

# **European ECA support to carbon intensive industries**

A research paper prepared for FERN



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## **Summary**

This report summarizes research findings on the involvement of European Export Credit Agencies (ECA's) in financing carbon intensive industries. It concentrates on all 21 ECA's in EU-member countries and on guarantees provided in the past six years (2004-2009). For each European ECA an overview is provided of the export credit guarantees granted during the studied period, split by sector and by region.

Subsequently, based on detailed information on individual guarantees as provided by some of the ECAs, an analysis was made of the extent to which each ECA financially supported companies active in eleven carbon-intensive activities or industries, as defined by FERN:

- Fossil-fuel electricity plants;
- · Oil and gas extraction;
- Shipping;
- Mining;
- Dredging;
- · Iron and steel manufacturing;
- Pulp and paper manufacturing;
- Chemical industry;
- Transportation infrastructure;
- · Aircraft manufacturing;
- Airlines.

Table 1 summarizes our research findings, indicating the total value of export credit guarantees issued by each ECA in the period 2004-2009 and the percentage of these guarantees issued to companies in carbon intensive sectors.

Table 1 European ECA's: Total and carbon intensive export credit guarantees 2004-2009

Export credit agency	Total guarantees (mln €)	Carbon intensive guarantees (mln €)	Carbon intensive guarantees (%)	Comments
Austria - OeKB	57,615.0	> 2,586.8	70.5	Based on number of reported projects
Belgium - ONDD	115,168.9	> 1,640.0	1.8 - 87.4	Based on value of reported projects
Czech Republic - EGAP	7,775.9	> 225.4	-	Based on value of two reported projects
Denmark - EKF	11,858.4	-	13.5 - 18.7	Based on number of (reported) projects in 2006-08
Estonia - KredEx	176.0	-	-	-
Finland - Finnvera	9,505.7	3,022.6	32.0 - 71.5	Based on value of reported projects
France - Coface	-	17,166.0	48.2	Based on value of reported projects
Germany - Euler Hermes	118,856.0	32,162.5	27.1	Based on value of reported projects
Greece - ECIO	1,470.0	-	-	-

Export credit agency	Total guarantees (mln €)	Carbon intensive guarantees (mln €)	Carbon intensive guarantees (%)	Comments
Hungary - Eximbank and MEHIB	1,486.7	-	-	-
Italy - SACE	89,913.0	9,835.6	10.9 - 89.3	Based on value of reported projects
Lithuania - LEIDAS	-	-	-	-
Luxembourg – Ducroire	> 2,000.0	-	-	Based on 2007 and 2008
Netherlands - Atradius	16,154.0	7,700.0	48.0 - 81.0	Based on value of reported projects
Poland - KUKE	> 3,800.0	-	49.9 - 67.8	Based on 2004-07 and number of projects
Portugal - COSEC	> 291.1	-	-	Based on 2007 and 2008
Slovak Republic - Eximbanka	827.9	-	> 12.2	Based on alternative sector division
Slovenia - SID	-	-	-	-
Spain - CESCE	-	-	44.4	Based on number of reported projects
Sweden - EKN	18,191.5		> 34.3	Based on alternative sector division
United Kingdom - ECGD	13,261.0	8,095.2	61.0 - 94.5	Based on value of reported projects
Total	> 468,351.1	> 82,434.1		

As shown in Table 1, seventeen European ECA's provided export credit guarantees with a total volume of €468.4 billion in the period 2004-2009 (for four ECAs no figures were found). For nine ECAs we were able to find or estimate figures on their export credit guarantees for companies in carbon intensive sectors, totalling €82.4 billion. As we could not make estimates of their carbon intensive guarantees for twelve ECAs, the total amount probably will be much higher, resulting in a significant percentage of all export credit guarantees granted by European ECAs. For individual ECAs, this percentage varied between 12 and 95%.

This research project was hampered by the fact that most of the European ECA's are not very transparent in providing information about the total volume of export credit guarantees over the past six years, and especially about specific projects guaranteed during these years. Below, an overview is given of the amount of information provided by the different ECA's studied in this report, ranked from elaborate to no information.

• None of the ECA's provided details on all export credit guarantee transactions made during any particular year.

- Coface (France) publishes detailed information on guarantees provided to projects above € 10 million and projects that fall in environmental category A or B. Finnvera (Finland) reports information about export guarantees provided to projects above € 10 million and projects that fall in environmental category A. Euler Hermes (Germany) provides information of all the official projects supported above € 15 million and selected projects of special public interest below this threshold. Atradius (Netherlands) and EGCD (United Kingdom) disclosed detailed information on all guarantees provided for projects which are not commercially confidential, including all environmental category A and B projects.
- SACE (Italy) only discloses elaborate transaction details for guarantees issued for projects within the environmental category A and B. ONDD (Belgium) published all the environmental category A and B insurance policies for 2007-09, with only a range of the guarantee values. OeKB (Austria) reported all the credit guarantees it issued to environmental category A and B export projects during the years 2006-09. It only disclosed the guarantee amount for some of these transactions.
- EGAP (Czech Republic) provided very limited information on the category A and B
  projects it issued guarantees to. Only two of these projects included the guarantee
  amount.
- EKF (Denmark), KUKE (Poland), and CESCE (Spain) reported the number of environmental category A and B export projects it helped financing during a limited amount of years, without providing details or guarantee amounts.
- Eximbanka (Slovak Republic) and EKN (Sweden) did not provide project specific information, but provided a relatively accurate sector division of the guarantees it provided during 2004-09.
- KredEx (Estonia), ECIO (Greece), Eximbank and MEHIB (Hungary), LEIDAS
  (Lithuania), COSEC (Portugal) and SID (Slovenia) did not provide any information that
  could be used to estimate the share of their guarantee volume dedicated to climate
  intensive projects.

#### Introduction

This report includes the results of our research into the involvement of European Export Credit Agencies (ECA's) in financing carbon intensive industries. The project concentrates on all ECA's in EU-member countries and on financing provided in the past six years (2004-2009).

As far as possible per European ECA an overview is givenof the short- and long-term export credit guarantees provided in the past six years (2004-2009), split by sector and by region (Europe, developing countries and other).

To estimate the involvement in carbon intensive industries, an overview is made of the shortand long-term export credit guarantees provided by ECAs from EU-countries in the past six years (2004-2009) to companies active in the following carbon-intensive activities or industries:

- · fossil-fuel electricity plants;
- · oil and gas extraction;
- shipping;
- mining;
- dredging:
- iron and steel manufacturing;
- pulp and paper manufacturing;
- chemical industry;
- transportation infrastructure;
- aircraft manufacturing;
- airlines.

In a separate spreadsheet, all export credit guarantees found are summarized per ECA, indicating the date, recipient, activity, country, term and amount.

Taking all guarantees together the percentage of all export credits guarantees provided to carbon-intensive industries during the past six years is calculated and included in this report. Each European ECA is described in a separate chapter. Sources are mentioned on all data included.

A summary of the findings of this report can be found on the first pages of this report.

## Chapter 1 Austria - OeKB

#### 1.1 General

The "Oesterreichische Kontrollbank Aktiengesellschaft AG" (OeKB) is Austria's central financial and information services agency for the export sector and capital market. Its specific services in Austria evolve around strengthening the national economy within the global competition. The institution was founded in 1946, and is owned by Austrian banks.

## 1.2 Total export credit guarantees

Table 2 shows the total amounts for which OeKB claims to have provided export credit insurances. The amount for 2009 was estimated by using the average increment over previous years. The sum of the amounts for the years 2006-09 is included for comparison purposes later on in this chapter, where transaction details of the years 2004 and 2005 are not available.

	•	
Year	Value of guarantees (mln €)	Increment per year (mln €)
2004	5,191	
2005	5,505	+ 0,314
2006	8,714	+ 3,209
2007	12,361	+ 3,602
2008	12,063	- 0,253
2009*	13,781	+ 1,718
Total	57,615	
Total 2006-09	46.919	

Table 2 OeKB: Export credit guarantees 2004-2009

Source: OeKB, Annual Report 2008, OeKB, June 2009.

As can be deduced from Table 2 the amount for which guarantees were granted per year more than doubled during the five-year period.

#### 1.3 Export credit guarantees by region

Table 3 shows how the guarantees issued by OeKB are spread by region. The category "Other guarantees" include "Guarantees by Aval (GA)" and "OeEB", or the Oesterreichische Entwicklungsbank AG, which is the official Development Bank of Austria and a full subsidiary of OeKB.<sup>1</sup>

<sup>\*</sup> The amount for 2009 was estimated on the basis of average increment over the remaining years

Table 3 OeKB: Export guarantees by region 2004-2008 (mln €)

Region	2004	2005	2006	2007	2008	Total	Percentage of total (%)
Europe (including Turkey / CIS)	772	1,735	1,540	4,337	3,023	11,407	26.0
EU	329	70	250	232	1,437	2,318	5.3
North America	18	1	7	1	2	29	0.1
Latin America	37	44	62	71	145	359	0.8
Asia	797	1,215	1,139	973	1,205	5,329	12.2
Australia, Oceania	_	_	_	_	9	9	0.0
Africa	33	46	78	70	151	378	0.9
Comprehensive policies	942	35	145	40	182	1,344	3.1
Other guarantees	2,263	2,359	5,493	6,592	5,909	22,616	52.0
Total	5,191	5,505	8,714	12,316	12,063	43,789	100.0

Source: OeKB, Annual Reports 2005, 2007 and 2008, OeKB, May 2006, 2007 and 2008.

## 1.4 Export credit guarantees by sector

No division of export credit guarantees by sector was found.

#### 1.5 Guarantees for carbon intensive sectors

In the years 2006-09 OeKB reported all the credit guarantees it issued to environmentally sensitive export products. Over this period, it provided details on 95 projects, of which 67 (70.5%) were carbon sensitive.

For most of the projects it also specified the cost of the exported product, which would give an indication of the amount for which OeKB provided insurance. As can be seen in Table 4, 46 of the projects had specified amounts, and the remaining 49 projects had barely or no specified amounts.

The projects for which only a range was specified were not included in the total amounts shown in Table 4, since the range was usually so wide that estimating them does not seem sensible. For example, in April 2007 the Austrian firm Andritz provided a sheet drying line for elemental bleached pulp that was "part of a larger 300 million project", and in May 2007 the Austrian Voith Paper exported four complete paper machines to China with an estimated value within the "three digit million range".

Excluding these amounts for carbon intensive projects from the calculations might seem to underestimate the total share of this group of projects. However, we assume that generally the value of an export product is more likely to be mentioned when it is relatively high. Therefore, we might just as well be overestimating the relative share of guarantees to carbon intensive projects with the total amounts shown in Table 4. Because of the large insecurity in the data for OeKB, we could not provide a range for the share of carbon intensive projects in this country.

Table 4 OeKB: Carbon intensive export credit guarantees in 2006-09

	2006	2007	2008	2009	Total
Total number of projects	21	26	27	21	95
Total specified amounts (mln €)	1,439.8	848.6	838.5	865.2	3,992.1
Number of carbon intensive projects with specified amounts	13	17	8	8	46
Specified amounts for carbon intensive projects (mln €)	1,075.0	533.6	394.0	584.2	2,586.8
Number of carbon intensive projects with unspecified amounts	1	4	10	6	21

Source: OeKB, "Bundesgarantierte Projekte ab 10 Mio. Euro", Transparenz & Compliance, *Website OeKB*, Viewed in April 2010.

## Chapter 2 Belgium - ONDD

#### 2.1 General

The National Delcredere Service (ONDD) is the Belgian public export credit agency. ONDD performs this function as an autonomous public institution that receives financial guarantees from the Belgian state.<sup>2</sup>

## 2.2 Total export credit guarantees

Table 5 shows that the amount for which ONDD issued export credit guarantees almost quadrupled between 2004 and 2009. The total (estimated) amount for which ONDD issued guarantees in these five years is € 115.2 billion.

Table 5 ONDD: Export credit guarantees 2004-2009

Year	Value of guarantees (mln €)	Increment per year (mIn €)
2004	8,922.3	
2005	12,317.2	3,394.9
2006	14,671.0	2,353.8
2007	19,866.0	5,195.0
2008	27,388.0	7,522.0
2009*	32,004.4	4,616.4
Total	115,168.9	

<sup>\*</sup> The amount for 2009 was estimated on the basis of average increment over the remaining years

Source: ONDD, Annual Report 2008, ONDD, June 2009.

## 2.3 Export credit guarantees by region

Table 6 shows how the earned premiums in 2004-08 were distributed over different countries. The premium amounts relate to the guarantee amounts from Table 5 in a more or less proportional manner. As can be observed from the table, Russia was the largest export country in each year. Other countries that were amongst the largest in 2008 (such as Dubai and Ghana) were not amongst the thirty largest ones in previous years, and were therefore left out of the table.

