

University of Groningen

Greenlining

Scholtens, Bert

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version

Final author's version (accepted by publisher, after peer review)

Publication date:

2001

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):

Scholtens, B. (2001). *Greenlining: economic and environmental effects of government facilitated lending to sustainable economic activities in the Netherlands*. University of Groningen, SOM research school.

Copyright

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: <https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment>.

Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.

**Greenlining:
Economic and Environmental Effects of Government
Facilitated Lending to Sustainable Economic Activities
in the Netherlands**

Bert Scholtens*

SOM - theme E Financial Markets and Institutions

* University of Groningen, Department of Finance, P.O. Box 800, 9700 AV Groningen, The Netherlands; phone +31 – 50 363 7064; fax +31 - 50 363 7207; email L.J.R.Scholtens@ECO.RUG.NL; [Http://www.eco.rug.nl/medewerk/scholten](http://www.eco.rug.nl/medewerk/scholten)
The paper is also downloadable in electronic version: [Http://som.rug.nl](http://som.rug.nl)

Keywords: Banks, Investment Funds; Fiscal Policy; Financial Markets; Economic Effects; Environmental Effects

JEL: E62, G28, H32, Q28, Q38, Q48

Abstract:

This paper analyzes the economic and environmental impact of a policy instrument that is related to the tax deductibility of interest returns and dividend yields from specified 'green' projects. We investigate this so-called 'Green Project Facility' in the Netherlands during 1995-1999. We analyze the effect on taxes, economic growth, employment, as well as on the emission of a number of gases and on solid waste production. We find that the economic effects in general are positive. However, the environmental effects are quite mixed. It is concluded that the policy instrument could be used much more effectively.

**GREENLINING:
ECONOMIC AND ENVIRONMENTAL EFFECTS OF GOVERNMENT FACILITATED
LENDING TO SUSTAINABLE ECONOMIC ACTIVITIES IN THE NETHERLANDS**

1. Introduction

For almost two decades, governments in so-called industrialized countries try to find out how they can affect the environmental effects of production and consumption in a way that does not disrupt the traditional market processes. The OECD (1994) already gave an overview of how government could try to achieve this goal. It also showed that a lot of policies indeed may interfere with the efficient functioning of markets. Increasingly, the use of taxes and subsidies has gained attention as a means to internalize environmental issues in the decision processes of private agents. This can be regarded as a second-best method to achieve optimal resource allocation within the economy (Cropper and Oates, 1992).

This paper analyzes one particular fiscal instrument that aims at making production and consumption less burdensome for the environment. We assess the so-called 'Green Project Facility' that is being used in the Netherlands since 1995. This instrument allows for the exemption of taxes from income (interest payments, dividend yields) derived from loans and investments in so-called 'Green Intermediaries' that are qualified to lend to projects that fulfill strict environmental criteria. Government agencies define the criteria and decide on whether or not to 'greenmark' projects. Furthermore, it is the government who licenses the Green Intermediaries. The public is free to lend to or to invest in these funds. In this paper, we analyze both the economic and the environmental effects of the Green Project Facility. The effect on taxes, growth, and unemployment is analyzed. Environmental effects of this instrument are taken into account too. As such, we concentrate on the emission of various gases and on the production of solid waste.

The structure of the paper is as follows. First, we explain the background and the content of the Green Project Facility. Then, in section 3, we go into the economic effects. Section 4 investigates the environmental effects. The conclusion is in section 5.

2. The Green Project Facility

The Green Project Facility (GPF) is established in 1995 to promote the access to finance for environmentally sound or worthwhile projects. This facility holds that the returns (interest payments, dividend yields) from so-called Green Intermediaries are exempted from income taxes. Income taxes in the Netherlands range from 30 to 60 per cent. A Green Intermediary is a financial intermediary that originates loans and investments in projects, so-called Green Projects, that comply with a host of criteria as put up by the government. The projects get financed below the prevailing market rate of interest. The government, the Finance Ministry to be exact, decides whether an intermediary is a Green Intermediary or not. The Green Intermediary, for asset and liability risk management reasons, is allowed to allocate at most 30 per cent of its assets in non-green projects. At year-end 1999, there were six tax-free Green Intermediaries actively operating in the Netherlands. Some of them had a mutual fund like character, others acted more like a savings bank. Special government agencies control and monitor the Green Projects. These agencies decide on behalf of the Minister of Housing and Environment and the Minister of Finance about whether a project qualifies for the GPF.

