threat of stricter legislation and on trust between partners.

It is important to note, that quality of VEAs significantly depends on future development possibilities. The original agreement must valuably include a clause supporting the future and update of the agreement, e.g. update targets, develop monitoring systems and increase stakeholder roles. The key is to ensure that interest is maintained in a regular review and update of the agreement, but the future potential to improve an agreement should not be an argument for allowing a weaker instrument than could be agreed.

Practice shows, that new regulation instruments have to evolve until they become really applicable means. This concerns economic instruments, which have improved over time to become perfect tools. VEIs move from unilateral environment commitments to negotiated environmental agreements, agreement targets are periodically reviewed and updated, more stakeholders are invited into the process over time, monitoring and reporting systems are improved.

Voluntary agreements and regulatory relief programs, if effective, promise superior regulatory outcomes through “win win” cooperation between firms and businesses. But if they fail, regulatory enforcement will result in “lose lose” conflicts that are all too common in environmental governance (Potoski, Prakash, 2004). When government regulators choose cooperative regulatory

enforcement and companies take the self policing (voluntary auditing) strategy a “win win” interaction take place. Regulating agencies win because self policing reduce their enforcement activities, firms win because regulations that are set under cooperation makes adjustment to requirements easier.

Summarizing presented arguments for and against VEAs, allows to state, that voluntary agreements are efficient in defining an appropriate environmental quality standard if these non-binding programs are used as a *complement* of other regulatory tools rather than as a *substitute* of them, also mutual trust between companies and governments is integral element establishing a cooperation in solving environmental problems.

Why companies participate in voluntary environmental programs?

There are a number of reasons for companies to join voluntary environmental programs: 1) publicity aspect of participation; 2) the benefits of shared information about energy use or emissions reduction practices; 3) appeal to consumers who demand “green” products and are willing to pay more for them; 4) intention to pre-empt government regulation; 5) seek to get regulatory or compliance relief from environmental agencies by showing them that the company has improved its environmental performance (or intends to do); 6) to gain a competitive advantage over competitors (Arora, Gangopadhyay, 1995; Segerson, Miceli, 1998; Maxwell et al., 1998; Charter, Polonsky, 1999).

Publicity is one of the most important components of participation. The worse the environmental track record of the company is, the more likely a company is to participate, but only in programs directly related to highly regulated pollutants and as long as the program is directly related to its own pollution reductions. This confirms the statement that a “stick and carrot” approach increases company’s responsiveness to voluntary programs. Companies that supervise their environmental performance more carefully wary of newer programs with uncertain benefits.

Since environmental reports are intended for the public and investors, rather than for the companies’ internal use, willingness to look good in the eyes of the public and investors provides a strong motivation to join voluntary programs. Public recognition is a very important predictor of participation, and companies’ management feel necessity to join them for the reputation effects. Calculations carried out by Videras and Alberini (2000) had showed, that there were no evidence of correlation between fines (assessed to companies for violations of the Clean Air Act) and likelihood of joining Green Lights (seeks to reduce the use of electricity and hence the emissions of greenhouse gases) program. Therefore, companies, which participated in this program, were seeking to improve their environmental image.

Consumers have different marginal rates of substitution between income and quality. This results in environmental quality differentiation with one company to attract wealthier consumers. Arora and Cason (1995, 1996), Khanna and Damon (1999) found out that proximity to final consumers is a significant predictor of participation. Voluntary programs offer public recognition for

outstanding achievements, and they allow partners to use the program logo in their own promotion and advertising. This benefit companies that are close to consumers.

Pre-emption to government regulation as a factor for environmental overcompliance was theoretically explored by Maxwell et al. (1998), Segerson and Miceli (1998). Research results showed that under certain conditions, the stronger threat of regulation is expected, the stronger will be self regulation. The level of abatement under voluntary programs is directly related to the probability of the threat. So, implementation and success of voluntary agreements depend on the strength of the legislative threat. As a result, one would expect a weaker response to programs with looser regulatory background.

There is some evidence consistent with the proposition that companies value the information and technology transfer aspect of joining the programs. Thus companies with limited innovative ability might use programs to absorb pollution abatement information and technologies disclosed by other participating companies or by the environment agencies. Such are companies with old equipment and low R&D expenditure per employee. On the contrary, innovative companies can be more likely participants because they may be more able to identify opportunities for reducing pollutants and adopt newer production processes at lower cost.

Companies' participation in voluntary environmental programs is also influenced by firms size, profitability, ability to innovate and reputation of the program. Larger enterprises prefer to participate in voluntary programs because they are more visible or are industrial leaders. Analyses of Videras and Alberini (2000) had shown that larger firms are systematically more likely to join, regardless of the pollutant addressed by program and the stringency of the regulations for that pollutant. The better the financial position of the company, the more likely it will be able to sustain the costs associated with participation.