Table 6 ONDD: Earned premiums by country 2004-2008 (thousand €)

Country	2004	2005	2006	2007	2008
Russia	7,547	14,161	13,212	14,880	24,355
Turkey	5,333	7,087	7,516	6,443	9,250
Iran	8,905	4,438	12,253	24,532	8,409
Brazil	3,136	2,313	4,953	8,007	7,723
Ukraine	1,319	1,558	2,746	3,492	7,432
India	1,402	1,084	1,678	3,131	6,616
Nigeria	695	1,553	2,706	2,616	5,117
Kazakhstan	696	917	1,576	1,508	4,655
China	2,203	2,121	2,447	2,885	4,549
Saudi-Arabia	1,708	1,808	3,510	8,104	3,801
Other	64,858	60,579	112,558	90,182	124,601
Total	97,802	97,619	165,155	165,780	206,508

Source: ONDD, "Annual reports 2005-08", ONDD, June 2006-09.

### 2.4 Export credit guarantees by sector

No division of export credit guarantees or premiums by sector was found.

#### 2.5 Guarantees for carbon intensive sectors

On its website, ONDD presents one list with all the environmental category A and B insurance policies that were issued since 2007. Guarantees issued before 2007 are not included in the list.

Since the exact values of the issued credit guarantees were not reported - only five broad categories - estimations had to be made in order to be able to perform computations with these data. For most categories we simply took the average, as shown in Table 7. For category 5 (above € 100 million), the average increment of the other categories was used to compute the logical average of this fifth category. This procedure is also shown in Table 7.

Table 7 ONDD: Categories of guarantee values

Category	Range (mIn €)	Average (mln €)	Increment (mIn €)	Change (mln €)
1	>10	5		
2	10-30	20	15	
3	30-70	50	30	15
4	70-100	85	35	5
5*	100<	130	45	10

<sup>\*</sup> Average amount is estimated based on the average change in increment.

Source: ECGD, "Annual Reports 2004-05 - 2008-09", ECGD, September 2005-09

For the years 2007-09, 33 projects were reported, meaning that these were the only transactions belonging to the environmental categories A and B during this period. From the 33 environmentally sensitive projects, 30 were also carbon intensive.

When analysing the amounts (using the average amounts of Table 7), the value of all reported transactions amounted to  $\in$  1,670 million. From this total amount,  $\in$  1,640 million (87.4%) was devoted to carbon intensive projects. Since it is likely that relatively many of the environmentally sensitive projects can also be classified as carbon intensive, this percentage is probably an overestimation of the actual ratio of carbon sensitive to other guarantees. ONDD published to have issued insurances covering  $\in$  79,258.4 million in the years 2007-09, meaning that the carbon sensitive insurances we found would constitute only 1.8% of all insurances. It is likely however, that this is an underestimation, since the large amount of not reported guarantees is likely to contain other carbon intensive transactions.

Table 8 shows how the issued guarantee amounts, and the relative shares of the reported and overall issued insurances are allocated over the sectors identified by FERN.

Table 8 ONDD: Carbon intensive export credit guarantees 2007-2009

Sector	Amount (mln €)	Percentage of total reported (%)	Percentage of total covered (%)
Fossil-fuel electricity plant	0	0	0
Oil & gas extraction	130.0	7.8	0.2
Shipping	0	0	0
Mining	0	0	0
Dredging	1,060.0	63.5	1.3
Iron & steel	270.0	16.2	0.3
Pulp & paper	0	0	0
Chemical industry	0	0	0
Transportation infrastructure	0	0	0
Aircrafts manufacturing	0	0	0
Airlines	0	0	0
Total	1,640.0	87.4	1.8

Source: ONDD, "ETHIEK", "Wie zijn wij?", Website ONDD, Viewed in April 2010.

As the two computed percentages are expected to over- and underestimate the real share of carbon sensitive export credit guarantees issued by ONDD, we conclude that the actual percentage will lie within the range of 1.8 and 87.4 percent.

## Chapter 3 Czech Republic - EGAP

#### 3.1 General

The Export Guarantee and Insurance Corporation (EGAP) of the Czech Republic was founded in June 1992 as a state-owned export credit agency, insuring credits connected with exports of goods and services from the Czech Republic against political and commercial risks. EGAP, now part of the state export support programme, provides insurance services to all exporters of Czech goods, and is still fully owned and financially guaranteed by the Czech state.<sup>3</sup>

## 3.2 Total export credit guarantees

Table 9 shows that the amount for which EGAP issued export credit guarantees more than tripled between 2004 and 2009. The total (estimated) amount for which EGAP issued guarantees in these five years is €7.8 billion.

Table 9	EGAP: Export	credit guarantees :	2004-2009
---------	--------------	---------------------	-----------

Year	Value of guarantees (mln €)	Change per year (mln €)
2004	557.3	
2005	765.6	+ 208.3
2006	1,085.9	+ 320.3
2007	1,874.9	+ 789.0
2008	1,614.0	- 260.9
2009*	1,878.2	+ 264.2
Total	7,775.9	

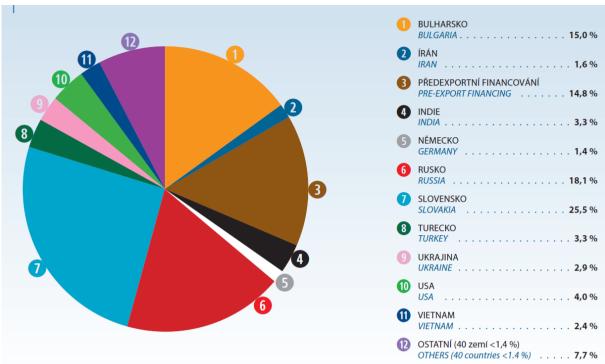
<sup>\*</sup> The amount for 2009 was estimated on the basis of average annual change over the previous years

Source: EGAP, "EGAP in numbers", Website EGAP, Viewed in April 2010.

#### 3.3 Export credit guarantees by region

During 2004, credits were insured to 51 countries, although 92% was directed to eleven countries. Slovakia was the largest export country with 25.5% of the EGAP credits insurances. An overview of the country division for 2004 is given in Figure 1.

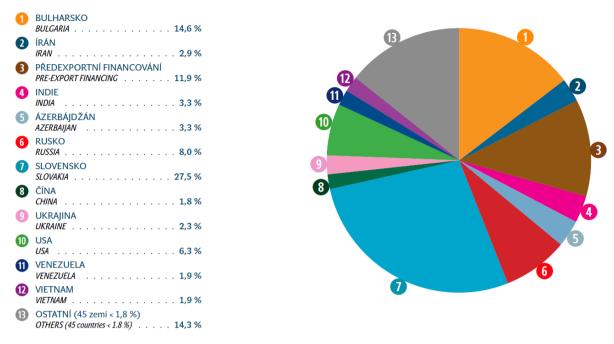
Figure 1. EGAP: Country allocation of guarantees in 2004 (%)



Source: EGAP, "Annual report 2004", EGAP, June 2005.

During 2005, the largest share from the state supported insurance (27.5 %) fell on Slovakia with credits for the export of agricultural equipment, production lines, travelling cranes, and a number of other machinery products and coal. The volume of the insurance value realized with Bulgaria (14.6 %) was also significant and consisted primarily of the insurance of the investment into a cascade of hydro power plants and of the insurance of the export of Škoda cars. The insurance of the export to Russia (8 %) supported predominantly export of the equipment for glass industry, agricultural technology, machinery products, industrial hosepipes, chipboards, mining technology, machine tools, trucks and technology for sugar-making industry.

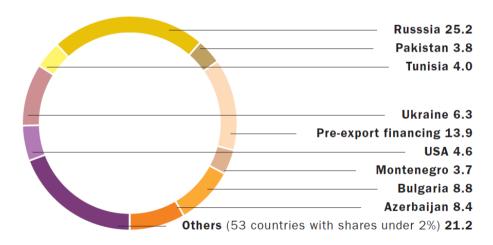
Figure 2. EGAP: Country allocation of guarantees in 2005 (%)



Source: EGAP, "Annual report 2005", EGAP, June 2006.

As a whole, EGAP insured export contracts to 62 countries in 2006. During the year, EGAP was insuring Czech exports mainly to the Russian Federation, which reached approximately CZK 7.5 billion (€272.4 million) and thus represented a quarter of the total insured volume. A further amount of CZK 4.7 billion (€170.7 million) was devoted to other CIS countries.

Figure 3. EGAP; Country allocation of guarantees in 2006 (%)



Source: EGAP, "Annual report 2006", EGAP, June 2007.

In 2007, EGAP insured export contracts to 59 countries. In comparison with 2006, nine new countries emerged in the list and three of them, Angola, Georgia and New Zealand, appeared for the first time ever. Czech exports with EGAP insurance were directed most often to the Russian Federation; they had an overall value of CZK 20 billion (€750.0 million) and represented more than two-fifths of the overall insured volume in 2007. The second place was taken by Georgia, where the company Energo Pro privatised, with the assistance of an insured credit for financing investments, a range of hydroelectric power stations and electricity distribution networks.

Figure 4. EGAP; Country allocation of guarantees in 2007 (%)



Source: EGAP, "Annual report 2007", EGAP, June 2008.

In 2008, EGAP insured exports of Czech goods, services and investments to 56 countries all over the world, of which 48% went to the Russian Federation and 13% to other CIS countries. The insurance of deliveries of technology and construction of the steam-gas power station in Kurgan with the insurance value of almost CZK 6.4 billion (€242.2 million) was among the largest projects in the Russian Federation.

VIETNAM 3.5%

UKRAINE 5.2%

SLOVAKIA 4.7%

GEORGIA 3.3%

RUSSIA 48.6%

OTHERS (44 COUNTRIES WITH SHARES BELOW 2%)
25%

BELARUS 3%

INDIA 5%

5 OTHER CIS COUNTRIES
1.7%

Figure 5. EGAP – country allocation of guarantees in 2008 (%)

Source: EGAP, "Annual report 2008", EGAP, June 2009.

## 3.4 Export credit guarantees by sector

No division of export credit guarantees or premiums by sector was found, but a general description was available for each year:

- During 2004, the commodity segment "Machinery and transport equipment" was predominant in the sectoral division of new state supported insurances of credits and investment; its share made 60.5%. Two thirds of the total volume of this segment were insured credits for deliveries of machinery and technological equipment, and approximately one quarter were the insured credits for the deliveries of power-producing equipment; the rest were deliveries of transport equipment. In 2004, among other commodities, the export credit insurances covered credits and guarantees relating coal (20.1% of the total volume) and further there were footwear, textiles, hides, metal castings, etc.
- In 2005, the group "Machinery and transport equipment" continued to predominate in the commodity structure of newly insured credits and investment with state support; its share was 60.8%. More than half of the total volume of this group were insured credits for deliveries of power-producing equipment, approximately one quarter were insured credits for the delivery of means of transport and the rest were deliveries of machinery and technological equipment. Among other commodities in 2005 were credits and guarantees related to export support and production for the export for deliveries of coal (26.6% of the total volume), and, furthermore there were footwear, textiles, wood and rubber products, metal castings and others (together 4 %).
- Regarding the commodity structure of newly insured credits and investments with state support in 2006, the segment "Machinery and transport equipment" had a share of 77% of the total volume. Deliveries of machinery and technology equipment made out 56.5% of this group, 17.4% was transport equipment and the remainder were deliveries of power-generating equipment. Compared to 2005, the share of the deliveries of machines and equipment increased, while the share of power-generating equipment declined in 2006. Among other commodity classes, the most frequent ones were insurances of credits and guarantees related to deliveries of footwear, textiles, wood and rubber products, metal castings and scientific instruments.
- In 2007, similarly to previous years, the "Machinery and transport equipment" category predominated in the commodity structure with a share of 85.6%. Deliveries of machinery and equipment were 50% within this class, 40% were deliveries of power equipment and the remainder was insurance of deliveries of means of transport. In comparison with 2006, the share of the power equipment increased significantly, while the share of the means of transport decreased moderately. In other commodity classes, the most frequently insured industries were footwear, textiles, products from wood and rubber, of metal castings and scientific instruments.
- Once again, "Machinery and transport equipment" was the dominant export credit insurance category in 2008, with a share of 87.2%. Almost half of this segment consisted of the deliveries of machinery and technological equipment, over 25% were deliveries of power equipment and the rest were deliveries of means of transport. Compared to 2007, the structure within this dominant category remained more or less identical. Amongst other commodity groups, the insured credits and guarantees mainly related to the deliveries of various wood and rubber products, metal castings, technologies and construction activities, medications, pharmaceutical products and scientific instruments.