Since the start of the GPF in 1995, the class of Green Projects gradually has been extended. For example, since 1996, it includes sustainable building projects. Since 1998, it also includes projects abroad, namely in Central- and Eastern Europe and in the Netherlands Antilles and Aruba. The GPF aims at projects whose return is such that it would have been highly unlikely that they would have been financed without the facility. The required return has a minimum threshold and an upper bound. The maximum return is set in such a way that, given the risk of the project, the project would be likely to get access to conventional financing. The lower threshold is that the

project has to generate at least some positive return (inclusive of subsidies, grants, and other financial resources).

[INSERT TABLE 1 and FIGURE 1 ABOUT HERE]

Table 1 gives the main categories of projects that are defined under the GPF. It gives the overall results during 1995-1999 for the number of projects, the number of objects, and the financial size of the projects. From table 1, it appears that most projects (almost fifty percent) were undertaken in 'agriculture' to move existing production into the direction of more ecologically sound production. Most objects (almost three fourths) were undertaken in the realm of 'sustainable building'. Most funds went to 'energy' (more than one third) and to 'other' (about twenty-five percent). As to the category 'other', it must be noted that this mainly refers to unique projects that share features with projects in other categories, predominantly energy and building. Figure 1 confronts the relative number of projects under the GPF with their relative size. It clearly shows that the category agriculture accounted for the bulk of the number of projects (49%) but only for 15% of their financial size. Energy accounts for 25% of the number of projects and for 36% of their size. Sustainable building accounts for 19% of the number of projects and for 12% of their financial size. Nature conservation has 1% of the number of projects and 9% of the size. Other projects have only 6% of the number of projects. These are quite large as - combined - they account for 28% of the financial size of the projects. All other categories account for less than 1% of the number of the projects as well as for less than 1% of the relative size of the projects.

[INSERT FIGURE 2 ABOUT HERE]

Figure 2 illustrates the development of the overall number and size of the projects that are facilitated under the Green Project Facility during the period under review. In the first year, 1995, only a small number of projects with a limited overall financial size was facilitated. In the next two years, their size grew to almost DFL 2 billion. Thereafter, it stabilizes at around DFL 1¼ billion per year. The number of projects grew

substantial too. But in contrast to financial size, there was no set-back after 1997. To the contrary, the highest number of projects was being facilitated in 1999.

3. Economic Effects

As to the economic effects of the Dutch GPF, we first put the amount of money involved into perspective. As such, we relate this amount to overall savings and investments in the Netherlands. Then, we look into the effects upon the real economy. First, we investigate the effect on government finance, especially the net effect on taxes. Then, we focus on the effect of the GPF on economic growth and employment.

3.1 Finance

[INSERT FIGURE 3 ABOUT HERE]

Figure 3 gives the savings and the investments under the GPF as a percentage of total savings and investments with mutual funds in the Netherlands in the period under review as well as in relation to overall sustainable savings and investments in the Netherlands. These data are for 1996-1999 as the Green Intermediaries did not provide useful reporting about their activities in 1995. More than 75,000 household put some of their money with a Green Intermediary (about 2.5% of all Dutch consumer households). Figure 3 shows that both savings and investments facilitated by the GPF are a very small part of overall savings and investments: less than one percent. However, their share shows a clear increase, especially with respect to savings where the 'market share' of GFP savings almost trebled. For GPF investments, this share rose by more than fifty percent. In this respect, it must be noted that the overall investment market in the Netherlands in this period showed an unprecedented growth. As such, the developments with respect to GPF facilitated savings and investments are quite encouraging. Figure 3 also relates GPF facilitated savings and investments to overall *sustainable* savings and investment. In this respect, it turns out that GPF savings make up already two-fifths of total savings. The dominance of GPF investment in overall

sustainable investment (more than 50% of total sustainable investments) is weakening. This results from the fact that the Dutch mutual fund market witnesses a lot of new funds that present themselves as sustainable or social responsible investment funds (see Jansens et al., 2000).

