

# **Politics and the Environment In Central and Eastern Europe**

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From the perspective of an environmentalist, the introduction of new and rigorous environmental standards in any region of the world should appear a welcome change. Yet the universalizing of national-level standards to supra-national or international levels and their subsequent imposition on economically less developed states brings with it a unique set of problems specific to the interests of developing states. This paper will ask what effect the importation of European Union (EU) environmental policy will have on the countries of Central and Eastern Europe (CEEC's).

The literature remains quite divided over the advantages and disadvantages of such an approach. Some argue that the introduction of EU standards in Central and Eastern Europe (CEE) represents a form of *positive leverage*, suggesting that a top-down strategy of exporting EU policy represents the best strategy for solving the region's environmental woes.<sup>1</sup> Others however raise questions about the advisability of a strategy of top-down imposition of EU policy that allows little flexibility at the state, regional or local level.<sup>2</sup> Finally, still others note the potential for missed opportunities resulting from the loss of policy autonomy.<sup>3</sup>

This paper will assess the costs and benefits of pursuing an entirely centralized EU environmental policy in CEE. As this paper will attempt to illustrate, the term *positive leverage* disguises many features of EU policy that reflect the interests of the more economically advanced and more politically powerful EU Member states. When imposed upon less advanced economies, highly centralized EU policies are likely to have distortionary effects that may well surpass their expected benefits. The top-downward imposition of EU standards is likely to result in significant adjustment problems for countries that were not involved in the original adoption of this legislation. The importation of highly centralized policies adopted by EU Member states at a more advanced stage of economic development introduces a mix of environmental regulations that do not conform well to the needs and preferences of citizens in the CEEC's. Moreover, EU environmental regulations imply competitive standards in the CEEC's that impose an economic burden on an already weak industry. Further, the importation of EU policy is likely to have a number of contingent effects, including dampening already

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<sup>1</sup> Many authors take this approach, arguing either in general about CEE policy needs (Moravcsik and Vachudova, 2003; Vachudova, 2002; Kovách, 2002), or more specifically about environmental issues in this region (Lynch, 2000; Slocock, 1996, 1999).

<sup>2</sup> Here again some raise general questions about the advantages of imposing EU policy on the CEEC's (Mungiu-Pippidi, 2000). Others argue more specifically about the disadvantages of centralized control over environmental policy (Pavlínek and Pickles, 2000) or about the disadvantages of centralized European Union control over environmental policy (Caddy, 1997; Zylicz and Holzinger, 2000). Finally some point out potential problems of competitiveness related to the imposition of developed world environmental policies on less developed economies (Bhagwati, 1994).

<sup>3</sup> See e.g. Gille (2000), and Ūrge-Vorsatz, Paizs and Pesic (2003).

weak environmental movements, diverting attention and resources from more pressing environmental problems, and diverting attention and resources from the necessity of economic development. The consequences are likely to be long term and potentially unfavorable for the CEEC's. Such observations strongly question the notion of "positive leverage" and suggest that state and/or sectoral interests and relative power predominantly motivate policy integration in the EU.

The first and perhaps the most important conclusion is that the lack of strong environmental movements at the base means that these countries—at least in the near future—are not likely to be able to support strongly independent green political parties, environmental NGO's, or to provide a strong foundation for public support of environmental issues. The second conclusion is that much of the success in the area of the environment will thus be dictated by EU environmental policy-making. This has both good and bad aspects. On the one hand, some much needed improvements will be made, though perhaps not at a rate that the EU would like to see them. On other hand, the attention being paid to EU environmental regulations may well distract attention from local, regional or national environmental issues that are important or even crucial for CEEC's. Finally, the feeling that the EU is solving Central Europe's environmental problems may ultimately lead to apathy among CEE citizens. The third strong conclusion is that the lack of a strong environmental movement at the base and the relative weakness of environmental NGO's may well mean that important environmental issues will be neglected or will even go unnoticed. In this regard, the conjunction of resource diversion, EU policy-making dominance and weak civil society in CEE makes for a particularly unhealthy mix.

This paper will proceed as follows. The first section discusses theoretical approaches to the analysis of environmental policy. The second section discusses the CEE environmental legacy, the current state of the environment in CEE, and some implications of the Accession Agreement. The third section assesses the potential for civic engagement in these countries on the issue of protecting the environment at the level of social movements, political parties and finally at the level of NGO's. The fourth section discusses the potential distortionary impact of EU involvement and the potential for missed opportunities. The final section concludes.

### **The Problem of Centralized Control?**

Some have argued that what I shall call the *positive leverage* exercised by the EU has brought about beneficial changes to the legal and economic framework in the CEEC's.<sup>4</sup> Most authors in this general framework tend to suggest that the degree of change pursued by the CEEC's (in terms of democracy or environmental regulation) has been leveraged on these states with the carrot of EU membership. Others still, arguing both from a Central European and a Western perspective, argue that EU government represents a significant check on the governments of CEEC's. In this regard, the

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<sup>4</sup> Vachudova speaks of the "passive" and "active" leverage exercised by the EU. I have condensed these into the term "positive leverage", which I think in keeping with the overall emphasis in Vachudova's work (2002). Moravcsik and Vachudova likewise emphasize the positive features that are likely to rise from the adoption of the EU regulatory and legislative framework (2003: 47).

participation of EU governments makes CEE governments more accountable and ensures a proper transition toward democracy and/or stronger environmental regulation.<sup>5</sup> Finally, the carrot of EU membership is often thought to have provided strong motivations for governments to pursue EU environmental policy as rapidly as possible in order to appear more prepared for EU membership than other states (Sloccock, 1996: 508), or to have strengthened the hand of environmental ministries that wanted to pursue a stronger environmental agenda (Sloccock, 1999: 157).

On the other hand, as Pavlínek and Pickles observe, under Communism, the centralization of policy-making at the national level had disastrous consequences for the protection of the environment at the local level. The Soviet “centralization” of policy-making was responsible for disrupting patterns of environmental protection and sustainable development that had been cultivated over decades and centuries by local level village assemblies. The introduction of centralized, bureaucratic (and authoritarian) control likewise brought in nationally appointed officials from other regions with little local knowledge or expertise. Given that these officials spent little time in individual regions, the history of local development and expertise was typically lost on the new soviet style form of economic management (2000: 75-79).

The second problem that the introduction of EU policy imposes is the problem of “*one-size-fits-all*”. As Mungiu-Pippidi (2000) has noted for Central Europe and EU policy as a whole, the CEEC’s are quite different one from the other and again from EU member states. Thus one can reasonably question the advisability and potential effectiveness of one centralized EU environmental policy to deal with the full range of environmental problems in CEE.

Bhagwati (1994), on the other hand, levels two basic objections to this approach at the developed world. First he argues that since countries might be expected to have different needs and preferences regarding the appropriate mix of environmental policies, environmental policy should fall within the purview of national governments and not international policy-makers. Second, he argues that the introduction of universalized national standards may erode any comparative advantage enjoyed by individual countries and that this occurs at the behest of producer groups in more advanced countries that hope to “level the playing field”. Implicit in these criticisms is the recognition that exporting developed country policies to the developing world may entail significant concessions on the part of developing countries in foregone economic development while advanced countries are likely to gain in competitiveness.<sup>6</sup>

Finally, a number of authors have pointed out that the imposition of the EU environmental regulatory framework (and EU policy in general) is likely to have a

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<sup>5</sup> Kovách (2002) for example, argues in more general terms, while Lynch (2000) builds an argument around environmental regulation and compliance.

<sup>6</sup> Realist theorists typically view the adoption of universal environmental standards as problematic even across countries at similar levels of economic development. The realist approach to international environmental agreements presents a relatively pessimistic outlook on the likelihood of successfully concluding such agreements. The competing and conflicting interests of states (and or domestic interests groups within states) are typically the source of these problems. Moreover, states that are not likely to benefit from such arrangements are typically coerced or leveraged into them, either through the use of side-payments or through the exercise of influence (Sprinz and Vaahantoranta, 1994).

negative impact overall on any positive legacy already present in the CEEC's. This basic argument has several strains. For example, some authors argue that the environmental policy framework in place at the time of transition had positive elements worth safeguarding. The requirement of adopting EU environmental policy has led to the utter abandonment of "old" policy strategies in favor of EU policy strategies without any serious thought given to these positive elements (Gille, forthcoming; Gille, 2000). On the other hand some have argued that the more general focus on the introduction of markets has distracted attention from features of the socialist systems that could have a positive impact on the environment Ürge-Vorsatz, Paizs and Pesic (2003). A number of authors have likewise argued that the lack of policy flexibility associated with the requirement of adopting the *Acquis Communautaire* (the current body of EU legislation) leaves the CEEC's with too little policy autonomy (Caddy, 1997; Zylicz and Holzinger, 2000). Finally, a number of authors have argued that the dominance of Western strategies of environmental activism has overshadowed the development of CEE social movement organizations. CEE NGO's have been weakened by their turn to western funding sources and strategies of environmental activism, their ensuing professionalization and the weakening of their links to CEE civil society (Jancar-Webster, 1998; Waller, 1998).