#### 3.5 Guarantees for carbon intensive sectors

EGAP did not publish sufficient information for computing the share of carbon intensive projects. It did provide several examples of export credits it insured for carbon intensive projects during 2009:

- In June 2009 EGAP insured a credit of €108.2 million for the construction of one unit of continuous casting and a vacuum furnace for the Magnitogorsk Metallurgical Ironworks in Russia.
- In July 2009 it insured a credit of €117.1 million for some mini-steelworks in Strážské, Slovakia.
- Furthermore, it guaranteed the financing of the Yunusemre coal-fired power plant in Turkey, the reconstruction of an atmospheric distillation unit for crude oil in Belarus, and the construction of a highway in Vietnam.

## Chapter 4 Denmark - EKF

#### 4.1 General

Eksport Kredit Fonden (EKF) is the Danish national export credit agency. It is the only organisation in the Danish market to offer insurance against the extraordinary risks that are not covered by the private credit insurance market.<sup>4</sup>

## 4.2 Total export credit guarantees

Table 10 shows how the total annual amount for which EKF issued export credit guarantees changed over the past five years. As can be observed, this amount is estimated to have more than doubled during this period. In total, the agency insured export credits with a value of €11.9 billion during the period of 2004-09.

Table 10 EKF: Export credit guarantees 2004-09

Year	Value of guarantees (mln €)	Change per year (mln €)
2004	1,142.2	
2005	1,554.8	+ 412.6
2006	2,158.8	+ 604.0
2007	2,306.0	+ 147.2
2008	2,214.3	- 91.7
2009*	2,482.3	+ 268.0
Total	11,858.4	

<sup>\*</sup> The amount for 2009 was estimated on the basis of average annual change over the previous years

Source: EKF, "Annual reports 2005-08", EKF, April 2006-09.

### 4.3 Export credit guarantees by region

Table 11 provides an overview of the relative shares of the different regions in the world in EKF's insurance portfolio. Throughout the past five years Danish export projects to the Asia / Pacific region received most of EKF's financing, except in the year 2007, when Western European projects received slightly more. Export credits for Africa generally received the lowest amount of guarantees by EKF.

Table 11 EKF: Geographical allocation of guarantees in 2004-08 (%)

Region	2004	2005	2006	2007	2008
Asia / Pacific	35.0	41.0	38.0	25.0	25.0
Western Europe	22.0	20.0	20.0	26.0	23.0
Eastern Europe	9.0	6.0	8.0	18.0	16.0
Middle East (including Turkey)	13.0	14.0	13.0	14.0	16.0
Americas	14.0	10.0	12.0	11.0	13.0
Africa	7.0	9.0	9.0	6.0	6.0
Total	100.0	100.0	100.0	100.0	100.0

Source: EKF, "Annual reports 2004-08", EKF, April 2005-09.

Figure 6 shows the countries of which the above regions were composed in 2008. For example, within the region "Americas" EKF only insured export projects directed to Mexico.

1 Algeria, 2 Aruba, 3 Belarus, 4 Burkina Faso, 5 China, 6 Croatia, 7 Ethiopia, 8 Ghana, 9 India, 10 Iran, 11 Kazakhstan, 12 Malaysia, 13 Mexico, 14 Namibia 15 Pakstan, 16 Russia, 17 Syria, 18 Tanzania, 19 Turkey, 20 Ukraine, 21 United Arab Emirates, 22 Venezuela, 23 Vietnam, 24 Qatar

Figure 6. Export countries for which EKF issued guarantees in 2008

Source: EKF, "CSR report 2008", EKF, April 2009.

#### 4.4 Export credit guarantees by sector

Table 12 shows how the export credit guarantees issued by EKF were divided over several economic sectors. In 2006 no differentiation was made between "chemistry and metal working" and "process industry". For 2004, 2005 and 2009 no data were available at all.

Table 12 EKF: Sectoral allocation of guarantees in 2006-2008 (%)

Industry	2006	2007	2008
Cement industry	22.0	34.0	36.0
Water and waste	11.0	2.0	2.0
Infrastructure	17.0	14.0	15.0
CHP and energy	4.0	2.0	1.0
Wind energy	30.0	34.0	32.0
Agriculture and food	11.0	11.0	8.0
Chemistry and metal working	6.0	1.0	1.0
Process industry	*	2.0	5.0
Total	100.0	100.0	100.0

<sup>\*</sup> No distinction was made between "chemistry and metal working" and "process industry"

Source: EKF, "Annual reports 2004-08", EKF, April 2005-09.

#### 4.5 Guarantees for carbon intensive sectors

EKF did not publish sufficient information to calculate the share of carbon intensive projects.

However, from the sector division in Table 12 can be deduced that the guarantee exposure of the carbon intensive category "Transportation infrastructure" constituted 17%, 14% and 15% of all export credit guarantees granted in 2006, 2007 and 2008 respectively. The relative share of the "Chemistry and metal working" industry was 1% of all guarantees in both 2007 and 2008. Furthermore, the carbon sensitive category "Fossil-fuel electricity plants" received 4%, 2% and 1% of all guarantees respectively in 2006, 2007 and 2008. This would indicate that the carbon intensive export projects constituted on average **18.7** percent of all guarantees granted during the period 2006-08.

Another, less accurate, indication of the share of carbon intensive projects as defined by FERN, was made by looking at the 74 projects with potential environmental impact included in the audit of EKF's 2008 CSR report. Of these 74 projects that received an export credit guarantee from EKF, 10 could be categorized as carbon intensive. This indicates a relative share of **13.5%**.

Table 13 EKF: Export credit guarantees for carbon intensive sectors 2004-2009

Sector	Frequency	Percentage of total reported (%)
Fossil-fuel electricity plant	2	2.7
Oil & gas extraction	1	1.4
Shipping	1	1.4
Mining	0	0.0
Dredging	0	0.0
Iron & steel	0	0.0
Pulp & paper	0	0.0
Chemical industry	0	0.0
Transportation infrastructure	6	8.1
Aircrafts manufacturing	0	0.0
Airlines	0	0.0
Total	10	13.5

Source: EKF, "CSR report 2008", EKF, April 2009.

## Chapter 5 Estonia - KredEx

#### 5.1 General

The Credit and Export Guarantee Fund KredEx was founded in 2001 by the Ministry of Economic Affairs and Communications of Estonia

## 5.2 Total export credit guarantees

Figure 7 shows the amounts (in Estonian Kroons) for which KredEx provided export credit guarantees in each year. The guaranteed export amounts from the figure are converted into euro's in Table 14 below, and the number of guarantees per year is added as well. The total guarantee amount for 2009 was not included in Figure 7 since it has not yet been included in an annual report. It is unclear what the "Guarantee commitments" in Figure 7 imply.

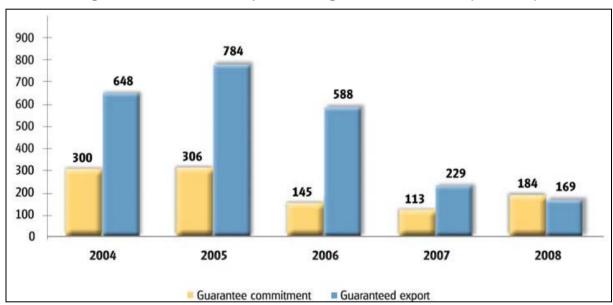


Figure 7. KredEx: Export credit guarantees 2004-08 (mln EEK)

Source: KredEx, "Annual report 2008", KredEx, April 2009.

Table 14 shows that the value for which KredEx issued export credit guarantees in each year reached its peak in 2005 with €50.1 million, then rapidly declined to €10.9 million in 2008, and has since almost doubled again to €21.4 million. The number of guarantees has consistently been declining since 2004, with only a small increase in 2009. This would indicate that the average amount per guarantee is rising over the years.

Table 14 KredEx: Export credit guarantees 2004-09

Year	Value of guarantees (mln €)	Number of guarantees issued
2004	41.4	418
2005	50.1	395
2006	37.6	203
2007	14.6	104
2008	10.9	78
2009	21.4	98
Total	176.0	1,296

Source: KredEx, "Annual reports 2004-08", KredEx, April 2005-09; KredEx, "Interest of entrepreneurs in the export guarantees of KredEx is continually increasing", KredEx, 4 March 2010.

## 5.3 Export credit guarantees by region

Table 15 gives a division by country of the total volume of guarantee contracts concluded in each year. Since different countries were pointed out in each year, the category "Other" is rather large in years where many of the export credit guarantees were issued for export destinations that were uncommon in other years. For example, in 2007 many of Estonia's exports were directed to Lithuania, Serbia, Latvia and Japan.<sup>5</sup>

Table 15 KredEx: Geographical allocation of guarantees in 2005-09 (%)

Country	2005	2006	2007	2008	2009
Ukraine	0.0	0.0	10.0	88.0	68.0
Russia	6.0	15.0	0.0	3.0	9.0
Sweden	11.0	6.0	8.0	1.0	0.0
United States	0.0	15.0	14.0	0.0	0.0
United Kingdom	13.0	9.0	11.0	0.0	0.0
Germany	29.0	9.0	8.0	0.0	0.0
Other	41.0	46.0	49.0	8.0	23.0
Total	100.0	100.0	100.0	100.0	100.0

Source: KredEx, "Annual reports 2005-08", KredEx, April 2006-09; KredEx, "Interest of entrepreneurs in the export guarantees of KredEx is continually increasing", KredEx, 4 March 2010.

## 5.4 Export credit guarantees by sector

Each year, KredEx provides details of the issued loan guarantee division per sector. This is the commercial part of the company that insures loans to Estonian companies operating nationally. However, for export credit guarantees or premiums no information on the allocation over different economic sectors was found.

## 5.5 Guarantees for carbon intensive sectors

Since no detailed list of specific projects was encountered either, no estimation can be made of the share of carbon intensive projects in the total export credit guarantee volume of KredEx.

## Chapter 6 Finland - Finnvera

#### 6.1 General

Finnvera is a specialised financing company owned by the state of Finland that provides loans, guarantees and export financing services.

Finnvera publishes basic information on long-term and medium-term (two years or over two years) export credit guarantees when the principal guaranteed by Finnvera is over €10 million or when a project is in environmental category A.

## 6.2 Total export credit guarantees

As Table 16 shows, the total export guarantees given by Finnvera more than doubled from 2004 to 2009. 2006 Saw a slight decrease compared to 2005 while the value of given guarantees dropped significantly in 2007 to an amount of  $\in$  705.7 million. In 2008 however, the export guarantees recovered and reached a record high of  $\in$  2,719.7 million. This amount of export guarantees seems to have stabilized as in 2009 the number only dropped slightly to a total of  $\in$  2,446.5 million. The amount of export guarantees given by Finnvera over the years 2004-2009 in total is  $\in$  9,505.7 million.

Table 16 Finnvera: Export credit guarantees 2004-2009

Year	Value of guarantees (mln €)
2004	987.1
2005	1,406.9
2006	1,239.8
2007	705.7
2008	2,719.7
2009	2,446.5
Total	9,505.7

Source: Finnvera, Annual Reports 2008, 2009, Finnvera.

#### 6.3 Export credit guarantees by region

As Table 17 shows, over the years 2004-2009 Finnvera provided most export guarantees to industrialized countries. Of the non-industrialised countries the CIS countries and Latin America received most export guarantees of Finnvera. Sub-Saharan Africa only received 0.8 % of the total of guarantees given by Finnvera over the years 2004-2009. In the year 2008 this region got a relatively high amount of guarantees as Finnvera changed its policy in 2007 which enabled them to guarantee credits to 37 new countries, mainly in Africa. <sup>6</sup>

Table 17 Finnvera: Export credit guarantees per region 2004-2009

Region	2004	2005	2006	2007	2008	2009	Total	Percentage of total (%)
Asia	211.2	309.5	181.0	142.1	199.1	599.2	1,642.1	17%
CIS	162.5	483.0	406.3	189.4	555.3	78.3	1,874.8	20%
Central and Eastern Europe	125.4	1.4	96.7	-	144.1	16.6	384.2	4%
Latin America	257.9	165.2	154.7	249.0	817.9	480.0	2,124.7	22%
Middle East and North Africa	147.5	85.5	222.9	87.4	319.8	152.8	1,015.9	11%
Sub-Saharan Africa	16.4	-	14.8	22.7	4.1	99.3	157.3	2%
Industrialised countries	66.2	362.3	163.4	15.1	679.4	1,020.3	2,306.7	24%
Total	987.1	1,406.9	1,239.8	705.7	2,719.7	2,446.5	9,505.7	100%

Source: Finnvera, Annual Reports 2008, 2009, Finnvera.