What are the financial benefits for the entrepreneurs that undertake Green Projects? Assume that entrepreneurs with similar experience and risk characteristics can borrow against an interest rate of 6%. Furthermore, assume that Green Projects would require an additional mark-up of 0.5 per cent. This mark-up originates from the innovative character of the projects. The difference between the commercial lending rate and the lending rate under GPF on average is about 1.75 per cent (ranging from 0.5 to 3.0 per cent). As such, the lending rate for Green Projects is 4.75 per cent on average. This implies that the relative cost advantage for entrepreneurs because of the GPF on average is almost 30% compared to the situation without this facility. With a total amount of circa DFL 5.2 billion of funds under the GPF in the period under review, the interest costs mount to circa DFL 247 million per year. In case all projects would have been undertaken without the GPF too, they would pay the loan rate of 6.5 per cent, which amounts to DFL 338 million. Thus, the interest advantage because of the GPF is DFL 91 million. However, it is quite likely that the actual benefits are smaller as a substantial part of the projects would have been undertaken anyhow. Without the GPF, they would have paid the market rate of 6.5 percent. In the remainder of this paper, we will assume that 50% would have been undertaken – in some way or another – even without the GPF.

3.2 Taxes

With respect to government finances we calculate the effect of the GPF for income taxes, corporate taxes and value-added taxes. We make an assessment for the complete period under review.

During 1995-1999 the Green Intermediaries took in about DFL 7.5 billion (5.2 billion / 0.7) from the public. Given an average return (interest and dividends paid) of

4%, the public received DFL 300 million. These returns are tax exempted. Assume that the average income tax rate of the savers and investors under the GPF is 50%. Then, the tax authorities have an opportunity loss of DFL 150 million. However, we assume that half of the projects would still have been undertaken. In that case, given the return of 4%, the tax man would have taxed DFL 75 million from these projects. Thus, his 'true' opportunity loss, given the assumptions, is DFL 225 million. The higher the return of the Green Intermediaries and the higher the proportion of projects that would have been undertaken anyhow, the larger this loss for the tax income.

Secondly, the GPF results in economic activities that otherwise (in part) would not have occurred. They generate value and profits. As such, they are eligible to pay corporate taxes. Let's assume that DFL 5.2 billion is allocated to entrepreneurs with green projects. In Dutch corporate tax law, interest payments are regarded as costs and are tax-deductible. Given the assumptions made above (section 3.1), we calculated that the interest cost advantage for the GPF entrepreneurs could be DFL 91 million. This implies that their costs are less than would have been the case otherwise. When we assume that the average corporate tax rate for these entrepreneurs is 37.5%, the extra tax income is DFL 34 million. However, we have to account for projects that would have been undertaken anyhow. They would have had to pay the full amount of interest costs at the prevailing market rate (assumed to be 6.5 percent). This would have resulted in less income from corporate taxation, namely DFL 17 million (45.5 million x 37.5%). Thus, as to corporate taxes, we have a tax advantage for the fiscal authorities of DFL 51 million (34 +17).

Third, we have VAT. Assume that the 'multiplier' is 2 (see section 3.3 below). As such, the GPF is estimated to have generated additional production of DFL 10 billion in the period under review. From the National Accounts we derive that this production generates a value added of DFL 5.44 billion (CBS, 2000). Assume that the average VAT-rate on the goods and services generated through GPF facilitated projects is 12.5 percent. As such, the GPF generates additional VAT-income of DFL 675 million. But again, note that we assume that 50% of the GPF facilitated projects would have

been undertaken anyhow. Therefore, we need to cut this effect in two, which results in a VAT-effect of the GPF of DFL 338 billion.

The net effect of the GPF on taxes can be calculated as the sum of the three tax effects: income taxes, corporate taxes, VAT. Given the assumptions made, we have a net effect in the Netherlands of about DFL 164 million ($= 338 + 51 - 225$). This outcome is sensitive for the multiplier chosen (2), the percentage of projects that would have been undertaken anyhow (50), and the interest rate to be paid on GPF projects in relation to the conventional market rate (1.75% below this rate). Furthermore, we abstracted from administration costs.