## Conclusions

The very fact about ongoing debates on superior or advanced regulation proves, that there is necessity for further improvement and that the present environmental policy requires supplementary regulatory means.

The cooperative approach to regulatory enforcement seeks to solve many of enforcement drawbacks by bringing firms' into cooperation in solving environmental problems based on a foundation of flexibility and trust.

Voluntary environment agreements make possibility for companies to choose and accept decisions on environment protection on their own. This makes environmental regulation system more adaptable to companies' potentialities.

Negotiated environment agreements are most meaningful in cooperation. They are defined as bilateral commitments undertaken by companies and by government that are expected to end in better environment quality. Such agreements improve dialogue and trust between industry and government, industry and public, government and society.

Voluntary environmental agreements (initiatives) serve for business publicity. Wish to demonstrate friendly

to environment behaviour stimulates companies to join voluntary environmental programmes; when companies denying signing the agreements or contravening the accepted terms can lose clients by lowered reputation.

Voluntary environmental agreements can serve of most use as complements to other policy measures, such as direct regulation and environmental taxes, where they can make a valuable contribution, especially in terms of their ability to raise awareness, create consensus and to provide a forum for information-sharing among different interest groups.

Mutual confidence between firms and governments is the cornerstone for success. Each cooperating side must be guaranteed that other is fairly cooperating. Mutual suspicion about the other's opportunism undermines cooperation.

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Skaidrė Žičkienė

**Bendradarbiavimas aplinkos apsaugos valdyme – nauja priemonė siekiant pažangos aplinkos apsaugos politikoje**

Santrauka

Ekonominės plėtros ir aplinkos apsaugos interesų suderinamumo idėja yra išreikšta darnaus vystymosi koncepcijoje. Daugelio šalių vyriausybės ir nevyriausybines organizacijos, tarptautinės organizacijos bei įvairūs judėjimai, suvokę aplinkos destruktijos mastus, priskiria aplinkos apsaugos klausimus prie svarbiausių 21-ojo amžiaus problemų. Tačiau siekis mažinti taršą ir užtikrinti visuomenei priimtina aplinkos kokybę pasirodė sunkiai įgyvendinamas pasikliaujant vien valstybinių aplinkos apsaugos reguliavimu.

Tiesioginio poveikio, arba „komanduok ir kontroliuok“, aplinkos politikos priemonėmis nustačius aplinkos standartus bei reikalavimus naudojamai technologijai, įmonės, nepaisant patiriamų išlaidų dydžio, privalo reikalavimų laikytis, o aplinkos apsaugos institucijos įpareigos nuolat kontroliuoti įmones ir bausti jas už pažeidimus. Ekonominė priemonė, pirmiausia mokesčių, taikymas aplinkos apsaugoje yra gerokai lankstesnė priemonė, tačiau didėjanti mokesčių našta neigiamai veikia įmonių ekonominius rezultatus, o „žaliųjų“ mokesčių reforma dar neįgavo norimo pagreičio.

Tai, kad Europoje vyksta debatai apie „geresnę“, „tinkamesnę“, „modernesnę“, „efektyvesnę“ reguliavimą, rodo, kad šiuo metu naudojamų instrumentų nepakanka aplinkos apsaugos tikslams pasiekti, jog reikalingos kitokio pobūdžio, lankstesnės priemonės, kurios gali būti įgyvendintos valdžios institucijoms bendradarbiaujant su verslo įmonėmis.

Aplinkos apsaugos politika JAV ir Vakarų Europoje kinta dviem kryptimis: 1) tūkstančiai verslo įmonių dalyvauja savanoriškose aplinkos programose, remiamose vyriausybės ir (ar) nevyriausybinių organizacijų; 2) vyriausybė eksperimentuoja švelnindama aplinkosauginius reikalavimus, t.y. leidžiamas didesnis lankstumas siekiant nustatytų standartų, teikiama techninė pagalba, toleruojami prasižengimai (pažeidimai); savo ruožtu įmonės įsipareigoja savarankiškai ir atsakingai kontroliuoti veiklą, nepažeisti aplinkos apsaugos įstatymų. Taigi JAV ir Europos šalyse svarbia aplinkos apsaugos priemone tampa bendradarbiavimas tarp reguliuojančiųjų ir reguliuojamųjų, įgaunantis savanoriškų įmonių įsipareigojimų (iniciatyvų) ir susitarimų su vyriausybe formą. Tai aplinkos apsaugos valdymo naujovė, kai aplinkos būklės reguliavimo mechanizmas papildomas priemonėmis, leidžiančiomis pačioms įmonėms rodyti iniciatyvą ir prisiimti įsipareigojimus, būti ne tik reguliuojamomis bet ir pačioms veikti savo veiklos reguliavimo mastą.

