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**Denmark's Environmental Aid to Central  
and Eastern Europe: Present and Future**

by

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## Introduction

Soon after the political changes in Central and Eastern Europe in the late 1980s, Denmark took steps to protect the environment in these areas and later made a strong commitment to step up its environmental aid.<sup>1</sup> But the goals of Denmark's environmental aid policy for Central and Eastern Europe were until recently vague, ambiguous and somewhat conflicting. In fact, the environmental aid projects were the policy. There was little political agreement on what Denmark's environmental aid policy should support, the likely effects of the aid, or the receiving countries' needs. Recently, in response to evaluations and criticism, portions of the aid were re-directed to establish a program-oriented strategy for various environmental sectors. Furthermore, more emphasis was put on participation and dissemination of useful experiences with environmental protection in Central and Eastern Europe.

The article proposes to redesign Denmark's environmental aid policy by strengthening organization of the aid in receiving countries, and by specifying green principles for better granting aid. As well, it is proposed to make contextual environmental analyses at the level of the individual environmental aid projects. Most probably, an agreement on implementation and future operation of environmental aid projects concluded at an early stage could enhance project sustainability by ensuring feasibility and increasing the lasting effects of environmental aid projects. It is accordingly emphasized that by building more permanent relationships among project partners implementation might improve and long-term effects of environmental projects might be enhanced.

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## 1. DENMARK'S ENVIRONMENTAL AID POLICY TO CEE

Denmark's environmental aid policy for Central and Eastern Europe (CEE), Russia, Byelorussia, Ukraine and the Baltic countries must be looked upon in the light of the new Danish foreign policy for this region that emerged in the late 1980s. Since then, the foreign policy for CEE has defined the policy framework within which a considerable number of environmental aid programs were launched by Danish governments.

In early 1989, motivated by the rapid changes occurring within the then German Democratic Republic (GDR), the Soviet Union (USSR), Poland and Hungary, the Danish government began to define its post-Cold War foreign policy. Most attention was paid to security issues, support to democratic changes, the collapse of communism as a political ideology, and the dissolving unity among countries in the East. In September 1989, the government, a coalition government of Conservatives, Liberals, and small parties from the political right and center, established Denmark's first action program to support the democratic process in CEE. In particular it emphasized the need for foreign investments that would contribute to the improvement of social and environmental conditions.

The first intense Parliamentary debate in Denmark on the new foreign policy for CEE took place in October 1989. The Minister of Foreign Affairs stressed the importance of Denmark contributing to environmental protection, human rights and contacts in a manner that could ensure an easy and safe reform process in CEE. The government's policy for CEE should also satisfy Denmark's security and commercial interests, and emphasis was put on support to an expansion of the market which was looked upon as an essential means of the reform process. Furthermore, support should be given to Danish consulting and manufacturing industries, and should improve the opportunities for private investments in joint ventures and new private companies. Financial aid should take into account the needs of CEE, but should be targeted at fields where Danish companies held an advantageous position, especially environment, agriculture, and the food process-

ing industry.

Denmark's security interests weighed heavily when it was decided to support the economic reform process in the East. However, economic interests also played an important role because, as the Minister of Foreign Affairs said, 'supporting the reform-friendly forces ... will benefit Danish business and employment'.<sup>2</sup> And, as he further pointed out, an 'increased growth in the Baltic countries and in Poland now is, thanks to the economic reforms in the East, possible in the longer run. We will support this development of changing the Baltic Sea to become an international growth region as we have seen in the case of the Mediterranean and the Pacific Ocean'.<sup>3</sup>

The Social Democrats and the Socialists, the principal Opposition parties, put more emphasis on direct government aid to infrastructure and education. They also wished to stimulate local contacts among political parties and interest organizations. Social Democrats and Socialists ascribed great importance to environmental matters and advocated that military budgets cuts should be converted to environmental aid, that economic growth should be sustainable, and that system export of Danish energy and environmental expertise should be promoted. According to the Social Democratic party, 'environmental cooperation can be a good cornerstone that can bring about cooperation not only at government level but a high degree of cooperation between people and organizations ... and also practical cooperation between companies'.<sup>4</sup> Social Democrats insisted that emphases should be put upon cooperation in specific sectors through people-to-people contacts and contacts among local authorities instead of on donations. The government supported the idea of local network-building and was opposed to rigid EC collaboration and coordination of the aid. As the Minister of the Environment declared, 'we should instead build networks of useful contacts,

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<sup>2</sup> Folketingets Forhandlinger 1989-90, Tillæg A, p. 1633.

<sup>3</sup> Folketingets Forhandlinger 1989-90, FF, p. 727.

<sup>4</sup> *Ibid.*, p. 748.

contributing to the pluralism these countries wish and need'.<sup>5</sup>

The Parliament decided to support the reform process, increase the economic support to the EC and elsewhere for achieving sustainability in the USSR and CEE, increase technological cooperation, support establishment of a joint European environmental fund within the Economic Commission for Europe (ECE), and establish a Danish fund for industrialization, especially for energy, environment and food.

A few weeks later, the government proposed a DKK 300 million 'Act to Support Danish Investments in the East'.<sup>6</sup> Under the act, support should be given primarily as initial capital to a private fund for investment support in CEE, the Investment Fund (IØ), which would be administered by the Ministry of Foreign Affairs. The Investment Fund was intended to provide guarantees and capital supplies to Danish commercial investments in joint ventures. The government also established the Investment Ensuring Scheme, an investment guarantee of DKK 1 billion intended to minimize economic risks due to political instability in East. In the Project Fund for CEE, yet another new fund established by the government, almost DKK 50 million were made available for funding of administrative and technical unspecified bilateral aid.

Contrary to the wishes of the Opposition, the proposal and the final act establishing the Investment Fund and the Project Fund did not mention environmental issues. Some ministerial contacts between Denmark and Poland were made in order to identify possible environmental areas for the funds, but these efforts were not integrated into the industrialization programs that provided the framework for the funds. At the time the act was being prepared, an Advisory Council on Renewable Energy under the Ministry of Industry criticized that environmental investments would not be focussed, and disagreed that all investment orders should only be given to Danish companies. It was recommended instead that support be given to CEE companies in order to establish local

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<sup>5</sup> *Ibid.*, p. 728.

<sup>6</sup> Folketingets Forhandlinger, 1989-90, FF., p. 783.

production of environmental technology.<sup>7</sup> But the criticism was ignored by the government, and the Ministry of Foreign Affairs decided that waste water treatment, smoke scrubbers, and hazardous waste treatment should not be supported under the Investment Fund.<sup>8</sup> Thus, the CEE aid policy should strengthen the reform process by supporting its economic actors, use market measures to encourage Danish companies to establish new markets, achieve the economic benefits of a new expanding economic region, and stimulate local network-building. Environmental support should be limited to a few projects where Danish companies could receive support from multilateral funds. Only a few environmental activities were supported under the Project Fund, but later it became an important financial source for support to infrastructure projects of great environmental importance.<sup>9</sup>

However, in November 1989, the Social Democrats proposed 'Subsidies for Environmental Activities in East European Countries'.<sup>10</sup> They proposed that DKK 100 million annually be made available for analysis, environmental plans, projects, agreements and facilities. It was proposed that this aid scheme should be administered by the Ministry of the Environment together with environmental organizations, the consulting companies' interest organization, and the labor market organizations. The proposal stressed 'more environment for the money' and support to Danish companies by strengthening the market for Danish environmental technology in CEE.