3.3 Economic Growth and Employment

The real economic effects are hard to derive. The ministries, the Green Intermediaries, nor the entrepreneurs of the Green Projects mention how much value is generated or how employment is affected. With the help of some rigorous assumptions, this section aims at coming up with a general impression about the effect of the GPF on growth and employment.

We assume that the funds allocated under the GPF are complemented by funds from other sources to the same extent. Furthermore, we assume this results in an economic production that is double that of the original investment under the GPF. This 'multiplier' of 2 is based on the experience with a number of the existing projects. In fact, the estimation of this multiplier is quite conservative as a lot of projects have substantially higher additional funds they use together with the GPF funds. However, for a lot of projects, this information lacks, and, therefore, we choose to be on the conservative side. The assumption that the production value of the Green Projects equals that of the funds invested is quite conservative too.

With DFL 5.2 billion invested under the GPF, production of Green Projects is estimated to be DFL 10 billion. If we assume that the production structure of these projects does not significantly differ from other types of production in the

Netherlands, this generates (because of intermediary deliverances) an additional value added of DFL 5.44 billion (CBS, 2000). This implies 0.7 per cent of GDP over the whole period, or 0.13 per cent additional growth of GDP per year.

We assume labor intensity of the Green Projects to be identical to that in the Dutch economy as a whole. This generates additional employment of 42,000 labor years (CBS, 2000). Furthermore, the extra tax income might result in an additional effect on economic growth and employment. The government could use the DFL 164 million extra to reduce its deficit or it could opt for additional spending. The former could result in DFL 400 million value added extra and to 1,500 years of employment extra. In the latter case, it would result in incrementally DFL 300 million in value added and an employment effect of 1,200 labor years (CBS, 2000). Overall, this results in additional value added of circa DFL 5.75 billion or a growth impulse of 0.15% points per year in the period under consideration. Employment was increased with more than 43,000 labor years. But, once again, it is important to keep in mind that it is highly unlikely that none of the Green Projects would have been undertaken without the GPF. We assumed that 50 per cent would have been undertaken anyhow. As a result, economic value added and employment from the GPF have to be divided by two. Thus, in all, the net result of the GPF on economic growth can be estimated at 0.075% per year, whereas the employment effects are an increase of total employment with 21,500 labor years. Note that to derive this result, we did not take into account the effect of the GPF on the functioning of the labor market. With relatively small policy instruments, this assumption seems acceptable. However, in case of large projects (say ten times the size of the current GPF) this would be highly unlikely, especially in the present tense labor market in the Netherlands. Furthermore, we did not assess the effect of income redistribution: funds are being transferred to entrepreneurs of Green Projects and to 'green' savers and investors.

4. Environmental Effects

Under the GPF, projects have been facilitated that resulted in sustainable energy capacity. For example, at year-end 1999 total wind power capacity was about 300 MWh. This may reduce CO₂ emission by about 300 thousand tons. Photovoltaic electricity production due to the GPF is about 425 MWh. The city heating projects resulted in a reduction of CO₂ emission of more than 800 thousand tons per year. These projects resulted in a reduction of the use of natural gas of about 500 million m³. Due to the GPF, the area of 'nature development' is about 16,000 hectares, and the area where biological agriculture is being practiced is 11,000 hectares.

To assess the effect of the GPF on the environment, accurate information on the environmental impact of traditional economic activities and on the ones facilitated by the GPF is warranted. Unfortunately, both types of information lack. This is a pity as it makes it impossible to determine whether or not the GPF actually achieves its aims. The government and government agencies argue it is sufficient to put strict criteria on the projects that are to be financed, that is, they concentrate on 'input'. However, what counts in environmental and in economic terms is what is actually being produced, i.e. output. The economic effects were the subject of section 3, here we primarily try to estimate the environmental effects. To this extent, we try to find out what are the environmental effects of the GPF through the allocation of the funds in relation to the main environmental problems in the Netherlands. We first investigate how the different economic sectors affect the environment. Then, we relate the GPF to activities in these sectors. As such, we compare the relative distribution of GPF related projects to the relative economic and environmental significance of economic sectors in the Netherlands. From this, we derive conclusions about the efficiency of the GPF. Given the lack of information mentioned, these conclusions can only be of a qualitative and a tentative character.