Naudojami kelių rūšių savanoriški susitarimai (iniciatyvos): 1) vienašališki įsipareigojimai, kuriuos prisiima įmonė (kelios įmonės, pramonės šaka), įsipareigojanti mažinti neigiamą poveikį aplinkai; 2) vyriausybės inicijuoti susitarimai, kai vyriausybė suformuluoja siektinus tikslus, o įmonės savanoriškai jų siekia; 3) įmonės (įmonių, pramonės šakos) derybų su vyriausybe sudaryti susitarimai; 4) trečiųjų šalių inicijuoti susitarimai; 5) aplinkos apsaugos tarnybų parengtos taisyklės, kurias savanoriškai sutinka vykdyti ūkio subjektai; 6) tarptautinės savanoriškos iniciatyvos, išreiškiančios tarptautines nuostatas aplinkos apsaugos klausimais. Savanoriški susitarimai (iniciatyvos), įgyvendinami praktiškai, įgauna įvairių formų, tai – elgesio kodai ir atsakomybės programos; savanoriškos deklaracijos ar pasižadėjimai; aplinkos apsaugos valdymo sistemų diegimas; savanoriškas auditas; aplinkosauginis (ekologinis) ženklinimas; savanoriškas informavimas apie poveikį aplinkai; „žalieji“ pirkimai ir etiškas investavimas ir kt.

Svarbiausiais laikomi susitarimai, sudaryti derantis vyriausybei su pramonės įmonėmis. Juose numatomos konkrečios užduotys, jų realizavimo terminai, veiklos perspektyvos, taip pat kontrolės ir ataskaitų pateikimo tvarka, fiksuojami ir vyriausybės įsipareigojimai, pvz., nuolaidos, lengvatos, atidėjimai ir pan. Tokie susitarimai didina pasitikėjimą tarp pramonės įmonių ir vyriausybės, pramonės ir visuomenės.

Bendradarbiavimo aplinkos apsaugos srityje tikslas – užtikrinti aplinkos būklės gerėjimą, todėl, nepaisant susitarimų formų įvairovės, skiriama keletas esminių veiksmų, kurie turi būti įvertinti formuojant susitarimus: bendradarbiavimas turi būti nukreiptas į aukšto aplinkos apsaugos lygio siekimą, susitarimai turi nustatyti ambicin-

gus tikslus; susitarimų sąlygos neturi iškreipti vidaus rinkos ir konkurencijos sąlygų; būtina įvertinti tarptautinės prekybos aspektus; tinkamas visoms besiderinčioms šalims informacinis aprūpinimas, sudaryta galimybė visuomenei dalyvauti priimančioms sprendimus; turi būti parengtas veiksmingas stebėsenos ir ataskaitų pateikimo modelis.

Valdžios institucijų ir verslo įmonių bendradarbiavimo aplinkos apsaugos srityje galimybės ir perspektyvos vertinamos kontroversiškai. Palaikantieji šią lanksčią priemonę argumentuoja, jog bendradarbiavimas sumažins kitų reguliavimo instrumentų naudojimą ir leis įmonėms optimizuoti išlaidas aplinkos apsaugai, o kiti, dažniausiai gamtos saugininkai, traktuoja tai „kaip leidimą teršti“ ir abejoja, jog savanoriškose įmonių ataskaitose apie poveikį aplinkai atsispindės tikroji padėtis.

Keblu rasti nors vieną reguliavimo instrumentą, kuris neturėtų trūkumų, ypač nepasitikima inovacijomis, nes tenka keisti jau nusistovėjusią tvarką. Nors savanoriški susitarimai yra lankstūs, greitai parengiami ir greičiau nei naujos taisyklės ar mokesčiai pradedami realizuoti, mažiau kainuoja įsipareigojimų įgyvendinimas, didesnė tikimybė, kad jie bus realizuoti, nes įmonės, prisiimdamos įsipareigojimus, įvertina ir planuoja savo finansines galimybes, tačiau lieka gana daug neapibrėžtumo. Pirmiausia tai, kad, prisiimdamos savanoriškų įsipareigojimų įmonės gali stengtis juos sumažinti, nesilaikyti sutarties sąlygų, todėl būtina nuolat stebėti, kontroliuoti įmonių elgseną. Taigi įmonės, pasinaudodamos vyriausybės pasitikėjimu, stengsis išsisukti nuo nustatytų reikalavimų vykdymo, o vyriausybė, naudodamasi savo galia, gali nubausti įmones už gera valia prisiimtų įsipareigojimų neįvykdymą. Susitarimo sąlygų pažeidimai gali baigtis tuo, kad nebus pasiekti numatyti aplinkos kokybės standartai.