After initial hesitation, the government supported the proposal for policy

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<sup>7</sup> Betænkning 5 December 1989, Folketingets Forhandlinger Tillæg B 1989-90, p. 59.

<sup>8</sup> *Notat om Investeringsstøtteordning for Østlandene* (Ministry of Foreign Affairs: 29 September 1989).

<sup>9</sup> Until 1991, twelve environmentally relevant projects were supported at a total cost of DKK 8.4 million. Interview with Karsten Skov, the Division of Eastern and Central Europe, the Ministry of the Environment, Denmark. 8 December, 1993.

<sup>10</sup> Folketingets Forhandlinger 1989-90, Tillæg A, p. 2241.

change.<sup>11</sup> And for the first time Parliamentary debate touched upon issues such as how environmental aid was best donated, the need for help to develop environmental law and build environmental administration, and direct investments in environmental facilities. Other issues raised were whether to build environmental facilities or new, cleaner industrial and power plants, and whether environmental fees, military budget cuts, or reduction in development aid should finance environmental aid. Despite parliamentary support of the proposal for an aid scheme in February 1990, it took more than one year before the act was passed.

Since late 1990, the preparations for the act on environmental aid to CEE gave rise to political debate on the environmental aid scheme, finally established in April 1991. The debate influenced to some extent the guidelines for application and funding later agreed upon.<sup>12</sup> One significant consequence was that the environmental aid previously administered through bilateral programs was now administered under the environmental aid scheme.

The goals of the environmental aid scheme were to generally support environmental protection and democracy in CEE, protect Denmark's environment, and support Danish private companies. The Baltic Sea states were given high priority, due to their strong impact on Denmark's environment, and Rumania, Yugoslavia, Albania and Bulgaria would not receive environmental aid. Support to self-reliance capabilities necessary for protection of the environment was also stressed. Environmental movements and activities should be supported because they bolstered the independence of the former USSR states, especially the Baltic states; the environmental movements in those countries were strongly opposed to Soviet 'hyper industrialism'. Democracy and environment were linked in two

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<sup>11</sup> The government first suggested that emphasis should instead be put on multilateral steps such as environmental soft loans from EBRD, EC, OECD and the Nordic Council of Ministers. The Danish government made a considerable effort to influence international support programs. The Nordic Investment Bank was given Danish support for the special joint environmental investment guarantees, the new environmental financing company NEFCO was given Danish support (DKK 11 million in 1990), and diverse EC programs were actively supported (approximately DKK 200 million).

<sup>12</sup> *Guidelines for Applications for Subsidies for Environmental Activities in the East European Countries* (Danish Environmental Protection Agency: Copenhagen, September 1991).

ways: democracy would fail, it was feared, if the CEE countries did not satisfy their environmental needs, and support to environmental protection should be channelled through grassroots groups. Accordingly, private companies and public authorities as well as interest organizations and grassroots could apply for funding under the aid scheme. It was stressed that technology transfer should be closely considered after project applicants had analyzed the local industrial and technical conditions for implementation. Environmental problems given priority were low energy efficiency, ecological catastrophe areas, and hazardous waste. While many types of assistance seemed necessary, emphasis was put on environmental priority planning, knowledge transfer, networking, and educational campaigns. Also demonstration plants and pre-feasibility studies were highlighted. Through administrative assistance Danish expertise should make sure that a source-oriented regulatory approach would be used when industry in CEE was rebuilt.

During 1990-1991, a number of projects were initiated under the various aid and investment programs. But Social Democrats and Socialists criticized that too many CEE aid programs had been funded in an uncoordinated fashion and pointed to the lack of priorities and guidelines. They criticized further that priorities were vague and that the administrators of the economic guarantees and financial support were profit-oriented with little concern for the environment. The kind of effects that could be expected, how the programs could be coordinated, and that only very long-term changes should be expected, were also debated. It was emphasized that environmental aid to CEE should not reduce development aid, but instead that new military budget cuts should be used to finance environmental aid. As a result of Parliamentary debate, new priorities for the general CEE aid, a new Danish action program supporting the reform process, and more detailed guidelines for the bilateral aid were established.

The environment, working conditions, food processing, education, culture, and employment became priority areas for aid to CEE. The aid was increased, and the countries bordering the Baltic Sea were given the highest priority as receivers of environmental and economic aid. The new guidelines reformulated the principles and application procedures of the various aid schemes (for the



environmental aid scheme, see page 16 below): commitment of and co-financing by the recipient countries, decentralized projects, dialogue with the recipient countries, welfare assistance and system export, environmental impact assessment of all aid, focus on human rights, and the importance of including cultural and scientific activities in the aid projects.

During 1993, almost all aid schemes were reevaluated and reorganized. A public and a Parliamentary debate took place, and several evaluation reports and new action programs were produced.<sup>13</sup> Much concern focussed on the social and political problems of the transition process in the East, and how Danish aid could be made more substantial as well as more effective. An often repeated phrase was 'the euphoria is over', an expression of disappointment and frustration due to the slow progress towards democracy, market economy and welfare in the East as well as few concrete results from international aid which was too diffuse.<sup>14</sup>

Several issues were raised - such as a slow application procedure, few follow-up investments in equipment and production, poor adaption of the aid to local conditions, lack of coordination and focus of the aid schemes, expensive loans, and poor training of the employees of the receiving partners. The press and the Opposition criticized that the aid schemes were too diffuse and responding too hastily to immediate needs. Moreover, too many projects had been intended to benefit Danish consulting companies and not the CEE. Thus, Danish industry

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<sup>13</sup> *Danmarks Internationale Indsats* (Ministry of Finance: June 1993); *Forslag til folketingsbeslutning om udbygning og forbedring af støten til Østeuropa*. Fremsat 24 March 1993 af Konservative, in Folketingets Forhandlinger 1992-3, Tillæg A; *Beretning over forslag til folketingsbeslutning om udbygning og forbedring af støtten til Østeuropa*, Folketingets Udenrigsudvalg 24 September 1993; *Forespørgsel om dansk øststøtte*, 25 November 1993 in Folketingets Forhandlinger 1993-94; *Dansk erhvervslivs rolle i den danske øststøtte* (Ministeriet for Erhvervspolitisk Samordning: December 1993); *Tilskud til miljøaktiviteter i Øst- og Centraleuropa: Årsberetning for 1992* (Ministry of the Environment: April 1993); *Rigsrevisionens Beretning* (1993); Henrik Lisberg, 'Penge fordeles planløst', *Politiken*, 30 June 1993; Henrik Lisberg, 'Østhjælp drukner i papirarbejde' *Politiken*, 30 June 1993; Ole Damkjær, 'Jagten på Øst-hjælpens hvide elefanter', *Information*, 2 July 1993; Henrik Lisberg, 'Regering erkender fejl i øst-hjælpen', *Politiken*, 3 July 1993; Helle Degn, 'Øststøtten skal males grøn'; *Børsen*, 12 August 1993; Henrik Lisberg, 'Støtte til østlande en fiasko', *Politiken*, 12 December 1993; Henrik Lisberg, 'Østhjælpen går i danske lommer', *Politiken*, 12 December 1993; Helle Degn, 'Gammel travet ud af stalden', *Politiken*, 16 December 1993; Henrik Lisberg, 'Øststøtten skal ændres', *Politiken*, 17 December 1993.