4.1 *Environmental burden of the different sectors*

[INSERT TABLE 2 ABOUT HERE]

Table 2 illustrates the distribution for different economic sectors with respect to two economic variables (GDP and labor volume) and to eight environmental variables. The data apply to 1999. These ten variables reflect the main topics in the discussion about economics and the environment in the Netherlands. CO₂ emission is held responsible for the greenhouse effect. The emission of CFCs and halons affects the ozone layer. The production of NO/NO₂, SO₂, and NH₃ primarily affects air and soil quality. The production of phosphor (P) and nitrogen (N) primarily affects water quality. The production of waste has adverse effects on water, soil and in general reflects limited sustainability of a particular consumption and production pattern.

Table 2 indicates that in relation to its share in total value added and employment, agriculture puts a very heavy burden on the environment. Only for the emission of gases that affect the ozone layer, its share is smaller than its economic size. It appears that mining production (mainly natural gas) in the Netherlands has relatively limited negative environmental effects. Industrial production has a large contribution to the greenhouse effect and the depletion of the ozone layer. Furthermore, waste production and sulfurdioxide emission are about twice industry's contribution to GDP and employment. Energy production also has an enormous contribution to the production of carbondioxide. Furthermore, its contribution to the emission of NO/NO₂ and of sulfurdioxide is far above its relative economic importance. The main environmental impact of building activities is in the emission of gases that adversely affect the ozone layer and in the production of waste. During the life cycle of real estate, however, it mainly is energy consumption that impacts upon the environment. From table 2, it appears that trade in itself does not put a large burden on the environment. In contrast, transport activities, to a large extent of course related to trade, have a very substantial impact on the emission of carbondioxide, NO/NO₂, and sulfurdioxide. Economic services, a very broad group of economic activities, has a substantial contribution to the emission of CFCs and halons. However,

in relation to its economic importance, its adverse environmental effects are relatively limited.

4.2 *The environmental effectiveness of GPF*

When the information in table 2 about the contribution to important economic and environmental issues is related to that in table 1 about the allocation of funds under the GPF, we can make the following observations. First is that a substantial part of the GPF is used to affect the greenhouse effect (projects in categories g, h, and i). Although a large number of projects under the GPF is related to agriculture, their financial size is still a lot smaller than the contribution of this sector to the main environmental problems in the Netherlands. In table 3, we try to quantify this type of divergence as well as others by constructing divergence indicators. Table 3 first gives the benchmark values for the relative importance of each sector with respect to the economic significance, the environmental burden and the use of the GPF. To this extent, *ECOB* is the average of the relative importance of each sector with respect to the contribution to GDP and employment (see table 2). *ENVB* is the average of the relative contribution of each sector to the eight environmental variables discussed above (i.e. burdensome gases and solid waste production; see table 2). *GPFB*, the benchmark for the GPF for each sector, is the estimated relative allocation from the GPF over the sectors. It is calculated as the average of the relative distribution along both the number of projects and the projects' financial size for each economic sector. Given the scarce information about the allocation of funds, it must be understood that the *GPFB* is a rather tentative indicator.

[INSERT TABLE 3 ABOUT HERE]

Table 3 gives the divergence indicators for each of the three benchmarks vis-à-vis each other. First is the divergence per economic sector between the economic significance and the burden for the environment. As such we derive the divergence indicator *ENVB-ECOB*. Here, the '+' sign suggests that the relative share of the sector in the total environmental burden for the Dutch society is larger than its share in the