Thus the literature above identifies several ways in which EU membership and the requirement of adopting the body of EU legislation—in contrast to the notion of *positive leverage*—could potentially have a more negative impact on the development of civil society and the environmental policy making process in CEE. The first is the potential lack of attention paid to local, regional or even state level environmental preferences, interests, and concerns. The second is the potentially negative implication of imposing more advanced country environmental policies on less developed economies for economic competitiveness. The third is the likelihood that any positive legacies will be eroded or simply forgotten in the wake of the wholesale adoption of EU environmental policy. Finally, though EU environmental policy is only partially and indirectly responsible, EU policy dominance may weaken civil society and its links to emerging CEE NGO's. This dynamic however is remarkably important with respect to the ability of CEEC's to develop independent movements rooted in the advocacy and defense of local, regional and state level environmental interests.

These observations raise several important questions. What are the consequences of EU membership for individual policy areas and what do these consequences imply about the advisability of "*one-size-fits-all*" arrangements? Are such arrangements well suited to deal with local, regional and state-level preferences, interests and concerns? Are there important ways in which such arrangements ignore these interests? What are the costs that agreements of this kind impose on lower levels or less advanced states? Do such costs have implications for the potential development of economic competitiveness? To what extent will such arrangements hinder the development of more locally based interests and concerns and what are the longer-term costs attached to this?

The drive for EU membership has in some senses awakened the same specter of overly centralized and excessively bureaucratic policy-making from above. This is in fact a great irony. Citizens in the CEEC's struggled vigorously to remove the yolk of a centralized planning system dominated by Moscow, and have replaced that with another centralized planning system dominated by Brussels. While there are of course significant

and important differences between these two opposite poles, jumping into the middle of the EU framework at the current stage of EU development essentially binds the New Member States to accept both the “rules of the game” and the “state of play” as they currently stand. Thus EU environmental policy has now been substituted for national-level policy.

This last point is compounded by the fact that—as is true for many or most laws introduced by the EU—EU environmental law is the result of a lengthy bargaining process between the European Commission, the Council of Ministers and the European Parliament (EP). The consequence is that EU policy is likely to meet the interests of all or most states concerned, and to require compensation from sources like the EU’s Structural and Cohesion Funds where the costs of EU environmental policy are too great for individual countries and their firms. The legislative bargaining process in effect insures that all participants can either stop legislation that is significantly unfavorable to them, or threaten to slow the decision-making process in cases where some form of financial compensation or *quid pro quo* is not forthcoming. While *qualified majority voting* (QMV) may reduce the veto power of minority states, the final product of the legislative process is likely to at least consider the lowest common denominator interests of a number of the less environmentally advanced states.

However, the transplanting of EU environmental law from the current EU member states to CEE fails to consider the gap between the status quo in Western Europe and CEE. Thus the impact—both environmental and financial—of EU environmental legislation may, in general, be expected to be much greater. Moreover, the EU has typically been either resistant or insensitive to local, regional or state-level concerns and has frequently refused to negotiate possible amendments to the *acquis* with more locally defined CEE interests in mind.

Part of the problem here is the question of bargaining power. As noted above, from inside the EU framework individual states frequently succeed in having an impact on EU-level regulations that are possible impediments to local, regional or state-level concerns. While qualified majority voting raises the threshold for regions or states with minority interests, making it more difficult for them to have a decisive impact on policy, candidate states have no ability whatsoever to influence the makeup of pre-existing policies. Almost no concessions are made on existing EU policy, despite the frequent *variable geometry* of EU regulations as they are applied in the EU member states.<sup>7</sup> Thus the strong interest of these states in EU membership has compelled them to accept an agreement that is not always in their interest on all accounts. As such, there was a fundamental asymmetry in bargaining power between the EU member states and CEEC’s.

If these countries had already managed to develop strong traditions of nationally controlled environmental policy-making, as well as well-organized civil society organizations, such an evolution might not be as threatening. But the reverse is the case.

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<sup>7</sup> On a considerable number of EU regulations, for example Economic and Monetary Union, the Schengen Agreement and others, individual states have insisted upon various concessions. However, the willingness of EU member states to accept such arrangements has typically not included matters related to competition and the smooth functioning of the Single Market.

While to some extent national-level traditions of environmental policy-making were born prior to 1989, they have since been greatly weakened and dissipated by multiple factors discussed at greater length below.

The long-run consequence is presumably that for the next decade or so, perhaps longer, the CEEC's are more likely to neglect an entire array of higher priority problems that are likely to arise as a result of the social, political and economic systems that are emerging in these countries, and because of the lack of familiarity with and understanding of the problems that these social, political and economic systems entail. The problem is not that the CEEC's are not themselves beginning to develop sensitivities to such issues—the reverse in fact is true. The problem is rather that both the resources and attention necessary to successfully combat such problems have been diverted for at least the next decade to *centrally determined* policy goals that are at best only partially adequate to dealing with long-term objectives.<sup>8</sup>

### **Reflections on the Environmental Crisis in Central Europe**

What crisis, some might first surmise? Traveling through the valleys of the Czech Republic, one sees very little physical evidence of environmental degradation and decay. The earth rises up to swallow any telltale signs of an era gone badly, of decades of environmental abuse. In the small Czech town of Liberec and the surrounding Jizera Mountains, one sees almost no immediately visible trace of the decades of environmental wear and tear endured in the Black Triangle area and the deposition of sulfur dioxide and acid rain. Yet, as early as the 1970's, it became clear that the forests simply could not survive the continued onslaught of air pollution from the Black Triangle region. By the 1990's, approximately 100% of the forest in the Northern and Eastern Bohemian region was damaged.<sup>9</sup>

Years of Soviet style production strategies have placed a significant environmental burden on the CEEC's.<sup>10</sup> The CEEC's have typically neglected to, or have only engaged marginally in, environmental protection up until the beginning of the Transition period in 1989. Thus, in 1989 these countries had a significant amount of catching up to do in order to be compliant with EU environmental regulations and standards. Measured in per capita terms, 1980's SO<sub>2</sub> emissions in the Czech Republic were 17 times, and measured in terms of units of GDP, 24 times those in West Germany (Horak, 2001: 314). However, as Pavlínek and Pickles point out, such figures exaggerate the picture somewhat, since the major cities of CEE—apart from Prague, Zagreb and Bucharest—exhibited SO<sub>2</sub> levels in the 1980's that were below Western standards and were similar to levels found in the cities of Western Europe. As these authors note, the

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<sup>8</sup> The concept of resource diversion extends all the way to administrative level in CEE. For example, even ministries (of the environment or other ministries) have seen substantial resources diverted to the EU membership drive and away from other ministerial responsibilities. One official I interviewed noted that it was not a problem getting ministry funding for EU related matters. But for other departments, it was a significant problem finding sufficient resources and staff.

<sup>9</sup> By 1990, an average of some 58.9% of the Czech Republic's forests had been damaged (Pavlínek and Pickles, 2000: 61).

<sup>10</sup> For an excellent overview of the environmental legacy left by the previous socialist systems, see Pavlínek and Pickles (2000: Ch. 3).

pollution burden in CEE resembles that in Western Europe before the West began to focus more attention on the environment. Even some of the most polluted regions have parallels in the West of the 1950's and 60's (2001: 43-4).

Individually, each of the CEEC's exhibits significant variation in the composition of the pollution burden across air, water and soil types. Hungary, for example, has remained comparatively less burdened with air pollution. Although lignite or brown coal was frequently used for heating in winter, approximately 1/3<sup>rd</sup> of energy production was from oil and natural gas, almost 40% from nuclear power,<sup>11</sup> and only the remaining 1/3<sup>rd</sup> from the burning of coal (Pavlínek and Pickles, 2001: 47). Czechoslovakia, on the other hand, used coal to produce 55% of its energy requirements and 78% of its electricity needs. Moreover, some 2/3rds of the coal used was brown coal (ibid: 45). The outcome for the Czech Republic has been far more serious air pollution concerns than those found in Hungary, in particular in the so-called "Black Triangle" region of Northern Bohemia. Hungary on the other hand has had far more serious problems with its water supply. A significant share—though not all—of Hungary's water supply problem is foreign-born (much of the pollution problem in the Danube and Tisza rivers comes from upstream sources in the neighboring countries of Austria, the Czech Republic, Slovakia and Romania). However, Hungarian untreated industrial and household sewage waste still presents a substantial threat to Hungary's water supply.

A number of factors have conspired to bring about quite significant reductions in pollution levels in CEE. The substantial drop in emissions, in the production of industrial waste and in the use of fertilizers is primarily due to the fact that much of the heavy industry endemic to CEE disappeared in the wake of the economic crisis between 1990 and 1995. Large combustion plants were shut down, large portions of CEE's heavy industry have disappeared, and much of the agricultural sector in CEE has also suffered dramatic decline due to the transition to market economies and the general decline of Soviet era markets.<sup>12</sup>

The introduction of market prices likewise had a serious impact on the production of pollution. Many previously subsidized inputs such as electricity and environmentally hazardous chemicals such as pesticides and fertilizers suddenly became much less affordable. Far fewer pesticides are now used in agriculture, due both to the introduction of market prices and the general decline in agriculture throughout Central Europe. While brown coal was commonly used for heating purposes on a very widespread basis, this is no longer the case. A majority of residences—in particular in more urban settings—have shifted over to oil or natural gas heating. Finally, while the number of cars per person has risen dramatically in all of the CEEC's, much of existing stock of passenger vehicles has been replaced with new or used vehicles that meet Western emissions standards.<sup>13</sup>

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<sup>11</sup> Hungary's Paks nuclear power plant was built in 1976 ([www.npp.hu](http://www.npp.hu)).