<sup>14</sup> See Søren Riishøj, 'Euforien er borte', *Politiken*, 25 November 1993.

interests deplored the lack of follow-up investments and export of hardware products.<sup>15</sup> The criticism echoed views expressed by both Eastern European countries and the Danish press who stressed the need for equipment and investments over prefeasibility studies and planning.<sup>16</sup>

In the Spring of 1993 a new Danish government led by Social Democrats took office and promised to press for cheaper and softer loans from the international financial institutions. Meetings were held with several of these institutions and Denmark organized a conference where environmental ministers from Denmark and fourteen East European countries signed the Declaration on Softening Loans to Environmental Protection in Eastern and Central Europe.<sup>17</sup> The Ministry of the Environment had criticized that the Baltic Sea Joint Comprehensive Environmental Action Programme focussed too much on single regional 'hot spots' from a technical and economic point of view and that it mistakenly was assumed that the international banks were willing to provide grants.<sup>18</sup> It further was criticized that the Baltic action plan dealt too much with efforts to clean up and spent money on high cost infrastructure that would reduce resources for preventive measures.<sup>19</sup>

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<sup>15</sup> Erik Bjerager, Jesper Schou Hansen og Tage Otkjær, 'Østhjælp havner i danske lommer', *Børsens Nyhedsmagasinet*, no. 13, 27 August 1993, pp. 20ff.

<sup>16</sup> *Tilskud til miljøaktiviteter i Øst- og Centraleuropa* (Ministry of the Environment: 1993), p. 20.

<sup>17</sup> 'Declaration on Softening Loans to Environmental Protection in Eastern and Central Europe. Copenhagen Declaration. 1 June, 1994. Adopted by Ministers'.

<sup>18</sup> 'Miljøstyrelsens oplæg til de miljørelaterede sektorprogrammer' (Danish Environmental Protection Agency: 9 December 1993) and 'Notat vedrørende Miljøinvesteringsprogrammet for Østersøen, herunder Danmarks holdning til finansieringskonferencen i Gdansk i marts 1993' (Danish Environmental Protection Agency: 2 December 1992). For an analysis of environmental cooperation to protect the Baltic Sea, see Lasse Ringius 'The Environmental Action Plan Approach: A Milestone in Pollution Control in the Baltic Sea', in R. Hjorth, ed., *Baltic Environmental Cooperation: A Regime in Transition* (forthcoming 1995).

<sup>19</sup> 'Notat vedrørende miljøinvesteringsprogrammet for Østersøen, herunder Danmark's holdning til finansieringskonferencen i Gdansk i marts 1993', *ibid.*; 'Tilskud til miljøaktiviteter i Øst- og Centraleuropa' (Danish Environmental Protection Agency, 1993); Håkan Rhode and Thomas Lindquist, 'Towards a Preventive Environmental Strategy for the Baltic Sea'. Draft, 1993. Lund University, forthcoming; and 'Greenpeace International's Position on the New Helsinki Convention, and the Task Force Investment Plan'. Statement at the HELCOM Ministerial Meeting. 9 April 1992.

The Danish efforts to establish environmental soft loans from international financial organization were also reflected in new environmental aid guidelines. Environmental aid projects that could be followed up by investments from the international financial organizations were given high priority. The goal was to strengthen Danish aid with international sources, and the annual environmental aid was increased to DKK 300 million, beginning in 1994.<sup>20</sup> In addition, the government would evaluate the effects of the programs by the end of 1993.<sup>21</sup> The most fundamental change in the aid strategy was a substitution of a large part of the general aid schemes for program-oriented aid for specific sectors. Much attention was paid to the question of how Danish aid could improve environmental protection within key sectors, and the government decided to support establishment of better regulatory systems and infrastructure by funding sectoral programs in the fields of environment, technology-administration and the private manufacturing sector. In this way the government hoped to create focussed and at the same time comprehensive innovations that would concentrate the aid and use available resources with greater effect. The sectoral program idea meant identification of targets demanding a number of coordinated initiatives and follow-ups through a more strategic sectoral aid program. To do so, parts of the aid administration were reorganized and the responsibility given to the respective Ministries which should produce sectoral guidelines and priorities in collaboration with Danish embassies and the receiving countries. Several Ministries were involved in designing 'environmentally-related sectoral programs' for Eastern and Central Europe, DKK 100 million annually, and in producing plans for supporting sectors - energy, nuclear safety, agriculture and traffic - that would be

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<sup>20</sup> Erik Bjerager, Jesper Schou Hansen og Tage Otkjær, 'Østhjælp havner i danske lommer', *Børsens Nyhedsmagasin*, op.cit.; 'Notat til statsrevisorerne om den danske bistand til Østeuropa i årene 1990, 1991 og 1992', *Rigsrevisionen* 24 May 1993. 'International miljøbistand under Miljø- og katastroferammen, Delstrategi vedrørende miljøindsatser i Øst- og Centraleuropa' (Danish Environmental Protection Agency: 28 October 1993), unpublished.

<sup>21</sup> *Tilskud til miljøaktiviteter i Øst- og Centraleuropa* (Ministry of the Environment: 1993), p. 20.

environmentally beneficial. The Ministry of the Environment was commissioned to make comments and adjustment-proposals to all these plans.<sup>22</sup> Like the former government, the Social Democratic government also promised to environmental impact assess all aid.

## Summary

The goals of Denmark's environmental aid policy were to support environmental protection, especially in order to protect Denmark's environment, to support Danish economic interests in an expanding *Mare Balticum* market, and finally to benefit Danish and CEE jobs and economies. The Danish Parliament was generally in agreement that market-building and consolidation were means for stabilizing the democratic development in CEE, that Danish companies were well-equipped to implement environmental aid and find target groups in CEE, and that Danish learning-processes with regard to regulation and production could be transferred through technology and institution-building. There was also agreement about the advantages of building local contacts among private companies and public organizations. Within the environmental field, the aim was to support democratic groups and to achieve concrete, substantial results.