economy. For the '-' sign, it is the other way round. Thus, the agricultural sector has the largest relative mismatch between its economic and environmental contribution. Also the transport sector puts a larger burden on the environment than the economic value it adds. In contrast, the services sector and the trade sector are relatively less burdensome for the environment than is 'warranted' by their economic significance. Second is the divergence between the economic importance and the use of the GPF. To this extent, *ECOB-GPFB* indicates which economic sector gets more ('+' sign) or less ('-' sign) funds through the GPF than would be proper on the basis of a simple allocation on the basis of economic significance. Clearly, the sectors energy, building, and agriculture receive more funds through the GPF than would be warranted by their economic importance. The negligence or underrepresentation of industry, trade, transport and services becomes clear from this divergence indicator. The third divergence indicator, *GPFB-ENVB*, shows which sector get more ('+' sign) or less ('-' sign) funds from the GPF than its relative contribution to the overall environmental burden. This indicator reveals that it is the sector energy and the building sector that clearly are overrepresented with respect to the GPF. It also shows that now the agricultural sector would have to be allocated relatively more funds to alleviate the environmental problems in this sector.

The concentration of the GPF on the building and energy sector seems warranted given their enormous impact on carbon dioxide emission respectively. As such, it mainly is the contribution of the Netherlands to the greenhouse effect and to the depletion of the ozone layer that is being affected. Furthermore, it seems quite efficient that a large number of projects aims at the agricultural sector that puts a very heavy burden on the quality of the Dutch environment too. However, this burden is so high that it can be argued that more effort in this respect is needed. Also, almost neglecting consumers, industry, trade, and transport results in little beneficial effect of the GPF on the emission of sulfur dioxide, NO/NO₂, and waste production.

5. Conclusion

The Green Project Facility in the Netherlands affects both the environment and the economy. It enhances sustainability by reducing the funding costs of environmentally sound and worthwhile economic activities. As such, a lot of really useful economic activities are being facilitated. The economic effects appear to be positive as both net value added and employment increase. Furthermore, it does not work to the detriment of the government budget.

The environmental achievements, however, are less clear as the projects undertaken lack transparency. Most projects are related to energy production or to building activities. This may contribute to a reduction in the growth of the emission of greenhouse gases and to those gases that deplete the ozone layer. However, the GPF appears to pay relatively little attention to other types of environmental pollution in the Netherlands. Furthermore, it appears that the GPF turns a blind eye to three important economic sectors that have substantial adverse environmental effects. First is that the GPF primarily relates to business households and hardly to consumer households (with the exception of facilitating 'green mortgages' for private households). Second is that the GPF does not facilitate projects that aim at reducing the adverse environmental effects from transport (with the exception of a facility that aims at improving bicycle lanes). Also, industrial activities clearly are not the focus of the GPF. In all, it can be concluded that broadening the focus of the GPF to include other environmental problems in the Netherlands (e.g. transport, waste production) could improve its effectiveness.

References

- Centraal Bureau voor de Statistiek (CBS), 2000. *National Accounts 1999*. The Hague: Sdu.
- Centraal Bureau voor de Statistiek / Rijksinstituut voor Volksgezondheid en Milieu (CBS / RIVM), 2000. *Milieucompendium 2000*, Alphen aan den Rijn: Samson.
- Cropper, M.L., W.E. Oates, 1992. Environmental Economics: A Survey, *Journal of Economic Literature*, 30 (2): 675-740.
- Jansens, K., L.J.R. Scholtens, P. Sprengers, 2000. *Sustainable Savings and Investment in the Netherlands. Volume and Growth Trends, 1987-1999*. Culemborg: VBDO.
- Ministerie van Financien, Ministerie van VROM, 2000. *Groen Beleggen. Jaarverslag 1999*. The Hague.
- Organization for Economic Co-operation and Development (OECD), 1994. *Managing the Environment: The Role of Economic Instruments*. Paris: OECD.

Table 1

Use of the Green Project Facility (totals per category; 1995-1999)

Category	Projects		Objects		Size	
	number	% of total	number	% of total	DFL million	% of total
a. forestry	3	0.2	3	0.0	2.0	0.0
b. nature monuments	0	0	0	0	0	0
c. country side architecture	3	0.2	3	0.0	4.3	0.1
d. nature conservation	19	1.4	19	0.2	608.4	11.7
e. agriculture	647	48.6	647	7.7	782.7	15.1
f. agrification	1	0.1	1	0.0	4.4	0.1
g. energy	327	24.6	1455	17.3	1875.5	36.1
h. building	249	18.7	6106	72.8	458.0	8.8
i. other	81	6.1	157	1.9	1461.0	28.1
<i>Total</i>	<i>1330</i>	<i>100</i>	<i>8391</i>	<i>100</i>	<i>5196.3</i>	<i>100</i>

Source: Ministerie van Financiën, Ministerie van VROM (2000).