## 6.4 Export credit guarantees by sector

Over the years 2004-2009 Finnvera mainly provided export credit guarantees for the shipbuilding and shipping industry and to the telecommunication sector. Over the years, also the forestry and wood processing sector became to play a larger role in Finnvera's offered guarantees.<sup>7</sup>

Table 18 Finnvera: Export credit guarantees per sector 2004-2009

Sector	2004	2005	2006	2007	2008	2009	Total	Percentage of total
Telecommunications	597.6	785.9	556.3	164.9	1,135.9	854.2	4,094.8	43%
Wood processing	84.8	149.4	315.2	273.3	286.7	213.3	1,322.7	14%
Power generation	177.0	25.2	82.8	47.5	347.1	106.6	786.2	8%
Shipping companies	2.4	309.1	181.4	-	687.8	835.4	2,016.1	21%
Other	125.3	137.3	104.1	220.0	262.3	437.0	1,286.0	14%
Total	987.1	1,406.9	1,239.8	705.7	2,719.8	2,446.5	9,505.8	100%

Source: Finnvera, Annual Reports 2008, 2009, Finnvera.

#### 6.5 Guarantees for climate intensive sectors

Finnvera reports information about export guarantees provided to projects above € 10 million and projects that fall in environmental category A. The total amount for the 45 export guarantees provided in the period 2004-2009 for which details are reported is € 4,225.4 million. Of these, € 3,022.6 million was provided to 32 projects that fall in the category 'carbon intensive' as identified by FERN. Only based upon the reported projects, 71.5% of the projects covered would thus fall in the category 'carbon intensive'.

If we compare this figure of €3,023 million with the total of export credit guarantees provided in the period 2004-2009 (€9,505.8 million, see Table 16), around 32% of the total amount of export covered by Finnvera over the years 2004-2009 would fall in one of the 'carbon intensive' sectors as identified by FERN. This however most probably is an underestimation as Finnvera only reports information about projects supported above €10 million or that fall in environmental category A. Table 19 gives an overview of the distribution per defined sector.

Table 19 Finnvera: Export credit guarantees to carbon intensive sectors 2004-2009

Sector	Amount (million €)	Percentage of total reported (%)	Percentage of total covered (%)
Fossil-fuel electricity plant	208.2	4.9	2.2%
Shipping	1,858.1	44.0	19.5%
Iron & steel	23.3 <sup>1</sup>	0.6	0.2%
Pulp & paper	781.1	18.5	8.2%
Transportation infrastructure	151.9 <sup>2</sup>	3.6	1.6%
Total	3,022.6	71.5	31.8%

Source: Reported export credit guarantees, Website Finnvera, Viewed in March 2010.

This is an underestimation as there is no amount available of one of the two projects supported by Finnvera that fall in this category.

This is an underestimation as there is no amount available of one of the four projects supported by Finnvera that fall in this category.

## Chapter 7 France - Coface

#### 7.1 General

Coface is not very transparent in reporting general information about amounts guaranteed or regional/sectoral divisions. The website of Coface does not offer annual reports.

#### 7.2 Guarantees for climate intensive sectors

Coface publishes information on large contracts, above € 10 million, obtained by French companies and benefiting from Coface guarantee on behalf of the French State. Additionally, Coface publishes all projects that fall in the environmental category A or B. This list is updated every quarter. It provides a description of projects, basic information on their environmental consequences and, where applicable, the requirements of Coface in the matter.

Coface reported a total of 201 projects over the years 2004-2009. 145 of these projects fall in the category 'carbon intensive' as identified by FERN. The export credit guarantee amount of these 145 projects together comes to €17,166 million. The total amount of the reported projects is €35,545 million. We can thus conclude that around 48% of the reported projects of Coface falls in the category 'carbon intensive'.

Table 20 gives an overview of the distribution across the sectors defined by FERN. The most important category is airlines. This is largely to be attributed to Airbus that secured guarantees of Coface of a total € 8872 million over the years 2004-2009 to deliver aircrafts to airlines all around the world.

Table 20 Coface: Export credit guarantees to carbon intensive sectors 2004-2009

Sector	Amount (million €)	Percentage of total reported (%)
Fossil-fuel electricity plant	1,064.0	3.0
Oil & gas extraction	564.8	1.6
Shipping	2,210.3	6.2
Mining	0.0	0.0
Dredging	223.3	0.6
Iron & steel	410.3	1.2
Pulp & paper	0.0	0.0
Chemical industry	924.7	2.6
Transportation infrastructure	2,142.8	6.0
Aircrafts manufacturing	82.6	0.2
Airlines	9,543.3	26.8
Total	17,166.0	48.2

Source: Coface, "Reported projects", Website Coface, Viewed in March 2010.

## Chapter 8 Germany - Euler Hermes

#### 8.1 General

Euler Hermes is the official Export Credit Agency of Germany.

## 8.2 Total export credit guarantees

As Table 21 shows, the amounts guaranteed by Euler Hermes over the years 2004-2009 are fairly stable around €20,000 million. Only in 2006 the amount of guarantees offered decreased to a record low €16,971 million. This is the same trend we saw with Finnvera (Finland) and can most probably be explained by the global economic downturn of that year. Over the years 2004-2009 together, Euler Hermes provided export guarantees worth a total of €118.856 million.

Table 21 Euler Hermes: Export credit guarantees 2004-2009

Year	Amount (mIn €)
2004	21,067
2005	19,773
2006	20,553
2007	16,971
2008	20,683
2009*	19,809
Total	118,856

<sup>\*</sup> As there are no numbers yet available for the total covered export volume of 2009, the amount given in the table above is an estimation based upon the average covered export volume of 2004-2008.

Source: Euler Hermes, Annual Reports 2004, 2005, 2006, 2007, 2008, Euler Hermes.

#### 8.3 **Export credit guarantees by region**

Table 22 gives an overview of how the guarantees issued by Euler Hermes were geographically distributed over the past six years.

Table 22 Euler Hermes: Export guarantees by region (mln €)

Region	2004	2005	2006	2007	2008	Total	Percentage of total (%)
Industrial countries	1,582	1,932	2,288	1,242 <sup>3</sup>	3,351 <sup>4</sup>	10,395	10.5
Central/Eastern Europe	3,523	3,568	3,425	n/a	n/a	10,516	10.6
European developing countries	2,071	1,494	1,541	5,690	5,625	16,421	16.6
Africa	2,027	1,181	1,351	2,021	2,929	9,509	9.6
Latin America	2,599	2,454	3,253	2,403	2,325	13,034	13.2
Asia	9,291	9,142	8,438	5,608	6,451	38,930	39.4
Oceania	4.2	1.5	1.4	6.1	2.7	16	0.0
Total	21,067	19,774	20,297	16,971	20,683	98,821	100.0

Source: Euler Hermes, Annual Reports 2004, 2005, 2006, 2007, 2008, Euler Hermes.

#### 8.4 **Export credit guarantees by sector**

Over the years 2004-2009 Euler Hermes reports a division of guarantees offered by goods. As Table 23 shows, by far the most guarantees were given for plants and for machinery and equipment.

Table 23 Euler Hermes: Reported guarantees by goods 2004-2007 (mln €)

Goods	2004	2005	2006	2007
Plants	5,368	4,728	5,607	4,712
Machinery and equipment	2,397	2,043	2,122	2,132
Electronic, precision engineering and optical equipment, telecommunication	1,109	1,182	554	492
Shipping	815	1,459	2,516	601
Vehicles	356	507	289	597
Aircraft	1,279	1,676	932	875
Construction services	234	140	470	421
Others	359	409	284	403
Total	11,917	12,142	12,774	10,233

Source: Euler Hermes, Annual Reports 2004, 2005, 2006, 2007, Euler Hermes.

For 2007 and 2008 Euler Hermes provides a different division of guarantees offered as they use a sectoral division. As Table 24 shows, over 2008 most guarantees given by Euler Hermes concerned projects in the Infrastructure, Manufacturing and Energy sector.

<sup>&</sup>lt;sup>3</sup> OECD high income countries

<sup>&</sup>lt;sup>4</sup> OECD high income countries

Table 24 Euler Hermes: Reported guarantees by sector 2008 (mln €)

Sector	2007	2008
Infrastructure	3,720	5,370
Manufacturing	3,241	3,026
Energy	896	1,623
Chemical industry	522	981
Mining industry	351	834
Paper trade, timber, leather and textile	551	634
Agricultural and food industry	464	343
Service industry	323	270
Oil and gas production	155	90
Environmental engineering	10	10
Total	10,233	13,181

Source: Euler Hermes, Annual Report 2008, Euler Hermes

#### 8.5 Guarantees for climate intensive sectors

On its website Euler Hermes provides information of all the official projects supported above €15 million and selected projects of special public interest below this threshold. A total of 612 projects (around 75% of the total) with a total value of €32,163 million falls within the carbon intensive category.

The amount of projects that fall in the 'carbon intensive' category is however an estimate as Euler Hermes does not provide information about the specific amounts covered per transaction. They merely report amount categories of which the averages are used to calculate the eventual amount of €32,163 million. Furthermore, Euler Hermes applies a procedure in which only applicants of projects with an order value exceeding €15 million and selected projects of special public interest below this threshold are requested to grant their approval for publication of certain project data. It is thus very well possible that there are projects under the threshold of €15 million that would fall in the category of 'carbon intensive' are not reported. These underestimations make it difficult to compare our calculated figure with the total covered export volume over 2004-2009 (€118,856 million)

Table 25 gives an overview of the distribution of the amounts and shares of carbon intensive transactions over the industries defined by FERN. Because of the large quantity of guarantees reported by Euler Hermes, it was infeasible to report the percentages of the overall reported value of transactions.

Table 25 Euler Hermes: Export credit guarantees 2004-2009

Sector	Amount (million €)	Percentage of total reported (%)	Percentage of total covered (%)
Fossil-fuel electricity plant	3,895.0		3.28
Oil & gas extraction	1,887.5		1.59
Shipping	5,597.5		4.7
Mining	937.5		0.79
Dredging	0		0
Iron & steel	6,920.0		5.82
Pulp & paper	1,620.0		1.36
Chemical industry	2,090.0		1.76
Transportation infrastructure	3,002.5		2.53
Aircrafts manufacturing	55.0		0.05
Airlines	6,157.5		5.15
Total	32,162.5		27.06

Source: Reported export credit guarantees, Website Euler Hermes, Viewed in March 2010.

# Chapter 9 Greece - ECIO

#### 9.1 General

The Export Credit Insurance Organization (ECIO) is the ECA of Greece. It is a non-profit Organization which is supervised by the Greek Ministry of Economy and Finance, and its State Guarantee Capital currently amounts to €1.47 billion. It offers short term export credit insurances, medium-long term export credit insurances, construction works insurances, buyer's credit insurances and overseas investment insurance schemes.<sup>8</sup>

No information was found on the geographical or sectoral distribution of these insurances, nor of the climate intensity of ECIO's financing activities.

# Chapter 10 Hungary - Eximbank and MEHIB

#### 10.1 General

In Hungary, two state-owned export credit insurers are active. The Eximbank is one of the two Hungarian state banks, which apart from providing credits, also issues guarantees for export projects against a premium below the market price. The Hungarian Export Credit Insurance Company, MEHIB, also insures export credits to companies registered in Hungary. Therefore, we provide details below of the guarantee activities of both institutions.

# 10.2 Total export credit guarantees

Each year, MEHIB publishes information on the annual amount for which guarantees were granted to the marketable portfolio (the commercial activities of the agency), and the state-backed non-marketable portfolio, around which this study revolves. Table 26 shows these amounts, along with the difference between each year's total guarantee value, so that the amount for 2009 could be estimated. From 2008 onwards, MEHIB no longer insures marketable projects, and it started publishing the percentage of short-term projects in the total guarantee volume. In 2008 this was 48.6%.

Table 26 MEHIB: Export credit guarantees 2004-09

Year	Value of guarantees (mln €)	Increment (min	Change in increment (mln
2004	46.1		
2005	58.8	12.7	
2006	144.9	86.1	73.4
2007	267.7	122.8	36.7
2008	409.2	141.5	18.7
2009*	560.0	150.8	9.3
Total	1486.7		

<sup>\*</sup> Amount was estimated using the trend in the change in annual increment over the previous years.

Source: MEHIB, "Annual reports 2004-08", MEHIB, April 2005-09.

The following information was found on total amounts for which the Hungarian Eximbank issued guarantees during 2006, 2007 and 2008:

Table 27 Eximbank: Export credit guarantees 2006-08

Year	Value of guarantees (mln €)	Value of guarantee lines (mln €)	Total insured amount (mln €)
2006	?	?	152.2
2007	82.2	54.8	137.0
2008	63.5	78.5	142.0
Total	?	?	431.2

Source: Eximbank, "Annual reports 2006-08", Eximbank, May 2007-09.

### 10.3 Export credit guarantees by region

The Eximbank did not provide any details on the geographical distribution of the export destinations for which it issued credit guarantees.

Table 28 shows the proportion of the guarantee volume that was issued by MEHIB to six different countries during the period 2004-08. Since in each year different countries were classified under "Other" by MEHIB, this category is larger in Table 28 for years when many guarantees were granted for countries uncommon to other years. In 2004, for example, many of the non-marketable export credit guarantees were directed to Indonesian projects, but this country was not mentioned in the annual reports of any of the subsequent years.