However, there was disagreement as to the use of Danish commercial interests as a bridge for transformation, especially as to the form environmental aid should take. The Conservative and Liberal parties stressed export of capital goods from commercial sources, while Socialists and Social Democrats were more in favor of system export carried out jointly by public authorities in Denmark and in CEE, political organizations and private companies. The changes in aid strategy that began in 1991-92 reflected the views of the Social Democratic government.

Recently attention has been paid to the receiving countries' needs, how companies in CEE could become more involved in environmental aid projects and

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<sup>22</sup> In 1993, the Ministry of the Environment made a few critical comments on the plan for agriculture aid. 'Miljøstyrelsens oplæg til de miljørelaterede sektorprogrammer', 9 December 1993, Danish Environmental Protection Agency.

training, sub-contractors, technology development projects, and how more influence could be given to local grassroots movements, public administration and science institutions. This illustrates the intention to develop aid initiatives that can facilitate broad participation and involve all actors in environmental protection. The recent emphasis on sectoral program aid strategies reflects moreover a political need for visible results of environmental aid. While there were problems regarding outcome and ineffective implementation of the aid, the prompt criticism made in Parliament and in the mass media served to adjust the aid. The debates in 1990 and 1991 were in fact echoed in the general criticism of the aid schemes voiced in 1993. Finally, Denmark's environmental aid to CEE was a question not only of political priorities of the Danish Parliament, but was strongly dependent on support from Ministries, administrations, and coordination among aid departments. Power struggles among Ministries that hoped to benefit from the expanding field of environmental aid resulted in reorganizations and readjustments of goals and policy instruments.

## **2. THE EASTERN EUROPE ENVIRONMENTAL AID SCHEME**

### **The Environmental Aid Budget**

Denmark's environmental aid to CEE is a recent, but quickly growing expenditure compared to other international activities, except disaster aid. The government hopes in the future to spend one per cent of GDP on development aid and one half per cent on environmental and disaster aid.

Table 1 shows the expected development in total Danish financial support to international activities in the period from 1988 to 1997.<sup>23</sup> Total expenditures are expected to increase from 0.94 per cent of GDP in 1988 to 1.62 of GDP in 1997. Environmental and disaster aid are the most quickly growing expenditures. By

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<sup>23</sup> *Danmarks Internationale Indsats*, op.cit, p. 17.

1997, environmental aid's share of total

**Table 1. Denmark's International Activities Budget 1988-1997**

|   | 1988<br>(1) | 1992<br>(2) | 1993<br>(3) | 1994<br>(4) | 1995<br>(5) | 1996<br>(6) | 1997<br>(7) | Increase 1993-1997<br>(8)= (7)-(3) |
|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|------------------------------------|
| .....Billion DKK (1994 prices).....     |             |             |             |             |             |             |             |                                    |
| Development Aid                         | 6.9         | 8.5         | 8.7         | 9.1         | 9.4         | 9.9         | 10.3        | 1.6                                |
| Environmental and disaster aid 'budget' | 0.8         | 1.3         | 3.9         | 4.1         | 4.4         | 4.7         | 5.0         | 1.1                                |
| environmental and disaster aid          | -           | 0.2         | 0.1         | 1.0         | 1.4         | 1.8         | 2.2         | 2.1                                |
| other refugee expenses                  | 0.7         | 0.6         | 3.1         | 2.5         | 2.4         | 2.3         | 2.2         | -0.9                               |
| peace-keeping operations                | 0.1         | 0.5         | 0.7         | 0.6         | 0.6         | 0.6         | 0.6         | -0.1                               |
| East-support (environmental aid excl.)  | -           | 1.3         | 2.1         | 2.1         | 1.6         | 1.5         | 1.4         | -0.7                               |
| Export-oriented aid                     | -           | 0.2         | 0.6         | 0.6         | 0.5         | 0.5         | 0.5         | -0.1                               |
| Additional aid                          | -           | 1.1         | 1.5         | 1.5         | 1.1         | 1.0         | 0.9         | -0.6                               |
| <b>Total</b>                            | <b>7.7</b>  | <b>11.0</b> | <b>14.7</b> | <b>15.3</b> | <b>15.5</b> | <b>16.1</b> | <b>16.7</b> | <b>2.0</b>                         |
| ----- Per cent -----                    |             |             |             |             |             |             |             |                                    |
| Per cent of GDP                         | 0.94        | 1.29        | 1.69        | 1.68        | 1.64        | 1.63        | 1.62        | -0.07                              |
| Index (1988=100) per cent               | 100         | 143         | 190         | 197         | 200         | 208         | 216         | 13.9                               |

expenditures will have increased to 6.6 per cent from 3.3. per cent in 1994.

Table 2 shows the expected development in Denmark's environmental aid budget from 1993 to 1997.<sup>24</sup> While the increase in resources to environmental aid to CEE in this period in itself is significant, the government hopes to annually increase environmental aid from 1993 to 2002. In 2002, total expenditures to environmental and disaster aid will amount to approximately DKK 6 billion, corresponding to a half per cent of GDP.<sup>25</sup> The amount will be evenly allocated to disaster and environmental aid. One half of the environmental aid is intended for

<sup>24</sup> *Ibid.*, p. 13.

<sup>25</sup> *Ibid.*, p. 23.

environmental protection in developing countries,

**Table 2. Denmark's environmental aid budget, 1993-97 (million DKK)**

|  | 1993  | 1994  | 1995  | 1996 | 1997  |
|--|-------|-------|-------|------|-------|
| <b>Environmental Aid</b>                                     |       |       |       |      |       |
| - East European Environmental Aid Scheme                     | -     | 100   | 100   | 100  | 100   |
| - New resources to east Europe environmental aid             | 20    | 200   | 300   | 400  | 500   |
| - New resources to environmental aid to developing countries | 20    | 200   | 300   | 400  | 500   |
| <b>Reserve</b>   | 10    | -     | -     | -    | -     |
| <b>Total</b>   | 50    | 500   | 700   | 900  | 1100  |
| <b>Per cent of GDP</b>                                       | 0.005 | 0.055 | 0.075 | 0.09 | 0.105 |

and the other half is intended for environmental protection in CEE. Thus, in 2002, a minimum of DKK 1.5 billion could be spent on environmental aid to CEE, compared to DKK 300 million in 1994.<sup>26</sup>

### Policy Implementation

Within the framework of environmental aid policy, Danish environmental authorities conducted negotiations and held consultations with environmental authorities from recipient countries who were given an opportunity to present their priorities and needs for funding. Subsequently, a joint plan was made that would identify the type and location of projects or project packages. After this stage, the implementation of the environmental aid was carried out by Danish private companies, organizations or public authorities who could apply for funding together with partners from CEE.

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<sup>26</sup> *Ibid*, p. 42.