<sup>12</sup> See for example Kerekes (1993).

<sup>13</sup> While the introduction of both new and used vehicles that meet Western emissions standards represents an obvious improvement over the emissions standards of vehicles produced during the Communist era, the tremendous increase in the number of vehicles per person still creates a significantly increased impact upon the surrounding environment. However, if the increased demand for passenger and other vehicles had been met with Communist era type vehicles, the resulting increase in urban pollution levels would have been far more dramatic.

On the surface of things, the record of environmental cleanup in the CEEC's appears immensely positive. Though such statistics disguise the means by which these gains have been achieved, they still represent remarkably significant change from the early days of transition. Where significant differences between Western and CEE lie is in the "efficient" production of pollution (or the pollution "intensity") and in higher concentrations of point source forms of pollution. Generally speaking, the CEEC's produce greater amounts of pollution per unit of GDP than Western states. This has at least two important implications. First, many of the production processes in CEE are more pollution intensive than in the West. Second, the pollution generated by power plants or industrial firms is likely to have a greater impact, the more it is geographically concentrated, and the closer it is located to more densely populated areas. Thus "*point source*" forms of pollution—concentrated in one specific geographic location (or firm)—are much more excessive in the CEEC's than Western Europe. One example of this type of pollution is that created by the sulfur dioxide (SO<sub>2</sub>), nitrogen oxide (NO<sub>x</sub>) and carbon dioxide (CO<sub>2</sub>) emissions of large combustion plants—most of which are power plants.<sup>14</sup>

With such point source emissions, EU directives are likely to have a strong impact. On average, some 74% of SO<sub>2</sub> emissions are produced by these large point sources.<sup>15</sup> In particular, the EU directive dealing with the emissions of large combustion plants (of which there are approximately 29 in Hungary), requires that such plants reduce their emissions below certain "limit values". Given that the largest emitters among these plants are—for the most part—in CEE,<sup>16</sup> this directive is likely to have a considerable impact on pollution reduction in the region. On the other hand, the burden of adjustment with regard to this directive is considerably imbalanced. While many of the large combustion plants in Western Europe are already compliant with this regulation and have not had to undertake significant investments in order to improve their emissions, the opposite is true in CEE. Thus, although the CEEC's did not participate in the making of this directive and did not participate in setting the target date, they will nonetheless be required to meet the same deadline.<sup>17</sup> This example raises the important and larger question of countries being required to comply with regulations in which they played no part.

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<sup>14</sup> In Estonia, for example, 80.5% of SO<sub>2</sub> emissions come from two thermoelectric power plants (World Bank, 1999: 84).

<sup>15</sup> Large point sources are responsible for much smaller, though still substantial, shares of the production of NO<sub>x</sub> (27%) and CO<sub>2</sub> (25%) emissions (Barrett, 2000: 5).

<sup>16</sup> From the Western states, Spain, the UK, the former East Germany, Italy, Belgium and the Netherlands (in that order) have some plants with very high emissions levels, and a larger number of West European countries have plants with emissions levels among the top 600 emitters. However the intensity of emissions and the share of firms among the top 100 emitters is much higher in CEE (Barrett, 2000).

<sup>17</sup> Although for Hungary, the deadline of compliance with the EU Directive on Large Combustion Plants is listed as a "transitional period", the deadline for compliance is in fact the same for all EU countries. According to the Directive, all countries must achieve significant reductions by Jan. 1<sup>st</sup>, 2008. Hungary has a transition period until 2004. Only Estonia (2015), Lithuania (20015) and Poland (2017) obtained transitional periods beyond 2008. From the perspective of EU member states, the limit values set by this directive are quite liberal and many plants already in operation in the EU as of 1995 successfully complied with the limit values set for new plants built after 2003. However, this is not the case from the perspective of CEEC's (see data in Barrett, 2000).

In per capita terms, however, pollution levels in Central Europe are now either similar to those in Western Europe, lower or somewhat higher but still lower than some other advanced industrialized countries (e.g. the US). However, the frequent calculation of pollution intensities as a share of GDP harbors a specific bias in favor of EU member states and suggests a sense of urgency with regard to the CEEC's that may well be exaggerated.<sup>18</sup> While the observation that EU member states are able to produce more GDP per unit of pollution than less advanced states is an important and indicative calculation (e.g. in the above case of power production, EU power plants produce far lower levels of pollution per unit of energy), it likewise conceals a number of important points. For one, the service sector is much larger in the EU member states than it is in CEE and its contribution to overall GDP is significant (in particular that of the financial, insurance and banking services sector) (see Table I). For another, the mix of goods produced in the EU member states is far less dependent upon goods that are likely to contribute much higher levels of pollution. In addition, where fertilizers and pesticides are concerned, only a very small share of the EU's production is related to agricultural goods and the relative terms of trade of agricultural products is typically well below those of more advanced goods (despite the high costs of CAP supported agricultural production).

[Table I about here: Economic structure in 1990, 1995 and 2000]

Pollution levels expressed as a share of GDP suggest that absolute amounts of pollution are much smaller in Western Europe. The reverse however is true. Moreover, since such figures provide no sense of the total amount of pollution relative to its potential impact on individuals or the surrounding environment. As a consequence, and in order to be able to consider the CEEC's on more equal footing with the EU member states, most of the calculations below emphasize first per capita levels of different emissions.<sup>19</sup>

To begin with the least successful case, reductions in the level of sulfur oxides ( $\text{SO}_x$ )<sup>20</sup> have nonetheless been dramatic over the period 1989-2000.<sup>21</sup> For the CEEC's as a whole,  $\text{SO}_x$  emissions expressed in per capita units have dropped by 62% over the period 1989-2000 (see Table II). More notably perhaps, excluding the case of Bulgaria, where  $\text{SO}_x$  levels are approximately twice as high as in the next closest CEE country, current  $\text{SO}_x$  levels in CEE are equal or below those in EU member states between 1989-1993. Note that the 1990-1992 EU levels exceed the 2000 CEE level (again excluding

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<sup>18</sup> I am indebted here to a discussion with Karoly Kiss of the Budapest University of Economic Sciences and some of his calculations that employ similar per capita measures of various emissions.

<sup>19</sup> In fact, an even more appropriate way to standardize measures of pollution levels might be by square miles.

<sup>20</sup> Note,  $\text{SO}_x$  emissions are made up predominantly of sulphur dioxide ( $\text{SO}_2$ ) emissions.

<sup>21</sup> Reliable statistics are notoriously difficult to come by. This is no less true with environmental statistics for the region of CEE. As Pavlínek and Pickles point out, figures for some countries have varied as widely as from 200 to 1647 thousand tons of sulfur dioxide emissions in Romania in 1989, and from 390 to 1753 thousand tons in the case of nitrogen oxide (2000: 41). Such complicate analyses of the type engaged in here.

Bulgaria), a period during which EU levels—contrary to CEE levels—are still rising rather than beginning to fall. Even when Bulgaria is included, 2000 CEE SO<sub>x</sub> levels are just below those of the EU member states in 1990 (though not in 1989). Finally, while the United States (US) should clearly not be used as the most appropriate benchmark, it is worth noting that US levels clearly exceed those in CEE as of 1992. Expressed in units of GDP, however, the CEEC's lag significantly behind both the EU member states and the US (see Table III). However, it is likewise important to draw attention to the consistent reductions in SO<sub>x</sub> levels over the entire period, suggesting that continued progress is being made on the reduction of SO<sub>x</sub> levels.

(Table II about here: per capita SO<sub>x</sub> emissions)

(Table III about here: SO<sub>x</sub> emissions per unit of GDP)

Regarding the emission of CO<sub>2</sub> on the other hand, the CEEC's are still in a relatively good position. On average, per capita CO<sub>2</sub> emissions in CEE are at about 70% of the EU level (see Table IV). Moreover, CEE has shown a decline in per capita CO<sub>2</sub> emissions of 14.3% since 1993, while the EU countries have remained relatively stable across the period 1991-2000.