Table 28 MEHIB: Non-marketable export cover per country (%)

Country	2004	2005	2006	2007	2008
Russia	67.5	10.3	34.0	89.6	58.6
Serbia	*2.6	0.0	4.0	4.7	3.6
Croatia	0.0	68.1	33.0	0.0	0.4
Turkey	0.0	0.0	10.0	0.0	0.0
Ukraine	7.0	0.0	0.0	0.0	2.7
Belarus	1.8	13.2	0.0	0.0	0.9
Kazakhstan	0.9				28.0
Other	20.2	8.3	19.0	5.7	5.8
Total	100.0	100.0	100.0	100.0	100.0

<sup>\*</sup> It was still part of Serbia-Montenegro

Source: MEHIB, "Annual reports 2005-08", MEHIB, October 2005-09.

### 10.4 Export credit guarantees by sector

No information was found on the allocation of export credit guarantees by the Eximbank or MEHIB over different economic sectors.

#### 10.5 Guarantees for carbon intensive sectors

The Eximbank did not provide any information on its financial involvement in projects within carbon intensive sectors.

MEHIB did publish a short list of environmentally sensitive projects in each year starting in 2005, however, no details or amounts were included. Over these five years, ten guarantee transactions were reported, most of which involved the construction of a shopping mall abroad. Only one project could be classified as carbon intensive; in 2006 Hungary supplied 50 double deck city busses to Turkey. Obviously, this carbon intensive proportion of 10% of environmentally sensitive projects does not provide much insight in the carbon intensive proportion among all guarantees provided by MEHIB, let alone Eximbank. Therefore, no range can be given for export credit agencies in Hungary.

# Chapter 11 Italy - SACE

#### 11.1 General

SACE SpA (Servizi Assicurativi del Commercio Estero) is the Italian export credit agency. The Group offers insurance cover in more than 155 countries and at present insures commercial transactions and financing world-wide for an overall value of approximately € 46 billion. SACE also insures Italian companies against political risks when exporting to instable countries around the world. <sup>10</sup>

## 11.2 Total export credit guarantees

The overall amount for which Italian businesses were insured in each year is given in Table 29. The amount for 2009 has not yet been published, so it was estimated on the basis of the average increment in other years:

Table 29 SACE: Export credit guarantees 2004-09 (mln €)

	Total amount granted (mln €)	Difference with previous year (mln €)
2004	5,300.0	
2005	16,081.0	+10,781.0
2006	17,363.5	+ 1,282.5
2007	23,614.3	+ 6,250.8
2008	27,554.2	+ 3,929.9
2009*	33,115.3	+ 5,561.1
Total	89,913.0	

<sup>\*</sup> Amounts for 2009 are estimated, based on previous years

Source: SACE, "Annual reports 2004-08", SACE, April 2005-09.

### 11.3 Export credit guarantees by region

Table 30 shows the geographical distribution of the export countries for which SACE has issued export credit insurances in each year. Data for 2009 are still not available.

Table 30 SACE: Guarantees per geo-economic area (2004-08)

%	EU	Other European countries and CIS	Middle East and North Africa	Americas	East Asia and Oceania	Sub- Saharan Africa	Other
2004	42.4	*	42.3	6.9	5.0	3.4	-
2005	20.0	27.9	34.0	8.6	8.8	0.8	-
2006	67.0	*	10.0	10.0	8.0	-	5.0
2007	19.2	17.3	30.5	15.0	14.5	2.8	0.7
2008	45.6	18.9	14.7	10.3	6.1	2.6	1.8

<sup>\*</sup> In these years "Other European Countries and CIS" was defined as part of "EU".

Source: SACE, "Annual reports 2004-08", SACE, April 2005-09.

## 11.4 Export credit guarantees by sector

Table 31 gives an overview of the different sectors for which SACE reported to have provided export credit insurances during the period from 2004 until 2008. Again, no data were available for 2009. Fluctuations per year can be caused by an altering definition of economic sectors in the different annual reports. For example, from 2006 onwards, a large new sector was "banking", and from 2007 onwards "defence" became newly emerging sector as well. Since these activities were allocated under "Other", this sector became relatively larger during these years.

Table 31 SACE: Guarantees per economic sector (2004-08)

%	Oil, gas & electricity	Machinery & equipment	Automobiles and airplanes	Construction	Metalworking	Other
2004	29.2	34.8	13.1	8.4	4.3	10.2
2005	29.6	8.5	18.3	-	15.5	28.1
2006	25.6	18.2	10.8	5.8	7.9	31.7
2007	21.5	5.1	12.9	4.6	12.9	43.0
2008	20.6	3.3	14.6	15.4	9.3	36.8

Source: SACE, "Annual reports 2004-08", SACE, April 2005-09.

#### 11.5 Guarantees for climate intensive sectors

SACE published details on some of their credit insurance transactions during the period of 2004-09. However, the lists of guarantees issued by SACE only include environmental category A and B transactions. They are updated every four months, and include transactions granted by SIMEST but assessed by SACE. Credit insurances by SACE have a period of 12 to 36 months, and can cover contracts with a value of up to EUR 500.000.<sup>11</sup>

Overall, 110 of the 127 (86.6%) reported guarantees during 2004-09 turn out to fall within the defined carbon intensive sectors. We also analysed what this percentage would be when looking at the value of the transactions. The percentages calculated for guarantees issued by SACE are based on the assumption that all the amounts in the category "below €20 million" are €10 million on average. Furthermore, only the transactions within the environmental categories A and B could be analysed. Therefore, two different sets of percentages were calculated.

The first set of percentages represent the share of carbon intensive activities inside the group of A and B category transactions. The overall capital amount dedicated to climate sensitive guarantees encompassed **89.3%** of the overall amount spent on category A and B guarantees. This percentage is slightly higher, but not appreciably different from when the quantities are used (86.6%). Table 32 shows how the amounts and relative shares are distributed across the carbon intensive sectors as identified by FERN. All of these ratios are likely to be overestimations, since the environmental A and B categories probably comprise a disproportionately large quantity of carbon intensive activities.

Therefore, the second set of percentages represents the share of each carbon intensive industry of the total capital amount for which guarantees were issued over the six year period. For this analysis the amounts of Table 29 were used, including the estimated total for 2009. Now, only **10.9%** of all capital was found to be spent on guarantees for any of the eleven studied industries. Again, the interior allocation of this ratio over the climate intensive industries defined by FERN is shown in Table 32. In this calculation it is apparent that other activities belonging to one of the studied sectors but not to category A or B are left out of the analysis, resulting in an underestimation of the percentage of the guarantees to carbon intensive industries.

Table 32 SACE: Export credit guarantees 2004-09

	_		
Sector	Amount (mIn €)	Percentage of Category A & B covered (%)	Percentage of total covered (%)
Fossil-fuel electricity plant	1,399.6	12.7	1.6
Oil & gas extraction	1,859.9	16.9	2.1
Shipping	-	0.0	0.0
Mining	40.0	0.4	0.0
Dredging	-	0.0	0.0
Iron & steel	4,987.9	45.3	5.5
Pulp & paper	-	0.0	0.0
Chemical industry	703.7	6.4	0.8
Transportation infrastructure	844.6	7.7	0.9
Aircrafts manufacturing	-	0.0	0.0
Airlines	-	0.0	0.0
Total	9,835.6	89.3	10.9

Source: SACE, "Transactions granted in 2004-09", SACE, January 2005-10.

Therefore, our estimation is that guarantees issued to export activities within carbon intensive sectors constitute a share **inside the range of 10.9% and 89.3%** of all guarantees issued. Consistent with our expectations with this degree of data limitations, this is a rather imprecise estimation.

# Chapter 12 Lithuania - LEIDAS

## 12.1 General

Lietuvos Eksporto Importo Draudimas (Export and Import Insurance Company) is the export credit agency of Lithuania.  $^{12}$ 

No information was found on annual guarantee amounts, the geographical or sectoral distribution of these insurances, nor of the climate intensity of LEIDAS' financing activities.

# Chapter 13 Luxembourg - Ducroire

#### 13.1 General

Established in 1961, the Office du Ducroire is a Luxembourgian public institution whose purpose is to foster international economic and financial relations in the interests of Luxembourg, having recourse to the following two instruments: financial backing for exports and export credit insurance.

As a credit insurer, the Office du Ducroire insures companies against default risks from their customers, whether these risks are political in origin or linked to the default or insolvency of customers, primarily through the acceptance of risks in the areas of export, import and international investment.<sup>13</sup>

## 13.2 Total export credit guarantees

Ducroire only published relevant information on the value of all insurances that were guaranteed by the state of Luxembourg for the years 2007 and 2008. A distinction was made between short-term (up to twelve months) and medium to long-term guarantees. Table 33 shows a strong increase in the amount for which export credit guarantees were issued in 2008 as opposed to 2007.

Table 33 Ducroire: Export credit guarantees 2007-08

Year	Short term: value of guarantees (mln €)	Medium / long term: value of guarantees (mln €)	Total (mIn €)
2007	442.4	325.3	767.7
2008	622.4	526.7	1,149.1

Source: Office du Ducroire, "Annual report 2008", Office du Ducroire, September 2009.

Figure 8 gives an overview of how the volume of all short- and long-term export credit guarantees issued by Ducroire evolved over the years. However, the figure also includes commercial transactions that were not guaranteed by the state of Luxembourg, and that are therefore not relevant to this research. Anyway, an overall trend of growth in the guarantee volume can be observed.

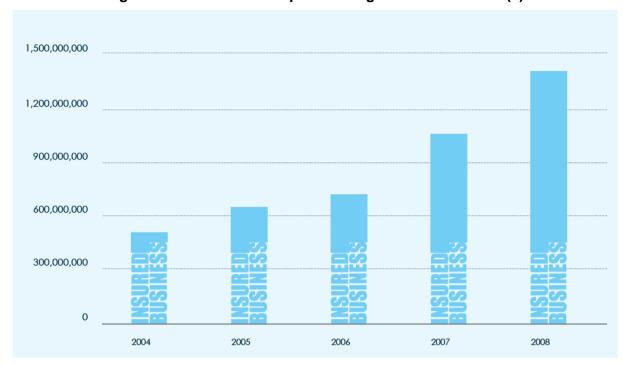


Figure 8. Ducroire: Export credit guarantees 2004-08 (€)

Source: Office du Ducroire, "Annual report 2008", Office du Ducroire, September 2009.

### 13.3 Export credit guarantees by region

Figure 9 shows how the total volume of short-term export credit guarantees was allocated over different export countries during 2008. The large bulk of capital was devoted to countries within Central, Eastern and Western Europe (72.1%). Russia, Ukraine and Mexico were the three individual countries with the highest share of the total short-term guarantee volume in 2008.<sup>14</sup>

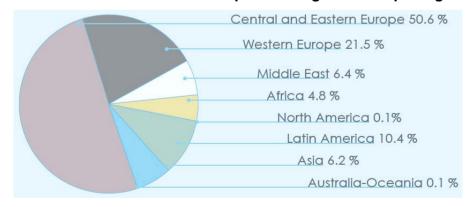


Figure 9. Ducroire: Short-term export credit guarantees per region 2008

Source: Office du Ducroire, "Annual report 2008", Office du Ducroire, September 2009.

Figure 10 gives the country allocation of the guarantees with a term of a year or longer. Here, the large majority of guarantees was provided to products directed to Asia (55.2%). Russia, India and Azerbaijan were the three individual countries with the largest share of the total medium and long-term guarantee volume in 2008.<sup>15</sup>

Latin America 3.0 %

Africa 4.4 %

Central and Eastern Europe 34.2 %

Asia 55.2 %

Australia -

Figure 10. Ducroire: Medium and long-term guarantees per region 2008

Source: Office du Ducroire, "Annual report 2008", Office du Ducroire, September 2009.

Oceania 0.5 %

No data are available on the geographical distribution of Ducroire's issued guarantees in other years.

Middle East 1.2 %

## 13.4 Export credit guarantees by sector

No information was found on the allocation of export credit guarantees by the Office du Ducroire over different economic sectors.

#### 13.5 Guarantees for carbon intensive sectors

No information was available on the proportion of Ducroire's guarantees issued to carbon intensive projects.

# **Chapter 14 Netherlands - Atradius**

#### 14.1 General

Atradius is one of the world's largest credit insurers with premium income of €1.7 billion and a global market share of 31 percent. Since 1932, it has a cooperation agreement with Atradius Dutch State for reinsurance by the state of commercial and political risks. <sup>16</sup>

Atradius is owned for 64.2% by the Spanish Grupo Compañía Española de Crédito y Caución, S.L., which in turn is owned for 70.3% by the Spanish insurer Grupo Catalana Occidente, S.A., which is a listed company. To 25% of Atradius is owned by the Swiss Reinsurance Company, and 9.1% by DB Equity S.à.r.l. (a subsidiary of Deutsche Bank AG).