The Danish Environmental Aid Scheme (described in Part One in this article) placed high priority on the Baltic Sea states because of their significant impact on Denmark's environment. Rumania, Yugoslavia, Albania and Bulgaria are of less relevance in this respect and were accordingly given little priority.<sup>27</sup> Support to self-reliance capabilities necessary to protect the environment was stressed in the guidelines, in particular assistance to training and institution-building. The link between democracy and environment was stressed through support to environmentalist groups. Consequently, private companies, public authorities, private organizations and grassroots organizations had in principle the same opportunity to apply for funding under the environmental aid scheme.

As already mentioned, priority was given to planning priorities, transfer of know-how, networking and educational campaigns. Regarding environmental facilities, demonstration plants and pre-feasibility studies were preferred. The environmental aid scheme's guidelines explained that 'the receiving countries must consent to and take active part in the projects', and 'rank education and training, and demonstration projects very high in the initial stages, whereas capital investments will rank lower. Large scale investments in technical solutions cannot take place until the required technical and administrative basis for environmental action has been initiated or established'. The guidelines listed several fields of action and further identified activities and goals within each field.<sup>28</sup>

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<sup>27</sup> For an analysis of Danish perceptions of transboundary environmental threats, see Ragnar Löfstedt and Lasse Ringius 'Danish Perspectives on Transboundary Environmental Risks: An Example from Copenhagen', *CICERO Working Paper 1994:10*.

<sup>28</sup> *Guidelines on Applications for Subsidies for Environmental Activities in East European Countries* (Danish Environmental Protection Agency: September 1991). With respect to training and education the aim is to 'provide persons in receiving countries with skills enabling them to control pollution more effectively, i.e. to contribute to the creation of the basis on which any environmental policy will rest: knowledge on how activities can and should be carried out'. The guidelines stress democratic decision making and specific Danish experiences with planning and administration.

With respect to the environmental aspects of energy production, support can only be given to selected key demonstration projects. Demonstration projects in the fields of energy consumption savings, environmentally benign energy raw materials, less polluting energy transmission systems, cleaning of atmospheric emissions and environmentally sound disposal of residual products can be supported.

With respect to industry and waste, support is given to, in order of priority, cleaner technology, recycling, incineration and controlled waste facilities. Environmental auditing and life



Also already mentioned, some of the means and ends of the 1991 aid scheme were somewhat changed in 1993 and more emphasis was put on regions and technologies/production sectors that were expected to receive international financial support. In another change, several Ministries became involved in administering the aid and were given responsibility for former aid scheme priorities. The ministries were made responsible for producing plans for environmental aid activities within their domains, for example energy or agriculture. This development concurred with a general change of environmental abatement approaches towards sectoral action programs. Such a change has taken place within the Baltic Sea regime for environmental cooperation.<sup>29</sup>

In 1993, during the reorganization of the aid scheme, a number of evaluation criteria were identified which were used later to evaluate effectiveness in the short and long term.<sup>30</sup> Each year the administration should report on effects of the aid scheme. It would be evaluated whether significant pollution reduction was achieved, and whether projects were likely to spread knowledge and technology. Projects with high transferability were ranked highest. Furthermore, as a general principle, 'the percentage of support granted to transfer and build-up of knowledge or the initial phases of a project will normally be higher than support granted to later phases or equipment'.<sup>31</sup> Danish companies, organizations and institutions

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cycle analysis will be used when setting up new facilities.

With respect to water pollution, the activities supported under the environmental aid scheme are 'actual projecting of treatment plant when this is based on an overall solution, from water consumption to purification.' 'In these fields [water pollution from industry] projects to prevent environmental damages will rank highest on the priority list, and technical solutions to water supply problems less high.'

With respect to environmental aspects of agriculture, the aim is, at the large production units, to stop 'point sources of slurry, reducing or avoiding increased consumption of fertilizers and pesticides, and formulating environmentally beneficial policies for marginal land'.

<sup>29</sup> Lasse Ringius, 'The Environmental Action Plan Approach: A Milestone in Pollution Control in the Baltic Sea', *op.cit.*

<sup>30</sup> For a discussion, see Jesper Holm 'Environmental Regime Effectiveness - with the Case of Danish Bilateral Aid', in R. Hjorth, ed., *Baltic Environmental Cooperation: A Regime in Transition* (forthcoming 1995).

<sup>31</sup> 'International miljøbistand under Miljø- og katastroferammen, Delstrategi vedrørende miljøindsatser i Øst- og Centraleuropa', *op. cit.*

could only apply for funding when a CEE partner or a CEE government authorization existed.

The environmental aid scheme was administered by the Environmental Protection Agency assisted by an advisory committee whose members represented the Ministries of Energy, Foreign Affairs, and Industry, the Danish industry's interest organization, the Association of Consulting Engineers, a labor organization, and a representative of Denmark's environmental community. The Environmental Protection Agency used mostly its own expertise, occasionally out-of-house expertise, when considering applications for funding. Most frequent among applicants were Danish companies, consulting firms, and manufacturing companies. According to a recent government estimate, 60 to 70 per cent of the aid was spent on salaries to Danish technical experts and administrators, especially consulting firms.<sup>32</sup> As previously mentioned, it was strongly criticized that the environmental aid was used to pay for consulting reports instead of concrete investments. However, such use of the environmental aid conformed with the guidelines of the environmental aid scheme's emphasis on pre-feasibility studies and administrative support.

Until 1993, none of the CEE recipient states made aid assistance priority plans. As a consequence, Danish priorities and guidelines for aid administration greatly influenced aid implementation. Few countries were able to identify projects or present in-depth project descriptions, and Danish companies and consultants instead defined projects that were acceptable within the frameworks of the scheme. Projects for training and education were given low priority except when part of technical or administrative projects.<sup>33</sup>

Table 3 presents the budget, allocation and expenditures of Denmark's CEE environmental aid scheme from 1991 to 1993.<sup>34</sup>

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<sup>32</sup> *Danmarks Internationale Indsats*, op.cit., p. 170.

<sup>33</sup> Interview with Karsten Skov. 8 December 1993.

<sup>34</sup> *Danmarks Internationale Indsats*, op.cit., p. 169. However, information on allocation and number of projects financed provided by Karsten Skov. 12 August 1994.

**Table 3. The Danish CEE Environmental Aid Scheme (million DKK)**

|                             | 1991 | 1992 | 1993 |
|-----------------------------|------|------|------|
| Budget                      | 100  | 160  | 130  |
| Allocation                  | 85   | 171  | 188  |
| Expenditure                 | 13   | 83   | 35   |
| Number of projects financed | 65   | 96   | 69   |

In 1991, Denmark gave aid mainly to three areas; energy and environment was supported with just over DKK 17 million (20%), waste and industry was supported with almost DKK 24 million (28%), and water pollution problems received just over DKK 24 million (24%).<sup>35</sup> In 1992, waste problems received almost DKK 44 million (26%), the energy area received almost DKK 26 million (15%), and waste water received just over DKK 27 million (16%).<sup>36</sup> At the end of 1993, of the total environmental aid, 18% of the aid had financed plant and infrastructure projects pending investments by international banks, 25% was granted to prefeasibility studies or projects already partly financed through international loans, 50% contributed to investments in equipment facilities, including training or consulting, and 7% was used to finance education and establishment of an environmental administration in CEE, and administration or designing and investment plans.<sup>37</sup> From 1991 to 1993, those countries that benefitted most from the Danish Environmental Aid Scheme were Poland (45%), Czechoslovakia (13%), Russia (10%), Hungary (7%), Lithuania (6%), Estonia (5%), Latvia (4%), and the

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<sup>35</sup> *Tilskud til miljøaktiviteter i Øst- og Centraleuropa* (Ministry of the Environment: April 1992), p. 12.