Praktika rodo, kad visos naujosios aplinkos valdymo priemonės turi evoliucionuoti, kol jos tampa realiai pritaikomais instrumentais. Tai pasakytina ir apie ekonomines reguliavimo priemones, kurios tobulėja, kol tapo tinkamais reguliavimo įrankiais. Bendradarbiavimas aplinkos apsaugoje, prasidėjęs nuo vienašališkų įsipareigojimų, juda valstybės ir įmonių derybų būdu suformuotų sutarčių link, kurių tikslai yra nuolat peržiūrimi ir tikslinami, įtraukiama vis daugiau suinteresuotų šalių, tobulėja stebėsenos ir informavimo apie aplinką sistemos.

Tinkamai paruošti ir atsakingai įgyvendinami savanoriški susitarimai yra dvigubai naudingi (win-win): įmonės laimi, nes joms lengviau prisitaikyti prie bendradarbiaujant su vyriausybe nustatytų reikalavimų; aplinkosaugos agentūros laimi, nes, įmonės prisiima atsakomybę kontroliuoti savo veiklą, todėl sumažėja prievartos realizuojant vyriausybės sprendimus mastas. Tačiau, jei bendradarbiavimas žlunga, valstybinio reguliavimo sustiprinimas gali baigtis dvigubu pralaimėjimu (lose-lose).

Ne mažiau svarbus tyrimo aspektas yra įmonių paskatos daly-

vauti savanoriškose aplinkos apsaugos programose. Priešasčių yra daug, svarbiausios: 1) viešasis dalyvavimo aspektas; 2) nauda dėl informacijos apie energijos naudojimo ar emisijų mažinimo būdus gavimo; 3) apeliavimas į pirkėjus, kurie nori „žaliųjų“ produktų arba yra pasirengę už juos mokėti daugiau; 4) intencija užkirsti kelią valstybiniam reguliavimui; 5) siekis gauti nuolaidų iš aplinkos agentūrų parodant, kad įmonės pagerino aplinkosauginę veiklą; 6) noras įgyti konkurencinį pranašumą.

Viešojo dalyvavimo aplinkos apsaugos programose aspektas itin svarbus, nes ekonomiškai išsivysčiusių šalių visuomenė labai palankiai žiūri į gamintojus, kurie rūpinasi aplinka. Kuo blogesni įmonės rezultatai aplinkosaugos srityje, tuo labiau ji yra suinteresuota dalyvauti programose, tačiau tik tose, kurios susijusios su griežtai reguliuojamais išmetimais. Atsakingai aplinkosauginius procesus valdančios įmonės, atsargiai vertina naujas neapibrėžtas naudas programas. Dalyvavimas programose įpareigoja viešai skelbti aplinkosaugines ataskaitas, todėl noras suformuoti teigiamą įvaizdį visuomenės ir investuotojų akyse tampa stipriu motyviatoriumi. Videras ir Alberini atliktas tyrimas patvirtino, jog nenustatytas koreliacinis ryšys tarp baudų, kurias turėjo sumokėti įmonės, ir jų noro dalyvauti *Green Lights* programoje (Videras, Alberini, 2000), t.y. įmonės, dalyvaujančios šioje programoje, siekė pagerinti savo įvaizdį, o ne išvengti taikomų sankcijų. Be to, savanoriškų programų dalyviams leidžiama reklamos ir rėmimo tikslais naudoti programos logotipą.

Siekis užkirsti kelią valstybiniam reguliavimui stimuliuoja įmones įsipareigoti savarankiškai kontroliuoti veiklą. Nustatyta, kad, konkrečiomis sąlygomis, didėjant tikimybei, jog valstybė imsis reguliuoti tam tikras sritis ar sugriežtins esamus standartus, auga ir įmonių noras prisiimti savanoriškus įsipareigojimus. Dalyvavimą programose skatina ir noras gauti vertingos informacijos, perimti pažangią patirtį. Taip paprastai elgiasi įmonės, turinčios senus įrengimus ir mažai investuojančios į tyrimus ir plėtrą, kai inovatyvios bendrovės turi realias galimybes sumažinti taršą ar mažesnėmis išlaidomis įdiegti naujus gamybos procesus.

Įvertinus bendradarbiavimo tarp valdžios institucijų ir verslo įmonių privalumus bei trūkumus, nustatyta, kad susitarimus tikslinga naudoti kaip papildomą dabartinio aplinkos apsaugos mechanizmo priemonę, tačiau jie negali pakeisti šiuo metu naudojamų tiesioginio bei ekonominio poveikio priemonių. Bendradarbiavimo efektyvumas priklauso nuo abipusio šalių pasitikėjimo. Įtarimai, jog įmonės ar valdžios institucijos pažeidžia įsipareigojimus, gali sužlugdyti aplinkosaugos pažangias iniciatyvas.

Raktažodžiai: *tiesioginio ir ekonominio reguliavimo metodai, prievarta, savikontrolė, bendradarbiavimas, savanoriški susitarimai (iniciatyvos), savanoriški įsipareigojimai.*

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