Table 2

Net direct contributions of economic activities to main environmental performance indicators, employment, and GDP in 1999

Sector	GDP	Labor volume	CO ₂	CFCs + Halons	NO/NO ₂	SO ₂	NH ₃	P	N	Waste
Consumer households	-	-	17.9	6.1	13.1	1.0	4.0	8.7	10.7	33.4
Agriculture	2.7	3.6	6.4	0.0	15.3	27.5	93.7	61.5	63.5	6.2
Mining	1.9	0.1	1.2	0.0	0.8	0.5	0.0	0.0	0.1	1.2
Industry	16.5	15.5	27.5	21.9	10.2	31.9	1.1	9.6	6.1	30.9
Energy & Water	1.7	0.6	21.6	0.0	5.9	4.3	0.0	0.0	1.7	0.6
Building	5.7	7.3	1.1	35.4	3.3	0.5	0.0	2.9	1.0	8.7
Trade	13.1	19.3	2.5	0.0	2.7	0.0	0.0	0.0	0.6	2.8
Transport	4.9	6.1	13.2	0.0	39.7	26.6	0.0	1.0	7.3	4.1
Services	53.5	47.5	8.6	36.6	9.0	7.7	1.2	16.3	9.1	12.1
<i>Total amount</i>	<i>824 DFL bn</i>	<i>6,352 x 1000</i>	<i>200,350 mn kg</i>	<i>636 x 1000 kg</i>	<i>639 mn kg</i>	<i>207 mn kg</i>	<i>175 mn kg</i>	<i>104 mn kg</i>	<i>1,041 mn kg</i>	<i>15,320 mn kg</i>

Sources: CBS, 2000 (tables M7, M9); CBS / RIVM, 2000 (tables A1.3, G1.1, G1.4).

Table 3

Benchmark and divergence indicators from economic and environmental indicators and from the GPF

Sector	Benchmark			Divergence indicator		
	ECOB	ENVB	GPFB	ENVB- ECOB	GPFB- ECOB	GPFB- ENVB
Consumers	0.0	11.9	1.0	11.9	-1.0	10.9
Agriculture	3.2	34.3	31.9	31.1	-28.8	2.4
Mining	1.0	0.5	0.0	-0.5	1.0	0.5
Industry	16.0	17.4	5.0	1.4	11.0	12.4
Energy & Water	1.2	4.3	34.8	3.1	-33.7	-30.5
Building	6.5	6.6	18.4	0.1	-11.9	-11.8
Trade	16.2	1.1	0.0	-15.1	16.2	1.1
Transport	5.5	11.5	0.0	6.0	5.5	11.5
Services	50.5	12.6	8.9	-37.9	41.6	3.7

Figure 1

Composition of the GPF for number and size of projects
(totals; 1995-1999)