(Table IV about here: per capita CO<sub>2</sub> emissions)

Similar results emerge with respect to the emission of nitrous oxides (NO<sub>x</sub>). Again, per capita levels in the EU member states exceed levels in the CEEC's for every year between 1990 and 2000 (see Table V). CEE levels only exceed EU levels in 1989. Moreover, the CEEC's have seen a steady and significant decline in their NO<sub>x</sub> emissions levels since 1989. In fact, emission levels have almost been cut in half (emissions have fallen 45.3% between 1989 and 2000). NO<sub>x</sub> emission levels began to decline in the EU member states as of 1990, and since then have only declined by some 32% (this figure presumably overstates the degree of decline in the EU member states due to the missing data in 1999 and 2000 for some of the heavier polluters). Again, while NO<sub>x</sub> emissions per unit of GDP remain significantly higher in the CEEC's (see Table VI), this figure greatly understates the impact of Western pollution levels

(Table V about here: per capita NO<sub>x</sub> emissions)

(Table VI about here: NO<sub>x</sub> emissions per unit of GDP)

With respect to fertilizers, similar results can be found. In fact for the reasons already noted above, the use of commercial fertilizers has likewise dropped quite dramatically and in 2000 was at about 67% of its level in 1985 in CEE (see Table VII). However, this overall decline disguises small but continuous increases in the use of

commercial fertilizers in some CEEC's after 1992. Moreover, most of the decline in the use of commercial fertilizers in CEE occurred in 1990 and 1991. While EU levels have declined more steadily over most of the period from 1985-2000, CEE levels of commercial fertilizer use fell below those in EU member states in 1991 and have remained below EU per capita levels ever since. The results for the use of nitrogenous fertilizers exhibit broadly similar trends, though per capita usage of nitrogenous fertilizers in the EU member states and the CEEC's is almost the same by 2000 (see Table VIII).

(Table VII about here: per capita use of Commercial fertilizers)

(Table VIII about here: per capita use of nitrogenous fertilizers)

More significant differences do exist between the EU member states and the CEEC's where the treatment of sewage and industrial waste sewage is concerned. However, even here there is considerable variation across the CEEC's and EU member states. Even as of 1999 (or the most recent year available for select countries), the percent of the population in some CEEC's that is connected to public wastewater treatment plants is quite small. In Hungary, for example, this percentage is quite small, about 26% in 1999 (see Table IX). Given Hungary's general degree of concern with water issues noted above, this represents an area of significant concern. Moreover, Hungary has not improved in this regard but has rather slipped back compared to 1990 (31%).

(Table IX about here: share population connected to waste water treatment)

The Czech Republic and Poland, on the other hand, compare quite favorably to some of the EU member states in the share of the population connected to waste water treatment plants. For the Czech Republic, this number was 62.4%, up from 50.3% in 1990. And Poland stood at 51.5% in 1999, up dramatically from 35.4% in 1990. These figures compare quite favorably to countries such as Belgium, with only 38.6% of the population connected to waste water treatment plants in 1999, Spain (48.3%), Portugal (55%) and Greece (56.2%).

Measured on the basis of population however, the degree of environmental crisis in CEE appears greatly overstated. In several of the above instances, the EU would be happy to be able to achieve per capita pollution levels similar to those in CEE. Moreover, while no detailed figures from the earlier years in CEE have been provided, as noted above, some of Europe's previous history was comparable. More importantly perhaps, this approach suggests that the focus on a strategy of emission limit values—as is currently the practice in EU environmental regulation—may not be the most meaningful strategy for CEE.

At least two alternatives appear preferable. In view of the urgency of some *point source* forms of pollution,<sup>22</sup> one alternative would be to focus only on so-called “*hot spots*”, areas of high pollution intensity that have a serious impact on either human health or the environment (or both). A second alternative is to focus not on “*end-of-pipe*” solutions (the introduction of scrubbers or other devices that remove pollution from the air or water), but rather on strategies of technological updating that impact the relative pollution efficiency of production, reduce overall energy requirements, or result in the removal or discontinuation of certain harmful chemicals and other pollutants in the production process. While in particular the end-of-pipe vs. technological change strategy has received some discussion in the literature, neither of these strategies have typically impacted the EU’s approach toward CEE, nor have they greatly influenced the choice of options in the various CEE countries. Moreover, as has repeatedly been noted in the literature, as the pressure to comply with EU environmental regulations mounts, an emphasis on longer-term strategies technological updating and increased efficiency declines in favor of short-term end-of-pipe solutions.

To take the case of energy noted above and its relationship to the production of large shares of concentrated *point-source* SO<sub>2</sub>, NO<sub>x</sub> and CO<sub>2</sub> emissions, it has been argued that significant progress could have been achieved with a combined energy and pollution reduction strategy that focused instead on energy efficiency. Üрге-Vorsatz, Paizs and Pesic (2003), for example, point out that far more energy is used per unit of GDP in CEE than in Western Europe. Encouraging more energy efficiency in the production process (or even residential use) could result in considerable achievements in the reduction of pollution.<sup>23</sup> These authors estimate that as of 1997, Hungary’s energy intensity was 3.5 times higher than the average in the European Union, while that of the Czech Republic and Poland was 2 times that again of Hungary’s (ibid: 265).<sup>24</sup>

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<sup>22</sup> The per capita approach fails to pinpoint a number of the more egregious cases of high concentrations of pollution, frequently in proximity to significant urban population settings. The implications of high pollution intensity in the production process, the regional concentration of economic activity (in particular of the more dangerous mix of brown coal, metallurgy, power and chemical production), and the combination of these two factors in areas of high population density has had quite serious effects on both the health of individuals and the surround environment. Such hot spots can be found in many locations in CEE, for example in the Copsa Mica region in Romania, in Katowice, Poland, or Borsodi and the Sío River area in Hungary. Pavlínek and Pickles, for example, detail the history of the Most district in the northern part of the Czech Republic, an area that forms part of the infamous “Black Triangle” spanning the northern part of the Czech Republic, the south eastern part of East Germany, and the south western part of Poland. As these authors note, average life expectancy at birth in Northern Bohemia was 10 years below the average in the more developed countries of Europe (2000: 135). Similar statistics are cited for cancer rates, other illnesses and infant mortality (ibid: Ch. 6).

<sup>23</sup> A previous study published by the Energy Club, a Hungarian NGO, likewise points to the potential advantages to be gained from greater investments in energy efficiency (Takacs, 2002). A previous study by the Danish Cooperation for Environment in Eastern Europe (DANCEE) likewise emphasized that “scarce financial resources may be wasted in unnecessary over-investment in air emissions controls, waste water treatment plants and solid waste management capacity”. The study recommended greater improvements in the efficiency of resource use (both energy and water), primarily through the introduction of market prices (DANCEE, 2001: 15).

<sup>24</sup> While Vorsatz, Paizs and Pesic note that the partial introduction of market prices has led to overall improvements in energy intensity (of 41% for Poland, 19% for the Czech Republic and 22% for Hungary

In the long run, the focus on “*end-of-pipe*” strategies of emissions reductions has a doubly undesirable impact: it makes industry less competitive by leading to price increases, and it diverts resources from strategies that might have comparable effects but that could potentially make industry more competitive while simultaneously reducing energy demand and intensity. Similar observations have been made with regard to excessive water use and expenditures on wastewater treatment plants.<sup>25</sup> Finally, it could likewise be argued that the excessive production of waste is likewise favored by EU policies that focus less on recycling and more on the creation of landfill capacity.<sup>26</sup>

The pursuit of EU membership has resulted however in an accession agreement for the CEEC’s that obliges them to adopt the entirety of environmental regulations contained in Chapter 22 of the EU’s *Acquis Communautaire*. As noted repeatedly in many of the documents from the European Commission’s Enlargement Directorate dealing with the negotiation of the so-called *environmental chapter*, “requests for transitional measures...must not involve amendments of the rules or policies of the Union”.<sup>27</sup> The only element of flexibility that has entered into negotiations concerned requests for transitional periods. Where such requests were “limited in time and scope and accompanied by a plan with clearly defined stages for application”, the Commission was willing to consider delays. This emphasis on transitional periods and absolute compliance with EU environmental regulations has ultimately pushed a strategy that emphasizes “*end-of-pipe*” solutions over the potentially more cost efficient strategy of technological updating and renewal.

Moreover, the Commission’s strategy toward the CEEC’s exhibits an inability to resolve a tension between prioritizing environmental issues on the one hand, and resolving transboundary and competition related issues on the other. Documents dealing with the negotiation of the environmental chapter repeatedly emphasize the importance of addressing both “transboundary” issues and environmental issues that are likely to affect or “distort” economic competition in the EU. Moreover, it is repeatedly emphasized that all new plants must comply with EU regulations from the first day of production.<sup>28</sup> On the other hand, the European Commission suggests developing clear and systematic priorities and the identification of projects that are “financially viable” or “conform realistically to national affordability/borrowing” (European Commission, 2001a: 7-8).

The following in fact suggests that transitional periods have not been easily negotiated where potential competition issues are concerned. For one, the most derogation heavy directives (see Table X) appear to be those related to the public sector, i.e. the treatment of urban wastewater (largely a public sector issue), and to the emissions of large combustion plants (of which plants with the highest emissions levels remain

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over the period from 1989-2000), they insist that further improvements will require active government intervention and alternative strategies (2003: 265-6).

<sup>25</sup> See DANCEE, 2001: 15.

<sup>26</sup> Gille argues persuasively that the adoption of EU directives on waste management in Hungary led to the indiscriminate elimination of Hungarian policies of waste reuse and recycling (Gille, forthcoming; Gille, 2000).