Atradius' core business is credit insurance, consisting of traditional credit insurance and the structured credit and political risk business of the Special Products division, which cooperates with the Dutch government. This "Dutch State Business" constituted 17% (€ 12.6 million) of Atradius' service income in 2008. Dutch State Business represents the export credit agency fees for the medium term credit and investment insurance business that Atradius offers on behalf of the Dutch state. The relationship between Atradius and the Dutch Ministry of Finance goes back to 1932. The risk element of the business is reinsured by the Dutch State. <sup>19</sup> Total insurance revenues were € 1,774 million in 2008 and € 1,589.3 million in 2009. <sup>20</sup> Figure 11 shows how these revenues developed since 2004:

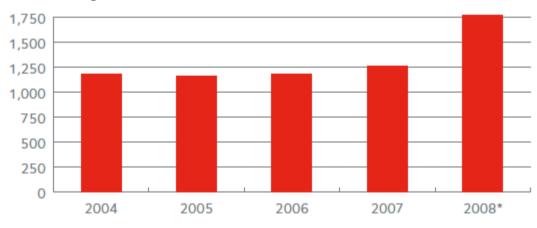


Figure 11. Atradius: Insurance revenues in 2004-2008

Source: Atradius N.V., "Annual Report 2008", Atradius N.V., April 2009.

Atradius provides credit insurances to Dutch firms exporting to 42 countries around the world, <sup>21</sup> as is shown in Figure 12.

Global footprint

Figure 12. Countries for which Atradius provided export credit insurance in 2008

Source: Atradius N.V., "Annual Report 2008", Atradius N.V., April 2009.

### 14.2 Total export credit guarantees

Table 34 shows the overall amounts for which Atradius Dutch State Business issued export credit insurances in each year. The amounts for 2004 and 2009 are estimations, based on how the reported amounts for these years related to the reported amounts of other years.

Table 34 Atradius Dutch State Business: Export credit guarantees in 2004-09 (mln €)

	Total amount granted (mIn ⊜
2004*	*2,348.0
2005	2,300.0
2006	2,400.0
2007	4,100.0
2008	3,000.0
2009*	*2,006.0
Total	16,154.0

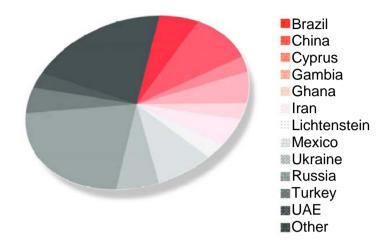
<sup>\*</sup> Amounts are estimated on the basis of how the reported amounts for these years related to the reported amounts of other years, as listed in Table 15.

Source: Atradius Dutch State Business N.V., "Annual Report 2007", Atradius Dutch State Business N.V., April 2008; Atradius Dutch State Business N.V., "Annual Report 2008", Atradius Dutch State Business N.V., April 2009.

## 14.3 Export credit guarantees by region

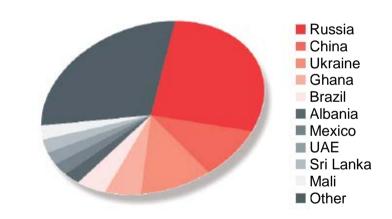
Figure 14 and Figure 13 show the geographical distribution of all guarantees issued in 2007 and 2008. As can be seen, Russia and China were amongst the largest markets in both years.

Figure 13. Atradius Dutch State Business: Business supported by country in 2007



Source: Atradius Dutch State Business N.V., "Annual Report 2007", *Atradius Dutch State Business N.V.*, April 2008.

Figure 14. Atradius Dutch State Business: Business supported by country in 2008



Source: Atradius Dutch State Business N.V., "Annual Report 2008", *Atradius Dutch State Business N.V.*, April 2009.

## 14.4 Export credit guarantees by sector

No information was found on the distribution of guarantees across sectors, apart from the industries defined by FERN.

#### 14.5 Guarantees for climate intensive sectors

At the end of each year, Atradius Dutch State Business publishes a list of some of the new guarantees it issued during that year. No specification was found of the criteria on which Atradius decides which guarantees it reports. In total, 334 transactions were reported during the period 2004-09, of which 160 (47.9%) concern insurances for activities that fall within at least one of the defined carbon intensive sectors.

We also analysed how the capital values of the reported  $CO_2$  intensive sectors relate to the overall reported transaction values. Table 35 shows these amounts for each year and for the entire period. Overall, **80.6%** of all guarantees reported by Atradius Dutch State Business were issued to carbon intensive industries. This percentage is significantly higher from when the quantities were used (47.9%), meaning that the carbon intensive export products received guarantees with a relatively higher value than products from other sectors did, or that Atradius only reported transactions for environmentally sensitive export projects, which contain relatively more  $CO_2$  intensive sectors. In that case, the 80.6% would be an overestimation of the actual proportion of carbon intensive projects.

When comparing the value of the observed  $CO_2$  intensive projects with the overall granted amounts for each year (except for 2004 and 2009, which are estimations) from Table 34, 48% of the value of all guarantees concerns climate sensitive sectors. This, however, might be an underestimation, in case the unreported transactions include carbon intensive projects as well.

Table 35 Atradius Dutch State Business: Export credit guarantees 2004-09 (mln €)

Year	Total amount granted (mln €)	Total amount reported (mln €)	Amount granted to CO₂ intensive sectors (mIn €)
2004	*2,348.0	1,400.0	900.0
2005	2,300.0	1,882.1	1,800.0
2006	2,400.0	1,406.7	1,100.0
2007	4,100.0	1,521.0	1,300.0
2008	3,000.0	2,229.4	1,800.0
2009	*2,006.0	1,200.0	800.0
Total	16,154.0	9,639.2	7,700.0

<sup>\*</sup> Amounts are estimated on the basis of how the reported amounts for these years related to the reported amounts of other years

Source: Atradius Dutch State Business N.V., "Annual Report 2007", Atradius Dutch State Business N.V., April 2008; Atradius Dutch State Business N.V., April 2009; Atradius Dutch State Business N.V., April 2009; Atradius Dutch State Business N.V., "Uitgereikte Polissen 2004-09", Atradius Dutch State Business N.V., February 2005-10

Therefore, we conclude that the percentage of capital attributed to guarantees for CO<sub>2</sub> intensive projects lies within the range of 48 and 81 percent.

Table 36 shows how the amounts and relative shares (with respect to the total amount and total reported amount) are distributed across the carbon intensive sectors as identified by FERN.

Table 36 Atradius Dutch State Business: Export credit guarantees 2004-09

Sector	Amount (mln €)	Percentage of total covered (%)	Percentage of total reported (%)
Fossil-fuel electricity plant	52.0	0.3	0.5
Oil & gas extraction	789.3	4.9	8.2
Shipping	2,989.3	18.5	31.0
Mining	3.4	0.0	0.0
Dredging	3,284.3	20.3	34.1
Iron & steel	264.0	1.6	2.7
Pulp & paper	-	0.0	0.0
Chemical industry	42.5	0.3	0.4
Transportation infrastructure	347.0	2.1	3.6
Aircrafts manufacturing	-	0.0	0.0
Airlines	-	0.0	0.0
Total*	7,771.7	48.1	80.6

<sup>\*</sup> The inconsistency between this  $\in$  7,771.7 and the  $\in$  7,700.0 of Table 16 is due to rounding off numbers

Source: Atradius Dutch State Business N.V., "Annual Reports 2004-08", *Atradius Dutch State Business N.V.*, April 2005-09.

Evidently, Atradius predominantly financed export products from the "shipping" and "dredging" sectors during the past six years.

# Chapter 15 Poland - KUKE

#### 15.1 General

Since 1991, Korporacja Ubezpieczen Kredytow Eksportowych (KUKE), or the Export Credit Insurance Corporation Joint Stock Company of Poland, provides insurance services to Polish entrepreneurs. It is the only institution in Poland authorized to provide export insurance backed by the state treasury.<sup>22</sup>

### 15.2 Total export credit guarantees

Figure 15 shows how the total volume of insurances issued by KUKE developed over the years. A trend of growth can be observed, both in the overall guarantee amount per year and in the annual amount of state-backed insurances. By the end of 2007, KUKE provided non-marketable insurances with an annual value of US\$ 1,476.8 million (€ 1,002.7 million). Data for 2008 and 2009 are still unavailable.

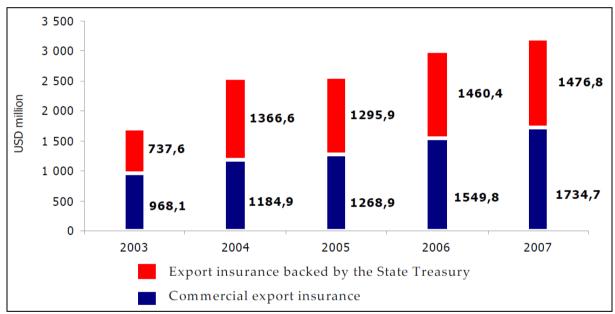


Figure 15. KUKE: Export credit guarantees 2003-2007 (mln US\$)

Source: KUKE, "Annual report 2007", KUKE, early 2008.

Figure 16 shows the development of the short-term (less than two years) segment of these state-backed guarantees. Turnover means the export credit amount that was covered by KUKE guarantees in each year. Once again, a tendency of chronological growth is observed. In the year 2007 KUKE provided short-term non-marketable guarantees over US\$ 703.8 million (€ 477.8 million) of export credits, meaning that the insured amount of long-term credits was US\$ 773 million (€ 524.8 million).

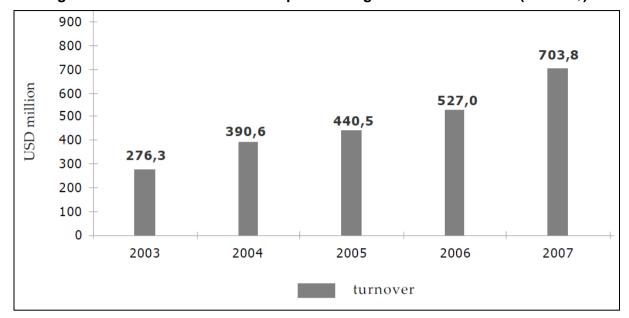


Figure 16. KUKE: Short-term export credit guarantees 2003-2007 (mln US\$)

Source: KUKE, "Annual report 2007", KUKE, May 2008.

### 15.3 Export credit guarantees by region

Table 37 shows how the geographical allocation of the short-term export credit guarantee volume changed over time. Data were only for the years 2005, 2006 and 2007. Russia and Ukraine were the largest export destinations in terms of short-term state-backed guarantees in each of the three years.

Table 37 KUKE: Short-term export credit guarantees per country in 2005-07

Country	2005	2006	2007
Russia	54.1	38.1	38.6
Ukraine	20.9	34.6	35.7
Belarus	2.7	15.3	13.9
Kazakhstan	0.0	6.6	4.7
Moldova	0.0	2.8	2.8
Serbia	17.1*	0.4	1.7
Other	5.2	2.2	2.6
Total	100.0	100.0	100.0

<sup>\*</sup> It was still part of Serbia-Montenegro

Source: KUKE, "Annual reports 2005-07", KUKE, May 2006-08.

Table 38 shows how the long-term bonds and guarantees by KUKE were geographically distributed in this period. As can be observed, this type of financing is devoted to a completely different set of countries. The Isle of Man and Germany are the largest export destinations in terms of long-term bonds and guarantees.

Table 38 KUKE: Long-term export credit guarantees per country in 2005-07

Country	2005	2006	2007
Isle of Man	26.2	43.3	64.2
Germany	43.7	23.0	12.6
Netherlands	10.8	15.9	12.4
Italy	0.0	0.0	8.0
Norway	16.4	10.7	2.8
Other	2.9	7.1	0.0
Total	100.0	100.0	100.0

<sup>\*</sup> It was still part of Serbia-Montenegro

Source: KUKE, "Annual reports 2005-07", KUKE, May 2006-08.

# 15.4 Export credit guarantees by sector

Table 39 gives the allocation of all KUKE's export guarantees that are backed by the state treasury over the different economic sectors. As can be seen in the table, there is very little overlap between the sectors for which short-term guarantees are issued, and the ones for which medium or long-term guarantees are provided.

Table 39 KUKE: Export credit guarantees per sector in 2005 (%)

Industry	Short-term	Medium and long-term
Ships		37.5
Construction services and materials		27.1
Wood and wood products	26.5	
Non-metallic products	21.9	
Metals	4.5	19.4
Rubber and plastic	9.7	
Other industrial machinery	4.9	3.7
Electricity generating equipment		8.4
Wholesale trade	6.9	
Chemical products	6.3	
Paper and paper products	3.6	
Mining equipment		3.0
Food processing equipment		0.9
Total	100.0	100.0

<sup>\*</sup> No distinction was made between "chemistry and metal working" and "process industry"

Source: KUKE, "Annual report 2005", KUKE, May 2006.