<sup>36</sup> *Tilskud til miljøaktiviteter i Øst- og Centraleuropa* (Ministry of the Environment: 1993), p. 16.

<sup>37</sup> Karsten Skov, 'Miljøhjælp til Østeuropa er en hjælp', *Politiken*, 20 December 1993.

Baltic (3%).<sup>38</sup> According to recent government estimates, approximately one third of the aid was spent on equipment and so-called direct environmental investments. The number of applications of this type recently increased both in number and in value and, since equipment and investments were considered important by the Eastern European countries, a future increase in support to so-called demonstration plants or demonstration projects was expected would take place.

### **Recipient countries - the examples of Latvia and Lithuania**

In order to show how Denmark's environmental aid to CEE has been spent, it is useful to take a closer look at the two Baltic countries Latvia and Lithuania.<sup>39</sup> As of 1993, in addition to four joint projects in the Baltic states, Denmark funded ten environmental aid projects in Latvia, and twelve in Lithuania. Appendixes I and II categorize the environmental aid projects with respect to types of environmental aid activity that were funded, for example technology transfer or investment. Information on the amount of resources and the length of the projects was also compiled.

All projects in the Latvian case involved knowledge transfer in one form or another. Four of the projects involved technology transfer, while one project involved investment. In the Lithuanian case, information on twelve environmental projects funded by the Danish government was collected. Unfortunately this information is not immediately comparable to the Latvian case. It is nonetheless evident that, besides some training in environmental management, most of the aid was used to finance consultants' reports and various other kinds of studies. In both countries the types of studies done varied from environmental assessment studies and waste planning to studies on the introduction of cleaner technology in industrial plants. Many of the projects focussed on solid or chemical waste

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<sup>38</sup> Based on information provided by Karsten Skov.

<sup>39</sup> Based on interviews with and reports by governments and international organizations.

handling and planning. Moreover, the various forms of cooperation that were supported are registered. Danish consulting firms were involved in the majority of the environmental projects, while there were few cases of, for example, twin-city arrangements.<sup>40</sup> The survey thus confirms that the bulk of the aid was used to pay Danish consultants.<sup>41</sup>

Until recently, data on Denmark's environmental aid were poor.<sup>42</sup> A recent government report concluded that 95 per cent of the aid in the period 1991-1993 was spent on Danish products, in the broad meaning of the term.<sup>43</sup> As was previously mentioned, it was further estimated that approximately 60-70 per cent of the aid was used to pay Danish technical experts and administrators<sup>44</sup>: this was strongly criticized by both industry interests and environmentalists. In accord with the guidelines, administrators of the environmental aid scheme however found that it was unadvisable to support the transfer of new technology to the recipient countries in the initial phase except on a small demonstration scale.<sup>45</sup> Although investments were limited to those countries who could afford to co-finance, larger projects involving investment in equipment are today about to be implemented.<sup>46</sup> In that case, Latvia and Lithuania might not be representative cases, as far as the amount of real investments is concerned. The two cases demonstrate nevertheless the problems of implementing projects in economies in transition without regard for local production conditions and integration of local human resources.

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<sup>40</sup> For a description, see Piotr Krzyzanowski, 'Union of the Baltic Cities', *Environment*, 35, 8, pp. 12-13.

<sup>41</sup> The authors' exchanges with Baltic scholars, colleagues and others confirmed this view.

<sup>42</sup> From 1991 to 1993, Denmark had 8 projects in Latvia, costing DKK 15.8 million, and 15 projects in Lithuania, costing DKK 27.2 million. Information provided by the Division of Eastern and Central Europe, the Ministry of the Environment, Denmark. 12 August 1993.

<sup>43</sup> *Danmarks Internationale Indsats*, op.cit., p. 162.

<sup>44</sup> *Ibid.*, p. 170.

<sup>45</sup> Interview with Karsten Skov.

<sup>46</sup> *Tilskud til miljøaktiviteter i Øst- og Centraleuropa* (Ministry of the Environment: 1993), p. 5.

### 3. REDESIGNING DENMARK'S ENVIRONMENTAL AID TO CEE

The goals of Denmark's environmental aid to CEE have been to benefit Danish industry and employment and, at the same time, to achieve high environmental benefits. Hence conflicts of interests, or trade-offs, may result when trying to maximize the environmental benefits, on the one hand, and support Danish industry and jobs on the other. It might complicate comparisons of the respective benefits of environmental aid projects that job and economic aspects are probably easier to quantify than environmental benefits.

It seems evident that estimates of to what degree environmental benefits of environmental aid are achievable in a particular context only can be made when taking into account the social and political conditions, as well as the technological, economic and environmental conditions, of individual environmental aid projects. For example, environmental benefits may best be achieved in one location by supporting initiatives to improve solid waste and hazardous waste management, while supporting clean technology in particular industrial sectors may be the best strategy in a different location. Under different conditions, education and awareness campaigns might lead to the highest environmental benefits. In estimating the environmental benefits, therefore, thorough knowledge of local resources, conditions and policies, as well as readiness and ability to benefit from more soft programs, are needed. Attempting to achieve the greatest possible environmental benefits will therefore put considerable challenges to environmental aid project planners and administrators. Based on this case study, some suggestions for improving the effectiveness of environmental aid projects are described below.

#### **Submit environmental context analysis together with application for funding**

The project proposer should be requested to submit a contextual analysis made by the project proposer alone or perhaps together with the partner(s) from the eligible country. The analysis must demonstrate in what way the proposed project satisfies

the needs of local, regional, or national public authorities. The beneficiary organization should also be able to demonstrate an ability to successfully complete the proposed project. In line with the recent changes in the guidelines for administration of environmental aid, project proposers should also demonstrate ability to do the necessary follow-up after termination of project funding.

The environmental context analysis, as it is suggested here, is not similar to an environmental feasibility study. It is intended to be a step forward in strengthening the role of environmental principles when projects are selected and later in the coordination and prioritization of programs and funds. The costs of producing the environmental context analysis together with the application might in some cases be considerable and some coverage of such costs should therefore be considered. A level of coverage could for example be decided for each single country. Some of the costs should be covered by the applicant, however, as this probably will increase the applicant's commitment to effectively implementing the project. Coverage should be possible when a proposed project fulfills the project requirements and is implementable.