<sup>27</sup> The same passage is included in all of the various iterations of the European Union’s Common Position vis-à-vis each individual candidate country. In the case of Hungary, for example, the relevant documents are CONF-H 56/99, CONF-H 60/00, and CONF-H 25/01.

<sup>28</sup> Ibid.

largely in public hands). The packaging and package waste directive—with significant private and public sector spending components<sup>29</sup>—comes in a close third. For another, the total number of transitional periods requested often differs quite radically from the total number approved in the Accession Treaty. According to some government representatives, there were in fact significant pressures to reduce the overall number of requests. The consequence however is that many costs must be met—in particular by the private sector—prior to the final date of membership.

(Table X about here: Transitional Periods)

The estimated costs of compliance with EU regulations are significant. While estimates have come down in recent years, the total cost of compliance for all the CEEC's is still estimated at some 78 to 108 billion Euros (see Table XI). Previous estimates have been as high as 230 billion Euros. Of this sum, the EU is likely to fund only a very small amount. The total Cohesion Fund allocation, for example, for the CEEC's for the period 2004-2006 amounts to 7.59 billion Euros. Only a portion of this amount, however, will be available for funding environmental expenditures.<sup>30</sup> Previously the EU has granted some 3.1 billion Euros of support annually through other mechanisms such as the Phare Program, ISPA, and SAPARD. However, these sums pale in comparison to the amounts the EU has granted the previous Cohesion countries (Greece, Ireland, Portugal and Spain) (DANCEE, 2001: 43-8).

(Table XI about here: Estimated Costs of Compliance)

The total cost of compliance with EU environmental policy seen as a share of GDP varies tremendously across individual CEEC's (see Table XII). The most serious case is that of Estonia, where cost estimates attain some 70.4% of Estonia's GDP in 2001. This estimate is followed by Bulgaria with 56.5%, and Romania with 49% of GDP in 2001. Figures for a number of countries, in particular Slovenia, Lithuania and the Czech Republic, are far less daunting. However, based on an estimate of yearly government expenditure of 1% of GDP and on an average annual rate of economic growth of 3%, it would still take the Czech Republic some 9-12 years to completely cover the costs of compliance with EU environmental regulations. For Estonia, Bulgaria and Romania, on the other hand, it will obviously take much longer for these countries to fully cover the costs of compliance.

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<sup>29</sup> Though of course the following depends in part on local or state-level arrangements, the public sector will be responsible for the collection and sorting of municipal packaging waste, while the private sector will be responsible for the collection of industrial packaging waste. Municipal and industrial packaging waste is typically recovered and recycled by the private sector (European Commission, 2001b: iii).

<sup>30</sup> It should be noted that at least some of the Western assistance that has been offered serves Western interests as well as CEE interests. Slocock mentions, for example, that concerns about transboundary pollution have driven at least some assistance (1999: 154), while concerns about potential catastrophes have presumably driven programs dealing with nuclear power problems in CEE.

(Table XII about here: Estimated Costs of Compliance as %GDP)

A word of caution is necessary with these estimates. For one, the current average government expenditure on the environment is less than 1% across all of the CEEC's.<sup>31</sup> For another, the likely rate of economic growth is quite difficult to predict. While across all of the CEEC's, the average rate of economic growth from 1994-2000 was approximately 3.5%, rates of economic growth have slowed somewhat in more recent years. Third, the nominal cost of environmental investments will increase over time. Thus the cost of machinery related to environmental investments that are postponed until later years will require greater investment expenditures than currently predicted. In addition, as has quite frequently been the case, the Commission's recent estimates may either over or under estimate the actual costs of compliance. Moreover, a share of the environmental problems may still be uncovered. The overall tendency, however, has been for compliance estimates to decline over time rather than to increase.

Finally, a large share of environmental investment expenditure is being undertaken by the private sector, in particular for expenditures related to the Directives on Large Combustion Plants, IPPC (Integrated Pollution Prevention and Control), packaging and packaging waste, and VOC (Volatile Organic Compounds) emissions. Thus for countries such as Bulgaria, it is estimated that as much as 46% of required environmental investment expenditures will be undertaken by the private sector. Slovakia and Romania have estimated that as much as 70% of environmental expenditure will be undertaken by the private sector (European Commission, 2001a: 14). Assuming that foreign investors are more likely to invest in firms or plants that involve limited environmental expenditures, the partial reliance on private sector investments may inadvertently place less emphasis on a strategy based on identifying "hot spots", as noted above, and more emphasis on small-scale environmental investments.

While CEE governments may pick up the slack by investing in certain priority "hot spots", such a policy approach would more likely be successful if these countries faced no other costs, or if EU funding levels made such large expenditures less problematic. However, there are tremendous pressures on the firms, economies and governments of CEEC's to be both economically competitive with Western firms and to fulfill all the financial and legal obligations of EU membership. Though many of the firms that will have to be compliant with EU environmental regulations are predominantly western-owned, there are still many CEE firms that will likewise be

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<sup>31</sup> Note that even estimating actual country environmental expenditures appears to be quite problematic. In one case, one and the same report published only 5 months apart by the EAP Task Force cites wildly different environmental expenditures for a number of countries. For example Romania is noted as spending 1.509 billion Euros in 1998 in the January document and 4.439 billion Euros in 1998 in the May document. Nor is this a problem of countries that are not accustomed to collecting and reporting such data. The figure for Germany for 1998 in the January document is 36.579 billion Euros, while it is 45.026 billion Euros in the May document (1/2003: 20; 5/2003: 20).

affected.<sup>32</sup> More importantly perhaps, governments in CEE currently face significant budgetary constraints. The average budget deficit between 1998 and 2002 was –3.7%.<sup>33</sup>

In sum, the pressures produced by the EU membership drive and the requirement of full compliance with the *acquis communautaires* result in tremendous costs that—at least to some degree—seem out of line with actual needs, interests or preferences in CEE. In some respects, the CEEC's have made remarkable if somewhat unintended progress. Moreover, while renewed economic growth may lead to increases in current pollution levels, there are a number of important factors that promise to keep this under some degree of control. For one, more recent industrial growth has typically been in industries that are far less pollution-intensive than Soviet era heavy industry. For another, Western firms with a stronger tradition of environmental protection and longer-term experience with up-to-date environmental technology have undertaken much of the investment in new industries.

Thus a strategy focusing on “hot spots” and energy efficiency seems better suited to dealing with the specific problems of CEE than one that is driven more strongly by a concern for potential market distortions. Transboundary concerns seem of greater relevance where they concern hot spot issues in such areas as the Black Triangle or the current Danube River Basin project, in particular where these concern significant effects on population and/or the environment.

### **Civic Awareness and Social Movements**

The environmental movements of the 1980's and early 1990's in CEE created widespread hopes about the development of strong environmental consciousness in this region. For the most part, however, this simply did not happen. Despite minor country to country variations, the broad generality of this phenomenon across CEE suggests common roots. This section will review both individual country phenomena as well as emergent commonalities across the CEEC's.

The historical evolution of environmental movements in CEE differs substantially from the historical evolution of such groups in Western Europe. While in Western Europe these movements broadly target capitalism and the negative externalities generated by market economies, in CEE, these movements broadly targeted Communism and the institutions of centralized planning and authoritarian political control.<sup>34</sup> While in Western Europe market economies remain in place and social and environmental movements are still broadly focused on counter-balancing their negative externalities, in CEE, environmental movements began to disband almost as soon as democratic electoral institutions and competitive political parties began to emerge. Moreover, as many authors

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<sup>32</sup> The degree of foreign penetration of industry varies considerably from country to country in CEE, with Hungary being the country that has perhaps seen the greatest amount of foreign penetration. In 1996, for example, the foreign share of manufacturing production in Hungary was approximately 61%, while it was only 22.6% for the Czech Republic and 21.6% for Slovakia (Hunya, 2000: 119). However, since 1996, FDI rates have greatly increased in the Czech Republic and Poland, while they have declined in Hungary.

<sup>33</sup> Calculated on the basis of data from Eurostat's website.

<sup>34</sup> Enyedi and Szirmai (1998), for example, note that the CEE movements never developed an anti-capitalist position, while this was common to the movements in Western Europe.

have noted, the environmental movements in CEE were often seen as an occasion to indirectly criticize the existing Communist governments. For a significant number of activists, the principal incentive for involvement was the potential to criticize the existing Communist regimes.<sup>35</sup> As a result, many who became involved in the environmental movements were more strongly motivated by the opportunity to oppose the existing governments than by their environmental convictions. When it became possible to join political parties and compete in the electoral arena, much of the environmental agenda became of secondary importance.

A similar phenomenon should be emphasized with respect to the general CEE faith in the market system. As just noted, in the West, social movements targeted the negative externalities of the market system. However, in CEE, the focus on Communism and authoritarian governments diverted attention from the potential impact that the introduction of market systems might have. The introduction of market systems was typically seen as the answer to the inefficiencies generated by Communist imposed systems of centralized planning. This, together with the interest in consumerism generated by years of scarcity and deprivation,<sup>36</sup> was presumably enough to persuade individuals that market systems had many more positive than negative externalities.