#### 15.5 Guarantees for carbon intensive sectors

KUKE published very little information on the guarantees it provided to carbon intensive export products. It only specified six environmentally sensitive projects of which two were also carbon intensive:<sup>23</sup>

- In August 2006 KUKE issued a guarantee for the construction of a power plant in Macedonia.
- In March 2008 it issued a guarantee for the construction of a mining and production complex with a port (embankments, loading equipment and a site for storing of aggregate) in Russia.

Since KUKE only stated the sectoral allocation of its export credit guarantees in the year 2005, only for this year a percentage can be computed. Since 34% of 2005's guarantee volume were short-term guarantees and the remaining 66% were medium or long-term, the sector percentages of Table 39 will be weighed accordingly in the last column of Table 40.

Table 40 KUKE: Export credit guarantees to carbon intensive sectors 2005

Sector	percentage of short- term guarantee volume (%)	percentage of medium/ long-term guarantee volume (%)	percentage of total guarantee volume (%)
Fossil-fuel electricity plant	0.0	8.4	5.5
Oil & gas extraction	0.0	0.0	0.0
Shipping	0.0	37.5	24.8
Mining	0.0	3.0	2.0
Dredging	0.0	0.0	0.0
Iron & steel	4.5	19.4	14.3
Pulp & paper	3.6	0.0	1.2
Chemical industry	6.3	0.0	2.1
Transportation infrastructure*	0.0	0.0 - 27.1	0.0 - 17.9
Aircrafts manufacturing	0.0	0.0	0.0
Airlines	0.0	0.0	0.0
Total	14.4	68.3 - 95.4	49.9 - 67.8

<sup>\*</sup> Depending on the extent to which "Construction services and materials" from Table 39 includes construction of transportation infrastructure.

Source: KUKE, "Annual report 2005", KUKE, May 2006.

We conclude that the proportion of KUKE's export credit guarantee volume that is devoted to carbon intensive projects lies within the range of **49.9%** to **67.8%**.

# Chapter 16 Portugal - COSEC

#### 16.1 General

Companhia de Seguro de Créditos, SA (COSEC) is the leading insurer in Portugal in the fields of credit insurance and bond insurance. It is also responsible, for account and by order of the Portuguese state, for covering and managing credit and investment risks in political risk countries.<sup>24</sup>

### 16.2 Total export credit guarantees

Table 41 gives an overview of the total amount for which COSEC provided state-backed export credit guarantees in 2007 and 2008. In these years, the guarantee volume increased by 17.2%. Overall, the amount for which COSEC issued guarantees in these two years is €291.1 million. No data were available for other years.

Table 41 COSEC: Export credit guarantees 2007-08 (mln €)

Year	Value (mIn €)
2007	134.0
2008	157.1
Total	291.1

Source: COSEC, "Annual report 2008", COSEC, September 2009.

### 16.3 Export credit guarantees by region

As far as state-guaranteed credit insurance in 2008 is concerned, Angola was the main market, although guarantees were also issued for operations carried out in other markets, such as Venezuela, Libya, Russia, Turkey, Algeria and Iran.<sup>25</sup>

Percentages of the distribution between different export destinations of Portuguese entrepreneurs were only found for the allocation of external credit risk over different countries. These proportions are shown in Table 42.

Table 42 COSEC: Geographic distribution of external credit risk in 2008

Country	2008
Spain	22.0
Germany	10.0
France	26.0
United Kingdom	10.0
The Netherlands	4.0
Italy	9.0
United States	6.0
Other markets in Europe	16.0
Other markets outside Europe	7.0
Total	100.0

Source: COSEC, "Annual report 2008", COSEC, September 2009.

# 16.4 Export credit guarantees by sector

In 2008, the more expressive sectors in which COSEC was involved were Civil Engineering and Public Works, Telecommunications, Ship Repair and Aeronautical Industry and Chemical Products.<sup>26</sup>

#### 16.5 Guarantees for carbon intensive sectors

No overview of specific projects was encountered for COSEC, but the sector description above indicates that two out of the four expressive sectors are categorized by FERN as carbon intensive. It is unclear whether these four sectors are claimed to be "expressive" because of the high quantity of export credit insurances to these sectors or the high aggregate value of the guarantees to these sectors.

# Chapter 17 Slovak Republic - Eximbanka

#### 17.1 General

Exportno-Importnej Banke Slovenskej Republiky SR (Eximbanka), or the Export-Import bank of the Slovak Republic, is the Slovak Republic's state owned export credit agency. It started its activities on 22 July 1997, with as its main objective to support the maximum volume of export of sophisticated production, especially to the European Union and OECD countries, as well as to developing countries, while ensuring the return on investment through the minimization of risks arising from insurance, credit, guarantee, and finance activities.<sup>27</sup>

### 17.2 Total export credit guarantees

Table 43 shows how the aggregate value of all export loans, guarantees and non-marketable export credit insurances changed over the years. Export-related loans and guarantees fall under the Eximbanka's banking activities, while the last category are the export credit insurances that are guaranteed by the Slovakian state. <sup>28</sup> Insurances to non-marketable risks comprise 25.7% of the entire export insurance volume of Eximbanka. <sup>29</sup>

In all cases there is an upward tendency over time. We estimate that by 2009 the amounts for the first two were approximately double the amounts of 2004 and the volume of non-marketable insurances almost tripled. Taking these six years together, we estimate that Eximbanka lent approximately € 1.3 billion and guaranteed around € 0.4 billion worth of Slovakian export projects. It provided state-guaranteed export credit insurances for around € 0.8 billion.

Table 43 Eximbanka: Export credit guarantees 2004-09 (mln €

	2004	2005	2006	2007	2008	2009*	Total
Total volume of loans at nominal value	139.2	161.8	209.6	229.8	268.3	300.6	1,309.3
Increment		22.6	47.8	20.2	38.5	32.3	
Total volume of guarantees issued	54.3	61.9	55.3	71.8	94.8	104.9	443.0
Increment		7.6	(6.6)	16.5	23	10.1	
Non-marketable insurance volume	36.1	54.6	101.5	80.2	250.9	304.6	827.9
Increment		18.5	46.9	(21.3)	170.7	53.7	

<sup>\*</sup> Amounts were estimated using the average annual increment over the previous years.

Source: Eximbanka, "Annual reports 2004-08", Eximbanka, July 2005-09.

#### 17.3 Export credit guarantees by region

Table 44 shows how Eximbanka's export credit guarantees were distributed over different countries during 2004-06. It indicates that there is great variety in the relative importance of export destinations over the years. Generally large export countries for the Slovak Republic during 2004-06 were Germany, Italy and Poland.

Table 44 Eximbanka: Export credit guarantees per country 2004-06

Export countries	2004	2005	2006
Germany	9.4%	9.6%	11.5%
Italy	6.5%	10.1%	8.1%
Slovak Republic	?	4.7%	13.7%
Poland	18.7%	7.3%	6.0%
Hungary	10.9%	4.0%	?
Russian Federation	2.9%	8.9%	?
Czech Republic	8.7%	5.4%	5.7%
Turkey	6.0%	?	8.8%
Ukraine	2.9%	7.2%	5.9%
Belgium	?	7.6%	3.7%
Sweden	2.9%	?	3.8%
Romania	4.2%	?	?
Switzerland	?	3.7%	?
Netherlands	?	?	3.7%
Other countries	26.9%	31.5%	29.1%
Total	€458.5 million	€505.4 million	€806.3 million

Source: Eximbanka, "Annual reports 2004-06", Eximbanka, July 2005-07.

For 2007-08 only a regional division was available, which is presented in Table 45. As was already expected from the country division in Table 44, the far majority of export guarantees is directed towards European and other OECD countries. No data were available for 2009.

Table 45 Eximbanka: Export credit guarantees per region 2007-08

Region	2007	2008
European Union and other OECD countries	93.5%	71.2%
CIS countries	4.8%	0.0%
EFTA countries	1.5%	0.0%
South-East Asia	0.4%	0.0%
Middle East	0.2%	1.9%
Other countries	2.0%	26.9%

Source: Eximbanka, "Annual reports 2007-08", Eximbanka, July 2008-09.

# 17.4 Export credit guarantees by sector

Table 46 gives the allocation of export credit guarantees of Eximbanka over different economic sectors. The sector division was not the same for each year (for example, in 2006 only a few sectors overlapped with those in other years), so some categorizations had to be guessed. This may explain some of the sectoral variation between different years.

Table 46 Eximbanka: Exports guaranteed by sector 2004-08

	2004	2005	2006	2007	2008
Market products	48.0%	54.0%	11.6%	42.2%	54.8%
Machinery and (transport) equipment	14.0%	9.3%	19.6%	19.5%	21.0%
Chemicals	17.0%	13.0%	6.2%	18.1%	6.6%
Industrial products	14.0%	15.2%	4.8%	12.8%	4.2%
Foodstuffs	4.0%	4.7%	0.0%	5.0%	0.9%
Mineral fuels and lubricants	2.0%	2.0%	0.0%	0.9%	0.2%
Other commodities	1.0%	1.1%	3.6%	0.5%	8.4%
Raw materials	0.0%	0.6%	54.2%	1.0%	0.0%
Investments	0.0%	0.1%	0.0%	0.0%	3.9%

Source: Eximbanka, "Annual reports 2004-08", Eximbanka, July 2005-09.

#### 17.5 Guarantees for carbon intensive sectors

No overview of specific projects was encountered for Eximbanka, but the sectoral distribution that was described above gives a rough indication:

- On average, 16.7% of exports supported through Eximbanka insurances were categorized as "Machinery and (transport) equipment", indicating that the category "Transportation Infrastructure" as defined by FERN constituted between 0 and 16.7 percent of exports supported through Eximbanka's guarantees during 2004-08.
- The category "Chemicals", as defined by both Eximbanka and FERN, took up 12.2% of all exports supported by Eximbanka during this five-year period.
- "Mineral fuels and lubricants", comprising in part FERN's carbon intensive category "Oil and gas", constituted 1.0% of Slovakian exports that were supported by Eximbanka's guarantees.
- It is difficult to speculate on whether the other Eximbanka sectors include any of FERN's carbon intensive sectors, but there is a possibility that "Raw materials" includes FERN's categories "Mining" and "Iron and steel", and that "Pulp and paper", "Airlines" and "Aircraft manufacturing" are included in one of the other sectors listed by FERN.

This indication is not sufficiently accurate for allowing the calculation of the (range of the) proportion of guarantees to carbon intensive export projects by Eximbanka.

## Chapter 18 Slovenia - SID

#### 18.1 General

SID Bank (Slovenska izvozna in razvojna banka) was established in 1992 as the Slovenian Export Corporation, with the aim of providing insurance and financing of export for Slovene companies. SID Bank's main activity is the insurance and financing of non-marketable risks.<sup>30</sup>

In the name of the Republic of Slovenia SID Bank as the authorised export-credit agency (ECA) provides:<sup>31</sup>

- Short-term export credit insurance against non-commercial and other non-marketable risks;
- Investment insurance against non-commercial risks;
- Medium-term export credit insurance against commercial and/or non-commercial risks;
- Interest Rate Equalization Programme in financing of international commercial transactions:
- · Other transactions on special authorisation.

SID Bank is not transparent in providing information on the total amount for which it issues export credit guarantees per year, or on the nature of these insurances. No information was found on the geographical or sectoral distribution of SID's insurances, nor of the climate intensity of ECIO's financing activities.

# Chapter 19 Spain - CESCE

#### 19.1 General

The Spanish export credit organization CESCE is not very transparent in providing information about its credit guarantee activities. No total value of issued guarantees was found, apart from €53 billion in 2008.<sup>32</sup> For none of the years an overview can be given of the geographical or sectoral distribution of issued guarantees.

#### 19.2 Guarantees for climate intensive sectors

CESCE did report that in 2008 twelve projects in the environmental categories A and B were financed, and in 2009 six projects. From these reported projects, there were four transactions in each year that can be classified under one of the carbon intensive sectors defined by FERN. Therefore, **44.4%** of all reported transactions by CESCE in the past six years are categorized as CO<sub>2</sub> intensive.

As no amounts were given for these projects, Table 47 only shows how the relative share of the number of guarantees in CO<sub>2</sub> intensive sectors is distributed across the eleven studied industries.

Table 47 CESCE: Export credit guarantees 2008-09 (%)

Sector	Share of number of guarantees (%)
Fossil-fuel electricity plant	11.1
Oil & gas extraction	5.6
Shipping	5.6
Mining	0.0
Dredging	0.0
Iron & steel	0.0
Pulp & paper	0.0
Chemical industry	0.0
Transportation infrastructure	22.2
Aircrafts manufacturing	0.0
Airlines	0.0
Total	44.4

Source: CESCE, "Transactions granted in 2008-09", CESCE, January 2009-10.