In addition to providing a better basis for decision making on the project and its possible environmental benefits, an obligatory contextual analysis will mean that Danish project developers must have an understanding of the interests of the eligible partner in a particular project. The project developer will then be better able to understand the efforts and determination that could be expected from the eligible partner in a project once the project starts operating. In addition, this will probably increase the success rate of the projects.

### **Make an agreement enhancing project sustainability**

In addition to the contextual analysis submitted together with the application for funding, it would be useful for funding to be made contingent upon an agreement with the beneficiary, or receiver, of the project outcome. The agreement should specify the obligations concerning the project grant and the conditions for meeting

the agreement. An agreement should also be made with the Danish partner in cases where there are obligations or intentions to continue cooperation or support beyond the expiration of the grant period.

Since they later will be facing larger obligations in case a project does not succeed, such an agreement would enhance project implementation because it presumably would strengthen the receiver's interest in implementing the project with as much effect as possible during the funding period. However, such an agreement can only be a moral and political one as it probably would be impossible, in most cases at least, to make any economic claims on the receiver of the outcome of the project. Moral and political aspects nonetheless may be of great importance in themselves when obligations are clearly spelled out and therefore easy to check later. No company, organization or public authority would wish to be accused of impropriety or have to explain its lack of compliance with obligations it itself had accepted.

An agreement reached with the beneficiary of the project will give the Danish environmental aid scheme new possibilities for evaluating the environmental aid projects. It would most likely be possible to supply better information about the progress of environmental projects as well as the long-term effects of the environmental aid.

### **Clarify the roles of project developers and project partners**

With respect to environmental aid project implementation, it is important to distinguish between the various types of partners in Denmark and in the eligible country. A somewhat simple categorization would include authorities, private companies and developers. An authority is a public authority, a permanent institution or organization of public or private, semi-private nature. Examples are universities, schools and foundations. Non-governmental organizations (NGO's) are also included in this category. They are all permanent entities able to and relevant for receiving and maintaining the outcome of a project in the eligible country.



Private companies also participate, first and foremost in order to make a profit. In order to separate those that develop, or make, the project from those in the eligible countries who are responsible for the operation/use/benefits of the project after it is completed and implemented, it is also useful to distinguish between the receiver of the outcome of a project and the project developer. A developer is a company or organization that operates on project basis. The developer exits the project when the project period expires and the funding is terminated. Developers will first and foremost be consulting companies which will not receive the outcome of a project in the eligible countries, nor will they be and are not responsible for continued assistance from the donor country.

**Table 4. Project partners in environmental aid projects**

| Denmark/<br>eligible country | authority | private company |
|------------------------------|-----------|-----------------|
| authority                    | +         | +               |
| private company              | +         | +               |

To maximize the long-term effects of an environmental aid project, it seems that the most promising forms of cooperation are those presented above in table 4. The parties are involved in the project also after its termination and they will be able to carry out further activities needed to make the project a success. In such cases, there is a possibility for continued exchange of experience, ad-hoc exchange of experts, smaller training support, and the like, financed by one budget.

In the context of the current discussion about redesigning Denmark's Environmental Aid Scheme for CEE it could therefore be considered whether a project should be funded only when permanent institutions or companies in the donor and recipient countries are actively involved in environmental aid projects.

This would not change the important role of the developers in many projects but would identify with more precision their particular role.

If the Danish partner was part of a joint venture partnership, it might moreover increase its flexibility and readiness to operate on the specific east regional conditions. The aim should be to initiate partnerships among Danish authorities, consultants/universities and companies with a broad contact to different sub-contractors. The joint ventures should cover specific environmental issues and production sectors, corresponding to the particular expertise of such joint venture partnerships. These partnerships would have better opportunities to cope with the conditions in CEE because they would not simply seek to sell their usual product line, nor would they push for only certain types of solutions. By having knowledge about the whole range of aspects of the environmental problem, from the production source to emission treatment and environmental consequences, such partnerships, together with partners from the CEE, might have good possibilities to identify the best local solutions given local conditions.

## CONCLUSIONS

Environmental aid to CEE was intended to be a helping hand to the Danish industry, a kind of export promotion facility for the environmental protection and technology industry. The intention was to increase Danish exports to CEE and generally to improve the presence of Danish industry in CEE. A second, related policy goal concerned the employment situation in Denmark. Denmark was struggling with a severe unemployment problem and environmental aid to CEE was looked upon as one way to reduce unemployment. A third policy goal was to reduce pollution in CEE, especially in order to reduce transboundary pollution reaching Denmark.

The first years' experiences showed that protection of the environment in CEE was difficult when the Danish government at the same time was concerned about Danish industry and jobs. The Danish government should therefore examine the compatibility of their three policy goals. Danish experiences so far indicate that

environmental concerns might easily be ignored.

What could be done to strengthen the environmental component of the Danish Eastern Europe Environmental Aid Scheme? First, the financial support criteria should be changed so as to better incorporate environmental concerns. Essentially, more 'green' and specific financial support criteria are needed. A second improvement that meets both the environmental and the democratic goals of the foreign policy for CEE should be considered; since environmental interests are under-represented on the Environmental Protection Agency's advisory committee compared to industry and labor organizations, 'care-takers' of 'green' interests should be better represented. The recent program-oriented strategy will make environmental issues more visible and thus easier to give priority to. But program-orientation is not sufficient, as it does not in itself secure any particular priority in favor of the environment.

Additional steps have been suggested above. Emphasized has been placed on the use of environmental context analysis, agreement on project implementation and maintenance, and that more concern should be paid to the types of partners in a environmental aid projects.

It remains to be seen if the recent reorganization of the Danish environmental aid policy will have an influence on the problems and dilemmas that have been examined in the above. For some time yet, success might be achieved simply because of the dramatic increase in the amount of available resources in the coming years. There may be enough resources for environment and development programs and investments in the recipient countries - however, some appear to be unable to digest more environmental aid projects - and for not insignificant contracts to the Danish hardware and consulting industry. However, because of the first years' modest results, the future development of Denmark's environmental aid to CEE will without doubt be followed closely by governments, industry, environmental interest groups, mass media, and analysts.