Almost as soon as democratic institutions were established in these countries, many environmental activists sought positions in the newly emerging political parties, or even the environmental ministries. In Hungary, for example, many environmental activists quickly joined political parties and the environmental agenda was rapidly pushed into the background in favor of more pressing economic and other social interests (Enyedi and Szirmai, 1998: 151-2). In the Czech Republic, many environmental activists joined the Civic Forum instead of the Green party (Horak, 2001: 316; Jancar-Webster, 1998: 73). Moreover, as Szirmai (1991) suggests, many of the environmental movements of the 1970's and 1980's in Hungary were not genuine environmental movements. Instead, local-level elites frequently pursued environmental agendas in order to achieve local economic priorities. Thus many of these local movements were strongly dominated by local elites. Thus, without a continued strong role by local elites (many of whom were replaced or ousted in the wave of political reform), many of these so-called environmental movements were destined to suffer under the transition period.

In the Czech Republic between 1990 and 1992, a considerable amount of the environmental agenda managed to appear in the agenda of political parties and parliament. In the early years of transition from about 1990-1992 there was significant effort and attention placed on the environmental agenda. According to Horak, the newly created Ministry of the Environment was successful in pursuing an environmental agenda for several reasons. First it was not tainted by a Communist past and strong links to compromised communist era constituencies. Second, its new Minister, Bedrich Moldan, was by all reports highly ambitious and had strong links to environmental activists in the parliament. Finally, the ministry itself had a sizable staff with considerable expertise

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<sup>35</sup> See Enyedi and Szirmai (1998: 151-2), Persanyi (1993), Horak (2001: 315), O'Toole and Hanf (1998: 99), and Waller (1998).

<sup>36</sup> Jancar-Webster, for example, notes that it would be difficult to expect individuals with an interest in gaining access to consumption goods from which they had been cut off for so many years to be willing to embrace more anti-market values and sentiments (1998: 76).

(2001: 315). However, after 1992, the Czech Ministry of the Environment suffered at the hands of the new Klaus government and the ministry remained isolated for some time. As a result, more economic interests quickly subsumed the early environmental agenda.

During this early period, the Czech Republic was able to pass a Clean Air Act (1992) that was in some respects even stricter than the comparable directive introduced in the European Union. According to Slocock, the Czech Clean Air Act required that Czech firms comply with EU environmental regulatory emissions standards by 1998. By this schedule, the Czech Republic would manage to become EU compliant in a period of 6 years, whereas Spanish firms, for example, would only be required to do so in 17 years (1996: 515).<sup>37</sup> In addition to the Clean Air Act, the Czech Republic was able to pass 7 laws before 1992 that dealt extensively with several areas of environmental policy: water, agricultural land, waste, environmental impact assessments and nature protection. In addition, Czech Ministry of the Environment was able to introduce the first Environment Fund to be established in the region (Horak, 2001: 317).

In Hungary, there is some controversy over when it is that the environmental agenda makes its way onto the political agenda. O'Toole and Hanf, for example, suggest that this did not occur until 1995. Prior to this point in time, they note that the only other environmental law passed was the Act on Environmental Protection from 1976 (1998: 100). However, Baker notes that Hungary succeeded in passing an Environmental framework law in 1992 (2002: 26). Environmental policy in Hungary has suffered from the relative weakness of the environmental ministry and the emphasis placed on economic priorities over environmental priorities. As O'Toole and Hanf also note, the environmental ministry has been renamed several times since 1987 (1998: 100). At different times since 1987 it has included additional responsibilities (such as Water Management or Regional Development). These repeated shifts appear to be representative of a wider uncertainty about the jurisdiction and authority of the ministry, as well as its overall importance and position in Hungarian politics.

To some extent, the incorporation of water management into the responsibilities of the Ministry of the Environment simply makes good sense for Hungary. As noted above, Hungary's environmental problems are more clearly focused on issues related to the water supply and less on issues related to air pollution.<sup>38</sup> Moreover, the short-term focus on Regional Development may well have been a result of the overall importance of the Regional Environmental Inspectorates in Hungarian environmental policy. In fact, as O'Toole and Hanf note, jurisdiction over environmental policy in Hungary is divided across at least four different regional and nationally organized bodies. The regional inspectorates in Hungary are responsible for setting standards for the emission of pollutants, while ambient air quality standards are set by the Institute of Public Health.

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<sup>37</sup> In fact, as the data in Table I suggest, the Czech Republic has achieved the most dramatic improvements in the level of per capita SO<sub>x</sub> emissions of any CEE country, managing to reduce them by a total of 86.6% over the period from 1989-2000.

<sup>38</sup> In 2000, Hungary's level of SO<sub>x</sub> emissions (48kg per capita), while just above the CEE average, was only below that of Bulgaria and Estonia (121kg and 72kg per capita), suggesting that progress could still be made.

Finally, the Ministry of Transport, Telecommunication and Water Management was responsible for setting emissions standards from mobile sources (1998: 105).<sup>39</sup>

Discerning which countries made the most significant legislative attempts to protect the environment is problematic without a more systematic analysis. Moreover, due to the multiple reasons noted above for the considerable decline in environmental pollution, it is exceedingly difficult to determine how much of a role governments might have played in this regard. Turnock and Carter suggest that the Czech Republic went further than most of the CEEC's in attempting to protect the environment (2002: 13). However, Poland likewise considered some 30 pieces of draft legislation related to the environment between 1994 and 1996 (Andersson, 1998: 5).<sup>40</sup> Baker notes that many CEEC's engaged in considerable environmental legislative activity in the early years of the transition. However, most of them were also not able to carry their initial enthusiasm over into the implementation phase (2002: 27).

What is relatively clear is that sometime after about 1992 (later in some countries), much of the initial momentum in the CEEC's had come to a stop. For one, the emergence of governments that were less accepting of environmental concerns had a significant impact on the environmental movement. As Horak (2001) notes, the change in government in the Czech Republic in 1992 led to the relative political isolation of the Ministry of the Environment. The new government's focus on economic priorities and market reform pushed environmental initiatives into the background. While Horak is inclined to blame this fact on the ideological leanings of the Klaus government, the increasing prevalence of economic over environmental interests ultimately appears to drive a significant shift away from environmental politics in all of the CEEC's. The years from about 1991-1994 or 1995 led to significant economic decline in all of these countries. The depth and severity of this period of economic decline is occasionally compared to that of the Great Depression.

Alongside the increasing importance of economic interests, one cannot neglect the declining strength of environmental movements. The weakness of the environmental movement is perhaps best illustrated using the example of green and environmental party political failures in CEE. In general, green political parties have been unable to campaign successfully in the political arena and win parliamentary seats. While green parties do exist in most of the CEEC's, they have typically only been able to win seats in parliament in a few isolated cases (see Table XIII). Currently, the Greens are best represented in Latvia, where in an alliance with the Latvian Farmer's Union, they have 12 seats in

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<sup>39</sup> Such jurisdictional confusion is not uncommon in Central Europe. In the Czech Republic, for example, there are problems with the coordination of water management. The protection of waters is the responsibility of the Ministry of Environment, while drinking water is the responsibility of the Ministry of Health. Finally the Ministry of Agriculture has recently established a division that is responsible for Water management (Turnock, 2002: 86-7).

<sup>40</sup> There are at least two different problems in attempting to compare countries on the basis of the amount of legislation they were able to pass. For one, the literature on this point is quite anecdotal and not broadly comparative. For another, in order to underline the difficulties in interpreting such information, it is apparent from the data in Table I, for example, that despite Poland's legislative efforts, both Lithuania and Slovakia achieved far greater success in their reduction of SO<sub>x</sub> emissions. This is clearly an area in which more work could be done.

parliament and the Prime Minister is a green representative.<sup>41</sup> Second in line is Slovenia, where the Youth Party of Slovenia (a party with “observer” status in the European Green Party) currently has 4 seats in parliament. From this point on however, the numbers drop radically. No other green or environmental party currently has seats in any parliament in CEE and in a few cases—Estonia and Lithuania—green parties have ceased competing altogether in the electoral arena. Moreover, the European Green Party has no formal representation from either Lithuania or Poland.<sup>42</sup>

[Table XIII about here: Green Parties in CEEC’s]

In the early years after 1989, the prospects of the Green parties in CEE looked much different. At the first election held in different countries (typically in 1991), green parties managed to mark their biggest successes. In Romania, for example, the Romanian Ecological Movement managed to win 12 seats in parliament with 2.6% of the votes, while the Romanian Ecological Party won 8 seats (and 1.7% of the vote). In Bulgaria, Ekoglasnost won 13 seats in parliament and the Green Party won 16 seats. Both parties won seats as a result of their cooperation with other parties in the Union of Democratic Forces in the 1990 Grand National Assembly.<sup>43</sup> In Slovenia the Green party won 8 seats with 8.9% of the votes. Next in line were the Green Party in Slovakia with 6 seats, and the Green Party in Lithuania with 4 seats.