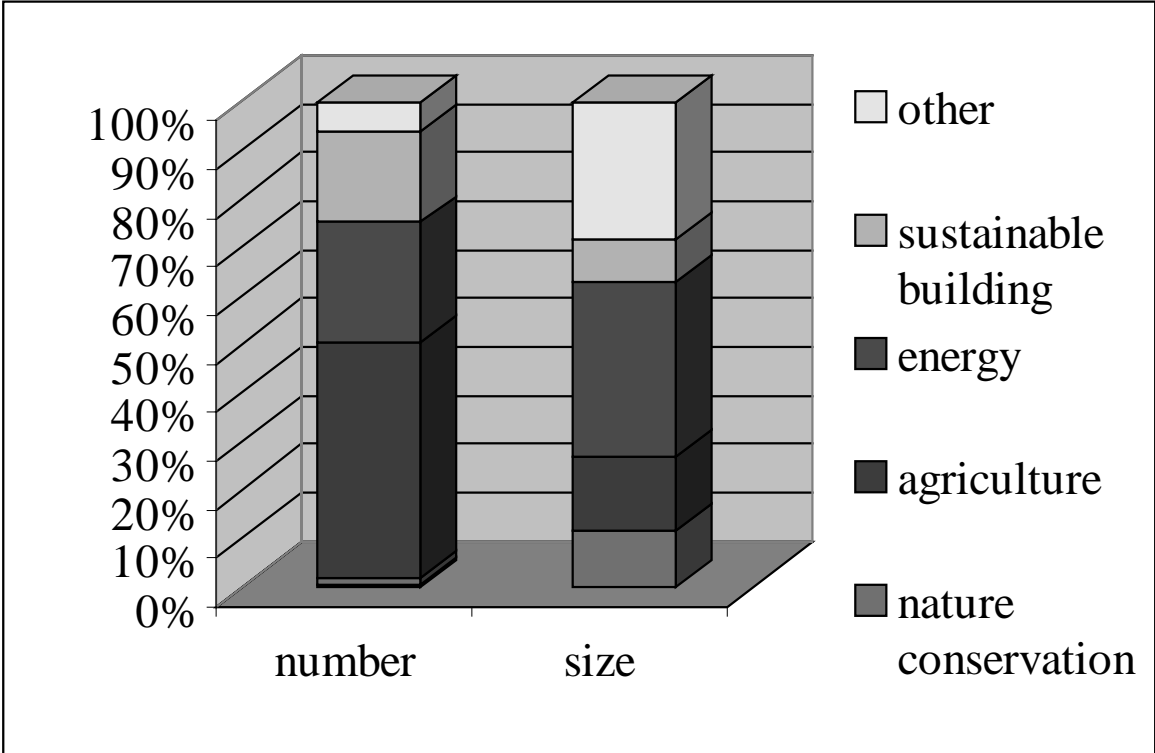


Figure 2

Number and size of GPF projects, 1995-1999

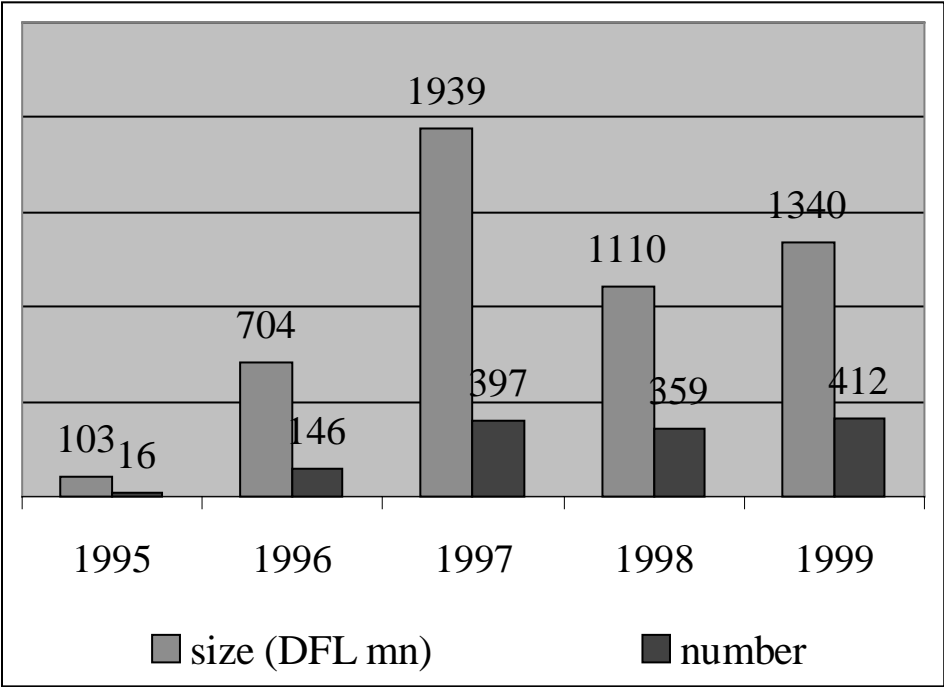


Figure 3

Savings and investments facilitated by the GPF in relation to total savings and mutual fund investments and in relation to sustainable savings and investments in the Netherlands