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**Appendix I Danish Environmental Aid Projects in Latvia as of 1993**

| types of activity                                      | transfer of technology | investment | prefeasibility study | transfer of knowledge | regulation and environmental instruments | cultural/ people-to-people activities | financed by | sum mil. DKK | period  |
|--|------------------------|------------|----------------------|-----------------------|--|---------------------------------------|-------------|--------------|---------|
| project name   |                        |            |                      |                       |  |                                       |             |              |         |
| prefeasibility study of the Gulf of Riga               |                        |            | x                    | x                     |  | x                                     | DK SW       | 1.0          | 91 - 92 |
| environmental research: Riga bay area                  |                        |            | x                    | x                     | x  | x                                     | DK          | 4.1          | 93 - 97 |
| policy research  |                        |            |                      | x                     |  |                                       | DK          | 0.3          | 93 - 95 |
| clean technology in fishing industries                 | x                      | x          |                      | x                     |  |                                       | DK Latvia   | 0.66         | 92 - 94 |
| feasibility study: chemical waste management           | x                      |            | x                    | x                     | x  |                                       | DK          | 1.9          | 90 - 93 |
| feasibility study: meat processing plant               | x                      |            | x                    | x                     |  |                                       | DK          | 0.88         | 92 - ?  |
| demo. project: energy saving and waste water treatment |                        |            |                      | x                     |  |                                       | DK          | 0.65         | 93 - ?  |

|  |   |  |   |   |   |   |    |      |               |
|--|---|--|---|---|---|---|----|------|---------------|
| environme<br>ntal plan-<br>ning:waste<br>flow,distri-<br>bution,uti-<br>lization<br>and re-<br>duction | x |  |   | x | x |   | DK | 2.32 | 92<br>-<br>93 |
| information<br>gathering   |   |  |   | x |   | x | DK | ?    | 93<br>93      |
| energy<br>systems  |   |  | x | x |   |   | DK | ?    | 90<br>92      |

## Appendix II. Danish Environmental Aid Projects in Lithuania as of 1993

| Name of activity   | Main aim or goal of activity | Partners in the activity   | The environmental character and content/aim of the activity  | Financing of the project     | Is there a time limit or is there infinite time for the activity? |
|--|------------------------------|--|--|------------------------------|---|
| Improvement and completion of Vilnius waste water treatment plan, design study | Water pollution control      | Denmark.<br>I. Krüger Consult<br><br>Lithuania.<br>Environmental Protection Department                   | To improve the operation of existing equipments, sludge treatment and utilization; evaluation of biological water treatment plant under construction | DKK<br>2.100.000             | Project completed 1992<br>June - 1993<br>January                  |
| Biological waste water treatment, Zemaitija National Park, pilot plant         | Water pollution control      | Denmark.<br>Puritek Ltd.<br><br>Lithuania.<br>Environmental Protection Department, KSPI Company, Vilnius | Preparation of project for construction of biological waste water treatment plant and supply of equipment for the plant                              | DKK<br>2.737.500             | Project under way begin<br>January 1992                           |
| Environmental protection and water supply                                      | Water pollution control      | Denmark.<br>City of Copenhagen, municipality<br><br>Lithuania.<br>Vilnius municipality                   | Improvement of environment and water supply system in Lithuania  | DKK<br>836.400<br>Sector Aid | November 7, 1991 - June 1992                                      |
| Chemical waste management feasibility study                                    | Waste management/disposal    | Denmark.<br>Chemcontrol Ltd.<br>Lithuania.<br>Ministry of Industry and Trade                             | Creation of hazardous waste management system in Lithuania   | DKK<br>1.629.500             | June 5, 1992 -<br>January 1993                                    |



|   |                                     |  |  |  |  |
|---|-------------------------------------|--|--|--|--|
| Solid waste management system   | Waste management/disposal           | Denmark.<br>COWI Consult<br>Lithuania.<br>EPD, Kaunas municipality.<br>Included in the project<br>EPD, Industry and Trade Ministry   | Waste collection, waste recycling technology; landfills  | DKK<br>1.126.000<br>sector aid                     | November 1992 -<br>February 1993       |
| Registration and legal provisions for cleaning up chemical waste sites    | Waste management/disposal           | Denmark.<br>I. Krüger Consult<br><br>Lithuania.<br>Environmental Protection Department   | Registration of landfills, classification according to impact on environment. Preparation of plans for cleaning up   | DKK.<br>2.580.000<br>Sector aid                    | Project under way<br>June 1, 1992 -    |
| Feasibility study for a treatment system for hazardous waste              | Waste management/disposal           | Denmark.<br>EPA section for CEE<br><br>Lithuania.<br>Environmental Protection Department   | The aim is to recommend a complete treatment system for hazardous waste in Lithuania   | 204.000 ECU  | Project under way<br>November 12, 1991 |
| Pre-feasibility study of the Lithuanian coast and the Nemunas river basin | Environmental protection activities | Sweden.<br>Denmark.<br>Nordic Investment Bank.<br><br>Lithuania.<br>EPD. The study has been made by a consulting group consisting of K-Konsult Water Projects AB and I. Krüger AS; Klaipeda University; Pram-project in Kaunas | Preparation of a priority action program to pre-feasibility level to permit decisions on the financing of priority investment projects to control and reduce pollution of the Baltic Sea from the Lithuanian coast and the Nemunas river basin | SVK<br>1.500.000<br>DKK<br>1.000.000<br>sector aid | July 10, 1991 -<br>April 10, 1992      |

|   |   |   |  |   |   |
|---|---|---|--|---|---|
| <p><b>Environmental evaluation of agro-chemicals</b></p>        | <p><b>Environmental Protection Activities</b></p> | <p><b>Denmark.</b><br/>COWI-Consult</p> <p><b>Lithuania.</b><br/>Environmental Protection Department</p>                      | <p><b>Identification of natural and agricultural conditions, their impact on the environment in Lithuania; comparison of EC laws and standards with Lithuanian; evaluation and plan preparation to improve agriculture with the positive impact on the environment</b></p> | <p><b>DKK</b><br/><b>1.900.000</b></p>  | <p><b>September 1992 - June 1993</b></p>                                      |
| <p><b>Machine condition monitoring system, Ignalina NPP</b></p> | <p><b>Operational safety of NPPs</b></p>          | <p><b>Denmark.</b><br/>Brüel and Kjær Ltd.</p> <p><b>Lithuania.</b><br/>Environmental Protection Department</p>               | <p><b>The safety and operating reliability of NNP:to design a vibrodiagnostic maintenance program for each individual NPP, to deliver the vibro-diagnostic hardware required</b></p>   | <p><b>DKK.</b><br/><b>2.829.000</b></p> | <p><b>Project under way</b><br/><b>June 1992- after a year and a half</b></p> |
| <p><b>Clean technology in the electroplating industry</b></p>   | <p><b>others</b></p>                              | <p><b>Denmark.</b><br/>Institute for Product Development</p> <p><b>Lithuania.</b><br/>Environmental Protection Department</p> | <p><b>To transfer and stimulate implementation of knowledge and technology within the plating industry concerning environmental production. This technology transferring aims at reduced pollution from Lithuanian plating industry</b></p>                                | <p><b>DKK</b><br/><b>1.532.500</b></p>  | <p><b>February 1992 - middle 1993</b></p>                                     |

|  |               |  |  |                                      |  |
|--|---------------|--|--|--------------------------------------|--|
| <b>Conservation values in previously closed military areas</b> | <b>others</b> | <b>Denmark.<br/>World Wildlife Fund<br/>Lithuania.<br/>EPD,<br/>University of<br/>Klaipeda</b> | <b>Investigation of natural values.<br/>Identification of areas deserving protection</b> | <b>DKK<br/>340.00<br/>Sector Aid</b> | <b>September 1,<br/>1992 - September<br/>1, 1994</b> |
|--|---------------|--|--|--------------------------------------|--|

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