In almost all of the above cases however, green parties have either gradually disappeared from the electoral arena or remained insignificant. In Romania, for example, the Romanian Ecological Movement—suffering from the splintering away of four separate environmental parties—failed to win any seats in the 1992 election and disappeared from the electoral arena at the following election in 1996. It re-emerged however in 2000 together with the Romanian Ecological Party and two additional parties to form with Romanian Ecological Pole. However this new offshoot of the Romanian Ecological Party only received 0.99% of the vote and won no seats. In Romania, as in Bulgaria, there are currently no environmental or green parties in parliament. In Slovenia, the Green party dropped to 5 seats at the 1992 election and then to 0 seats in 1996 and 2000. A new Youth Party has emerged in Slovenia that currently has 4 seats in parliament and has observer status in the European Green Party. In Slovakia, the Green Party lost all of its seats in the 1992 election and only made it back into parliament as a result of its coalition arrangement with the Democratic Coalition in 1998. In the 2002 elections, however, they failed to win any seats.

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<sup>41</sup> While newspaper sources at the time portrayed Indulis Emsis as the first Green Prime Minister in Europe, this was not exactly true. Bulgaria has also had at least two Green prime ministers (Rüdig, 2002a: 23).

<sup>42</sup> The European Green Party has in fact noted that the EU enlargement toward CEE represents a significant threat for them in terms of their representational strength in the EP (EUObserver, 2/19/04).

<sup>43</sup> There are considerable discrepancies over which parties won what number of seats. The Bulgarian Green Party ([www.greenparty.bg](http://www.greenparty.bg)), for example, claims they won 17 seats, while Jancar-Webster sets the figure at 15 (1998: 73). Jordan (1998) however notes that both Ekoglasnost and the Green Party won seats and gives seat counts for both parties. These are the figures I have reported above.

The Green Party in Hungary received only 0.36% of the vote in the 1990 national elections and has not succeeded at either the national or the local level (Enyedi and Szirmai, 1998: 152). Its best performance thus far was at the national elections in 2002 with 3.95% of the vote but no seats in parliament, potentially indicating a gradual rise in Green party popularity in Hungary. In the Czech Republic, the Green party was undermined by the loss of environmental and other political activists to the Civic Forum and thus failed to rise above the 5% electoral threshold (Horak, 2001: 316). While it posted a minor comeback to 2.36% of the vote in 2002, it still has not seats in parliament. All in all, Green or environmental parties have not fared well in the electoral arena in CEE. The Latvian case appears to be the exception to the rule. The numerous electoral alliances that occur in many countries in CEE typically appear to mark the beginning of the end for these parties.

Other political parties have not done a very good job of taking on the green environmental agenda. In Poland, for example, no green political party has thus far managed to gain a foothold. While two green political parties campaigned in the 1991 election (the Polish Green Party and the Polish Ecology Party), they received 0.63% and 0.82% of the vote and no parliamentary seats. The Ecological Forum—the green faction of the Freedom Union—did manage to gain seats in parliament in 1993 and 1997, but the Freedom Union failed to make it back into the parliament in 2001 (Ferry, 2002). As Millard notes, in 1993 no Green party contested the elections and the “Krakow federation of independent environmental groups” that there was no Polish political party they could endorse (1998: 151). According to Andersson, other political parties in Poland have either paid little attention to the environment or have not even elaborated any kind of environmental agenda (1998: 4). In Hungary, the governmental program did not focus on any specific “concept” of environmental protection or management (Enyedi and Szirmai, 1998: 152).

Environmental NGO’s and social environmental movements have not fared all that much better than Green parties in CEE. While environmental movements suffered many of the problems noted above, environmental NGO’s currently experience a number of difficulties that tend to make them weak institutions in CEE. For one, such organizations are typically dependent on financial resources either from Western environmental organizations, the REC (the Regional Environmental Central for CEE), or from state-level sources such as the environmental ministries in individual countries. NGO’s in CEE have almost no citizen base upon which to depend for financial support and citizens currently appear to have more economic concerns.

Financial dependence weakens these organizations for multiple reasons. Where resources come from Western organizations, the CEE organizations are expected to pursue much of the Western agenda.<sup>44</sup> For another, the dependence on state-level environmental ministries and even on occasion firms presumably makes it more difficult for NGO’s to act as genuinely independent organizations.<sup>45</sup> As frequently noted in the

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<sup>44</sup> Several sources mention problems that arise from this general dynamic (see for example Waller, 1998 or Jancar-Webster, 1998).

<sup>45</sup> During the course of a series of interviews conducted in the summer of 2003, a number of organizations noted their resource dependence on state ministries of the environment or even local firms. One NGO, for example, regularly engaged in research for the Ministry of the Environment in the Czech Republic and

literature, environmental NGO's in Central Europe have almost no real citizen or membership base. As such, they remain entirely dependent upon other financial donors in the region. Moreover, this financial dependence has led to intense funding competition between environmental NGO's, making it very difficult for such organizations to build a stronger unity of purpose (Baker, 2002: 28; Fagin and Tickle, 2002: 51).

Some analysts have pointed to a phenomenon of professionalization that may distance CEE NGO's even more strongly from local citizens. In order to be eligible for funding from Western organizations, environmental ministries or the REC, NGO's are required to become more professional organizations. This transformation has both benefits and disadvantages. While it makes these organizations more attractive as participants in the local policy-making process and increases their eligibility for foreign funding, it distances them from their potential citizen base. More importantly for the purposes of this paper, such a phenomenon shifts the primary objectives of these organizations toward those that will gain Western (financial) support, and away from issues of importance at the local level (Baker, 2002: 30; Jancar-Webster, 1998). Finally, as Baker notes, professionalization may also contribute to a sort of "blind faith" phenomenon whereby citizens in CEE simply accept the notion that "top-down" change is both possible and appropriate, a remnant of the Communist legacy (2002: 30-31).<sup>46</sup>

NGO's in CEE are likewise greatly weakened by the fact that they currently have no or few political allies in parliament. The lack of Green parties with any kind of footing in parliament greatly diminishes the potential impact of such organizations on the policy-making process. This does not mean that NGO's have no contacts whatsoever to their respective governments or the Ministry of the Environment. There are countless examples of environmental movement organizers who have since found homes in environmental ministries or have participated in environmental factions of other political

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relied entirely on the ministry for its funding. Another NGO engaged in monitoring air pollution levels in the Most district depended entirely on local firms for their funding. Finally, monitoring organizations in some areas involve curious conflicts of interest. For example, the Czech State Forest Company—which is responsible for all forested areas in the Czech Republic—has dual and conflicting responsibilities. One is the "sustainable development" of the forests, while the other is "controlling wood production". Oddly, this organization is entirely self-funded from its wood production. While some of the other organizations were more financially independent, their financial resources remained quite limited and thus the type of projects they funded were very small scale (such as two traffic circles, one bus stop and other small projects).

However, the picture obtained of environmental NGO's was not always so gloomy. Some organizations appeared far more able to offer independent and objective criticisms of governmental environmental policy. EnergiaKlub (Energy Club) in Budapest, for example, is a very successful NGO that has gained some notoriety for its exposure of a nuclear power scandal in Hungary and its "watchdog" like monitoring of governmental energy policy ([www.energiaklub.hu](http://www.energiaklub.hu)).

<sup>46</sup> This point is reflected in the organizational structure of some environmentally minded institutions that evoke images of the fox guarding the hen house. For example, in the Czech Republic, the Czech State Forest Company is responsible for both the sustainable development of the forests as well as decisions regarding the sale of timber. As noted above (preceding fn.), they are likewise dependent on funding from their sale of timber. The Administration of the Protected Landscape Area—a parallel organization—is funded by the state but has little direct control over the decisions of the Czech State Forest Company. Still, representatives of the two organizations profess to be able to work out their differences. Quite similar arrangements are present in Hungary as well, where the forests are managed either by state "companies" or are privately owned.

parties. But the lack of green parties is emblematic of the degree of environmental consciousness currently pervading civil society in CEE.

Some have observed that democratization itself reduced the need for environmental activism by making new forms of political expression of environmental interests possible (such as the formation of NGO's and political participation in other parties) (Baker, 2002: 28: cites Jancar-Webster, 1998). However, more attention should be given as well to the impact of the EU membership drive on civil society. The sense that becoming members of the European Union will solve CEE's problems extends as well to environmental concerns. Even environmental ministries ultimately became entirely absorbed with simply transposing EU legislation into the national legislative framework, thereby losing much of their ability to define an independent environmental agenda.

The lack of a strong social movement focused on environmental issues has several important ramifications for the future of environmental policy-making in CEE. For one, EU environmental policy has clearly come to dominate the field of environmental policy in CEE. The consequence of the lack of genuine social and environmental movements in CEE is that issues that are ignored by EU policy and which might otherwise receive strong attention due to public scrutiny instead go unnoticed. Differences in the ability of local NGO's to respond to real environmental problems and issues were lamentably obvious in discussions with many of these organizations. Some organizations seemed simply unable to develop genuinely independent and self-motivated agendas and environmental goals. In particular, those organizations that were dependent on some form of state funding seemed unable to develop strongly independent visions of what state environmental policy should look like. Thus the principal efforts of some NGO's seemed to be focused upon identifying problems—either of an environmental or an institutional nature—without attempting to formulate actual solutions.<sup>47</sup>

### **EU Compliance and Missed Opportunities**

While the adoption of EU environmental policy will likely have a positive impact in some areas, there are likely to be a number of casualties as well. Both the diversions of financial and administrative resources away from local, regional and state-level concerns, as well as the generally weak environmental organization of civil society, are likely to have the consequence that many opportunities will be missed and environmental issues of potentially greater concern will be neglected. This section attempts to identify a few of those areas.