The fact that in 2008 the total amount for which CESCE assured export credits was €53 billion, clearly implies that the large majority of transactions was not reported. Therefore, the indication of 44.4% is likely to be very imprecise.

# Chapter 20 Sweden - EKN

#### 20.1 General

Exportkreditnämnden (EKN) is the Swedish national export credit agency, guaranteed by the Swedish state. In contrast to some of the other ECA's studied in this report, EKN's mandate includes providing guarantees that are competitive in relation to what other export credit agencies offer, without being so generous that they subsidise Swedish exports. The premium paid for a guarantee is intended to cover the risk that EKN is taking.<sup>33</sup>

# 20.2 Total export credit guarantees

Table 48 shows how the aggregate value and number of guarantees issued by EKN changed over the years. Although an upward trend can be observed for the number of guarantees, the issued amount dropped significantly in 2007 and then increased again to an estimated € million in 2009. Taking these six years together, we estimate that EKN issued export credit guarantees with a total value of approximately € 18.2 billion.

Table 48 EKN: Export credit guarantees 2004-09 (mln €)

	2004	2005	2006	2007	2008	2009*	Total
Issued guarantee volume (mln €)	2,266.6	2,889.2	4,369.7	2,179.4	2,995.2	3,491.4	18,191.5
Increment		717.3	1,364.4	(1,421.1)	815.8	301.8	
Number of issued guarantees	202.1	192.0	232.1	224.8	259.1	300.8	1,410.9
Increment		(1.6)	32.4	33.6	34.3	24.8	

<sup>\*</sup> Amounts were estimated using the average annual increment over the previous years.

Source: EKN, "Annual reports 2004-08", EKN, March 2005-09.

#### 20.3 Export credit guarantees by region

EKN did not report the relative shares of export countries or regions in its annual export credit guarantee volume. Table 49 gives the largest countries in the annual outstanding guarantee volumes. No exact amounts were disclosed by EKN, so this table only gives a ranking of the ten countries with the most export credit guarantees outstanding at the end of each year. No data were available for 2004 and 2009.

Table 49 EKN: Countries with largest annual outstanding guarantee volumes in 2005-08

2005	2006	2007	2008
South Africa	Pakistan	Pakistan	Pakistan
Iran	South Africa	South Africa	South Africa
India	Sweden	Sweden	Iran
Russia	Iran	Iran	Sweden
China	Russia	India	Russia
Spain	India	Turkey	India
Italy	Italy	Russia	Turkey
Chile	Spain	China	China
Brazil	China	Chile	Chile
Turkey	Chile	Italy	Bangladesh

Source: EKN, "Annual reports 2005-08", EKN, March 2006-09.

### 20.4 Export credit guarantees by sector

Table 50 shows how the total volume of export credit guarantees by EKN was distributed over different industries in each year. Telecom equipment was the largest sector in each year, except for 2006, when the defence industry was the largest with 43.0%.

Table 50 EKN: Export credit guarantees per sector in 2005-08 (%)

Industry	2005	2006	2007	2008
Telecom equipment	35.0	29.0	44.0	30.0
Transport industry	31.0	10.0	27.0	27.0
Engineering industry	13.0	6.0	8.0	17.0
Power generation	12.0	8.0	6.0	16.0
Other	2.0	4.0	7.0	8.0
Defence industry	7.0	43.0	8.0	2.0

Source: EKN, "Annual reports 2005-08", EKN, March 2006-09.

#### 20.5 Guarantees for carbon intensive sectors

EKN only disclosed some limited information on projects that fell within the environmental categories A and B in the years 2006-08. In these three years it reported 15 projects as environmentally intensive. Seven (46.7%) of these projects can be classified under one of FERN's carbon intensive industries. Four (26.7%) of them were "Fossil-fuel electricity plants", and there was one project (6.7%) in the categories "Pulp and paper", "Transportation infrastructure" and "Oil and gas". Since a very minimal amount of projects for which EKN issued guarantees were listed as environmentally intensive, the above percentages cannot be statistically relied upon.

When looking at the industry divisions made by EKN (Table 50), FERN's "Transportation infrastructure" industry would be expected to comprise 23.8% of EKN's guarantee volume in 2005-08. Power generation, assuming this is all based on fossil fuels, took up on average 10.5% of EKN's guarantee volume in this period. Overall, this would indicate that the share of EKN's guarantee volume dedicated to carbon intensive export projects is at least **34.3%**.

# Chapter 21 United Kingdom - ECGD

#### 21.1 General

ECGD, the Export Credits Guarantee Department, is the UK's official Export Credit Agency.

It provides insurance to UK exporters against non-payment by their overseas buyers, guarantees for bank loans to facilitate the provision of finance to buyers of goods and services from UK companies, and political risk insurance to UK investors in overseas markets.<sup>34</sup>

# 21.2 Total export credit guarantees

Figure 17 shows how the total amount for which ECGD provided guarantees in each calendar year developed during the period 2004-2009:

2008-09 -2007-08 -2006-07 -2005-06 -2004-05 -0 500 1000 1500 2000 2500

Figure 17. Amounts (in mln £) for which ECGD provided guarantees in 2004-09

Source: ECGD, "Annual Report 2008-09", ECGD, September 2009.

Table 51 gives these figures converted into euro's, using OANDA exchange rates on 1 January in each of the calendar years:

Table 51 ECGD: Export credit guarantees 2004-2009 (mln €)

Calendar year	2004–05	2005–06	2006–07	2007–08	2008–09	Total
Guarantees issued (mln €)	2,881.9	3,245.3	2,666.4	2,484.9	1,982.5	13,261.0
of which OII (mIn €)	496.1	347.8	225.4	187.4	89.8	1,346.5

Source: ECGD, "Annual Report 2008-09", *ECGD*, September 2009; OANDA Currency Converter, Viewed in March 2010.

Under its Overseas Investment Insurance (OII) scheme, ECGD provides political risk insurance in respect of investments by UK firms overseas. No new investments were insured during the year 2008-09. The maximum liability in respect of OII stands at £ 81 million (€ 87.1 million) at 31 March 2009, a reduction from £ 138 million (€ 174.2 million) in 2007-08.

# 21.3 Export credit guarantees by region

In 2008-09 the business supported by ECGD related to 22 overseas countries, compared with 24 for the previous year, and the total number of guarantees and insurance policies issued increased from 96 to 136. Figure 18 until Figure 21 shows how the issuance of guarantees was distributed geographically in the calendar years 2005-06 – 2008-09.

5% 3%

Africa

Americas

Asia

Europe

Figure 18. ECGD: Business supported by region (%) in 2005-06

Source: ECGD, "Annual Report 2005-06", ECGD, September 2006

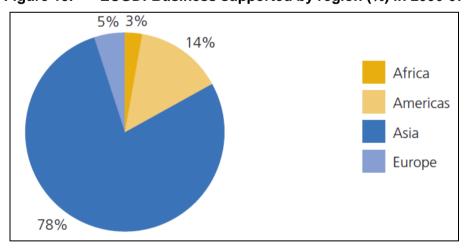


Figure 19. ECGD: Business supported by region (%) in 2006-07

Source: ECGD, "Annual Report 2006-07", ECGD, September 2007

8% 2%

30%

Africa

Americas

Asia

Europe

Figure 20. ECGD: Business supported by region (%) in 2007-08

Source: ECGD, "Annual Report 2007-08", ECGD, September 2008

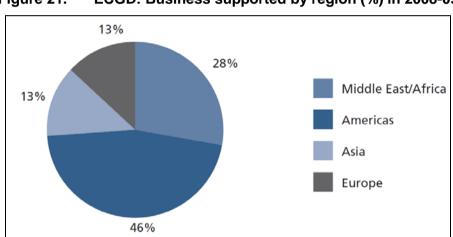


Figure 21. ECGD: Business supported by region (%) in 2008-09

Source: ECGD, "Annual Report 2008-09", ECGD, September 2009

# 21.4 Export credit guarantees by sector

Figure 22 shows how the guarantees issued by ECGD in 2008-09 were distributed over the four main sectors of United Kingdom exports:

1%

Airbus

Other Aerospace

Civil

Defence

Figure 22. ECGD: Value of business supported by sector in 2008-09

Source: ECGD, "Annual Report 2008-09", ECGD, September 2009.

Table 52 shows the development of this distribution over the studied years. Guarantees provided to the export of airbuses by the British company Airbus S.A.S. increased significantly in the calendar year 2008-09. ECGD guaranteed financing for more than 100 aircraft deliveries. This represented the largest number of Airbus aircraft ever supported by ECGD in a single financial year. The aircraft were delivered to 23 airlines and operating lessors in Australia, North- and South America, Asia, Northern Africa, and Europe. 35

Table 52 ECGD: Guarantees by sector (%) in 2004-2009

Sector	2004–05	2005–06	2006–07	2007–08	2008-09
Airbus	31	44	27	29	72
Other Aerospace	1	3	2	1	1
Civil	30	30	29	13	26
Defence	38	23	42	57	1

Source: ECGD, "Annual Report 2008-09", ECGD, September 2009

The amount for which ECGD provided Defence guarantees decreased dramatically in the past calendar year. ECGD provided Atradius (the Dutch ECA) with reinsurance to cover a €12.5m contract won by Thales (UK). The order was to supply a range of electronic equipment (radar detectors, decoys, underwater telephones) to be fitted on four Dutch Sigma-class corvette naval vessels being supplied to the Indonesian Ministry of Defence. During the year, BAE Systems decided not to continue its insurance with ECGD for the Saudi-British Defence Co-operation Programme, on which it is the prime contractor.<sup>36</sup>

#### 21.5 Guarantees for climate intensive sectors

At the end of each calendar year, ECGD publishes a list of some of the new guarantees it issued during those twelve months. The remaining transactions are commercially confidential and not disclosed. In total, 166 transactions were reported during the period 2004-09, of which 148 (89.2%) concern insurances for activities that fall within at least one of the defined carbon intensive sectors.<sup>37</sup>

We also analysed how the capital values of the reported  $CO_2$  intensive sectors relate to the overall reported transaction values. Table 53 shows these amounts for each year and for the entire period (converted into euro's, using OANDA exchange rates of 1 January in each calendar year). The overall amounts of guarantees issued were copied from Table 51 for comparison.

Overall, **94.5%** of all guarantees reported by ECGD were issued to carbon intensive industries. This percentage is somewhat higher from when the quantities were used (89.2%), meaning either that the carbon intensive export products received guarantees with a relatively higher value than products from other sectors did, or that the reported transactions by ECGD contain relatively more  $CO_2$  intensive sectors than the unreported ones. In that case, the 94.5% would be an overestimation of the actual proportion of carbon intensive projects.

Table 53 ECGD: Export credit guarantees 2004-2009 (mln €)

Calendar year	2004–05	2005–06	2006–07	2007–08	2008–09	Total
Guarantees reported (mln €)	1,171.8	2,145.4	1,315.3	2,444.5	1,487.3	8,564.3
Guarantees issued (mln €)	2,881.9	3,245.3	2,666.4	2,484.9	1,982.5	13,261.0

Source: ECGD, "Annual Report 2008-09", ECGD, September 2009; OANDA Currency Converter, Viewed in March 2010.

When comparing the value of the observed  $CO_2$  intensive projects with the overall issued amounts for each year, **61.0%** of the value of all guarantees concerns climate sensitive sectors. This, however, might be an underestimation, in case the unreported transactions include carbon intensive projects as well.

Table 54 shows how the amounts and relative shares are distributed across the carbon intensive sectors as identified by FERN. The total guarantee amounts are the sum of the annual amounts listed in Table 51 and Table 53.

Table 54 ECGD: Export credit guarantees 2004-09

Sector	Amount (mln €)	Percentage of total reported (%)	Percentage of total issued (%)	
Fossil-fuel electricity plant	252.9	3.0	2.8	
Oil & gas extraction	755.6	8.8	15.7	
Shipping	388.2	4.5	0.5	
Mining	-	0.0	0.0	
Dredging	-	0.0	0.0	
Iron & steel	274.0	3.2	4.0	
Pulp & paper	-	0.0	0.0	
Chemical industry	-	0.0	0.0	
Transportation infrastructure	354.7	4.1	2.5	
Aircrafts manufacturing	1,221.4	14.3	7.3	
Airlines	4,848.4	56.6	28.2	
Total	8,095.2	94.5	61.0	

Source: ECGD, "Annual Reports 2004-05 – 2008-09", *ECGD*, September 2005-09

Overall, we conclude that the percentage of capital attributed to guarantees for CO2 intensive projects lies within the range of 61.0 and 94.5 percent.

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