One of the more important but less frequently asked questions for the CEEC's is to what extent the focus on the adoption of EU objectives and regulations has already distracted (or will distract) CEE governments from other important goals? Given the tremendous effort and attention that is being placed on EU compliance, what are the negative sides to the focus on EU environmental legislation? That tremendous resources

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<sup>47</sup> While this observation was not true across the board, it did appear a pervasive phenomenon that most organizations were focused more strongly on criticisms of government policy-making and were less involved in attempting to develop genuinely independent environmental strategies.

are being diverted away from areas of potential interest should be self-evident from the preceding discussion and the suggestion that the identification of the environmental agenda for CEE is potentially driven by a misguided sense of priorities.

Some of the more common examples of resource diversion and missed opportunities involve the development of roads over rail, and the lack of attention that is paid to expanding public transportation. As noted by others, the so-called “*positive legacy*” of the communist era is the relative focus on the development of public infrastructure, in particular railroads and public bus and subway systems (see for example Üрге-Vorsatz, Paizs and Pesic, 2003: 262; Horak, 2001: 322). Many have lamented that more effort could have been put into improving the railway networks instead of shifting most freight transport from the rail to the road.<sup>48</sup> The environmental impact of road freight is of course much greater than rail freight. District heating is likewise seen as an area that could have a potentially very positive impact on the environment. Some 20% of the public, for example, is connected to district heating in Hungary and some 80% of apartments in urban areas in Poland are likewise connected to district heating.<sup>49</sup> While district heating is typically thought to be an environmentally efficient alternative, little to no emphasis has been placed on this strategy by CEE governments.

Urban sprawl and the rapidly rising number of vehicles is also a considerable problem. Large tracts of land outside the previous urban peripheries are rapidly being devoured by the construction of new housing. Moreover, much of this new housing construction goes un-zoned and unplanned. This development raises several issues that are—for the most part—simply going unaddressed by governments absorbed with other agendas. Moreover, these areas typically lie outside of the existing public transportation networks. Thus, in order to commute into the cities, individuals use passenger cars instead of public transportation. This contributes significantly both to the rapid rise in the total number of passenger vehicles on the road, to traffic congestion in the cities, and to greatly increased levels of smog. Few attempts are being made to increase the availability of public transportation outside the existing networks and even less is being done to reduce the total burden on city traffic and congestion.

For this reason, and also due to the greatly increased availability of passenger vehicles, the total number of vehicles per person has radically increased (see Table XIII). Between 1990 and 1999, for example, the total number of vehicles per 1000 inhabitants has increased by 64% (against only 27% in Western Europe). Although the total number of vehicles per 1000 inhabitants is still significantly below that in Western Europe, this merely suggests that things are likely to get worse before they get better in CEE. The lack of attention to public transportation and to urban congestion however, will only exacerbate these problems in the short and potentially also the long term.

(Table XIV about here: # passenger vehicles per 1000 inhabitants)

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<sup>48</sup> Some of the railroad lines have been improved, in particular those that connect more important “corridors”, but most freight has still been shifted from the rail to the road.

<sup>49</sup> I am indebted to discussions with the Diana Üрге-Vorsatz and Energy Club’s Gábor Takács for this point. See also Üрге-Vorsatz, Paizs and Pesic, 2003: 262.

Many other issues, however, are not even raised in any public fora. While the above noted issues have at least been discussed by some NGO's, there are a range of issues that receive little to no public discussion. For example, EU environmental regulations are not well suited to helping many of the CEEC's deal with the problem of nitrates in the soil. As noted above, this is currently not a significant problem. However, as agriculture begins to revive in Central Europe, more and more fertilizers are again used, the amount of nitrate in the soil is likely to increase dramatically. However, the EU has no polluter-pays-principle for the agricultural sector.<sup>50</sup>

A number of regulations present before the adoption of EU environmental policy have simply been eliminated, regardless of their viability or potential advantages. Perhaps one of the most egregious of these is that reported by Gille (forthcoming; 2000). She notes that Hungary previously had a very extensive system of waste collection that catalogued all the types of waste produced by individual firms. Abandoned in 1992, this institutional system was additionally charged with the responsibility of trying to find alternative uses for industrial waste. Though inefficient and far from perfect in its degree of success, such a program represented a potentially valuable store of information and was a mechanism that potentially could have been used for developing further alternative uses for waste. Moreover, as Gille (2004) notes, Hungary was unusual relative to Western Europe in its degree of hazardous waste recycling. Despite this fact, Hungary has completely shifted over to waste collection systems and has dispensed with all its previous waste recycling systems.<sup>51</sup>

Others have likewise noted that many of the CEEC's previously had some environmental regulations that were even stricter than EU environmental regulation (Kerekes, 1993: 146). Of course, this did not mean that these environmental regulations were actually enforced. But neither did this mean that the CEEC's had no previous environmental regulatory framework. However, once again, environmental regulations of this kind were simply dispensed with as EU environmental regulation was adopted.

All in all, respondents note that they would prefer to be able to pursue more diversified solutions to local, regional and state-level problems. However, the imposition of EU environmental regulations and the diversion of resources have tended to make this either difficult or impossible.

## **Conclusion**

A strong case can be made that the top-down imposition of EU environmental regulation results in a significant diversion of resources from environmental objectives that would more clearly correspond to local, regional and state-level interests and preferences. More importantly, the choice of environmental priorities identified via the process of adopting EU legislation does not appear to do justice to some of the more pressing environmental needs in CEE. Finally, the generally weak structure of civil

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<sup>50</sup> I am here indebted to a discussion with György Várallyay, an agronomical soil scientist at the Hungarian Academy of Sciences.

<sup>51</sup> Gille likewise notes a number of smaller programs that were eliminated early on. For one, a long-standing policy of deposits on packaging was eliminated. For another, deposit and refund systems for bottles and batteries were likewise eliminated (2000: 217).

society organizations suggests that the identification and advocacy of important environmental alternatives in CEE will either not take place at all, or will be under-represented.

While there will doubtless be some gains from the adoption of EU environmental legislation (in particular with respect to the potential degree of monitoring and enforcement and to some extent in the area of wastewater management),<sup>52</sup> there will likewise be many costs. Among the most important of these costs are the following. First, and potentially the most significant, is the quite substantial and long-term diversion of financial and administrative resources to projects that are of dubious importance for CEE needs. Second, this diversion of resources is likely to have a significant impact on the overall competitiveness of CEE economies. Third, alternative and potentially more pressing environmental issues are likely to go un-discussed or even unnoticed.

In the long run it is questionable to what degree success in environmental policy depends on EU pressure. A recent study from the EAP Taskforce actually noted that although the CEECs had a bit of a lead on some of their Eastern neighbors in overall environmental expenditures, many of these countries have now caught up with their Western counterparts. Overall expenditure levels on environmental policy in these countries—measured as a share of GDP—now actually approximate levels spent in CEE.<sup>53</sup> At best, such a statistic questions the relative impact and importance of the EU membership drive on the push to improve the environment in CEE. The decline of heavy industry and potentially the strong-minded character of a few select individuals who forcefully pushed the environmental agenda in the early years of the transition have been equally if not more significant in explaining CEE's degree of environmental success.

Clearly more work could be done in this area of research. For one, it is necessary to explore in more detail the range of environmental policies and practices that were in place prior to 1989. For another, more work could be done to provide a more systematic account of what factors actually drove environmental policy-making in CEE in the early years of transition. In addition, more work could be done to unearth other positive environmental practices that have since been abandoned in the pursuit of EU membership. Finally, the degree to which the adoption of EU environmental policy might have defused citizen participation in defining the domestic environmental agenda is also worth exploring. This in fact may be one of the more significant legacies of the drive for EU membership and potentially one of its greater losses.

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<sup>52</sup> Cichowski (1998), for example, points to the importance of both the European Court of Justice as a tool of individuals and interest groups who can use the court to force local officials to comply with EU environmental regulations. Thus in some senses, Kovách (2002) may well be correct in suggesting the EU can serve as a control on domestic governments. In this respect, EU environmental regulation and the EU regulatory framework may potentially bring some significant benefits by helping civil society organizations to act as important watchdog agencies.

<sup>53</sup> The countries discussed in this paper that compare favorably to a subset of the CEE countries are Kazakhstan, Moldova, the Russian Federation, Ukraine and Uzbekistan. A few of the countries analyzed, however, did not quite match up to the levels of expenditure in CEE (Armenia, Azerbaijan, Georgia and the Kyrgyz Republic) (EAP Task Force, 5/2003).

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