European Parliament two-seat operation:

## Environmental costs, transport & energy

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#### Note

As a UK-authored document, the convention in this report is to use points (".") for decimal places (e.g. 2.5).

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## **Executive Summary**

The European Parliament has two seats and meets regularly in both Brussels and Strasbourg. The duplication of facilities and the demands made on MEPs, staff, journalists and assistants imposes significant financial, environmental and organisational penalties on Europe's Parliament. The financial penalties are estimated to be over 200 million Euros each year.

This report has carried out a systematic analysis of the use of energy in buildings, transport and purchases associated with the Strasbourg operation and has used widely accepted methods and techniques to convert these details into estimates of the  $CO_2$  impact of the two-seat operation.

We have carried out the analysis focussing on Strasbourg and on the  $CO_2$  impact of the Strasbourg operation. The total  $CO_2$  inventory associated with Strasbourg is 18901 tonnes pa.

This total is significant in several respects. It is large, it is avoidable and it would be prudent for the Parliament to set a clear example in reducing these emissions especially at a time when the European Union is taking a lead in advocating cuts in greenhouse gases. Not to "put its own house in order" is to send all the wrong signals at a time when convincing leadership is needed if the Union is to be successful in heading off the worst consequences of climate change.

We are confident our calculations are correct but in two respects they must be regarded as interim. Firstly we have not had access to high quality data on all aspects of personnel and transport. We have used such data as were available and made clear our assumptions and scenarios. Secondly we have not carried out a compensatory analysis for any additional energy expenditure in Brussels if the Strasbourg operation were to cease. This requires more detailed energy and operational practice information than was available to us but we are confident that any compensatory changes of this kind will be minor.

The Strasbourg operation imposes a very large climate change burden. There are reasons why Parliament has evolved this way but the urgent need to take action on climate change requires a change of plan. Not to change historical operational practice sends a very clear message to millions of citizens and thousands of businesses that they need not try very hard to change behaviour if this change is inconvenient. This would be a serious mistake at a critical juncture in the climate change policy debate. The conclusion that follows from this is that on climate change grounds the European Parliament should concentrate all its activities in Brussels and bring the Strasbourg operation to an end.

## 1 Introduction

- 1.1 Eco-Logica Ltd was commissioned on 12<sup>th</sup> February 2007 by Caroline Lucas MEP and Jean Lambert MEP to carry out a study of the environmental impact of the current pattern of two-seat operation of the European Parliament.
- 1.2 The terms of reference of this study are:
  - Collect and assess energy consumption data of all EP buildings in Brussels and Strasbourg and identify the proportion of this combined total that could reasonably be regarded as over and above what would be needed in a one-seat operation, assuming the one seat would be Brussels.
  - Collect and assess information on the transport, energy and climate change implications of moving MEPs, assistants, support staff and freight between Brussels and Strasbourg.
  - Take into account any compensatory movements, which might, for example, produce shorter journeys to Strasbourg than would be the case for a trip to Brussels and build this into the analysis.
  - Arrive at an evidence-based and robust conclusion about the environmental and climate change implications of running a one-seat, Brussels-based, operation for the European Parliament.



Photo: Lukas Riebling 2005

## 2 The geographical basis of European Parliament operations

2.1 When it met in Edinburgh on 11 and 12 December 1992, the European Council reached agreement on the location of the seats of the institutions and of certain bodies and departments of the European Communities and of Europol. That agreement was subsequently set out in a protocol annexed to the Treaty of Amsterdam, which lays down in particular:

'The European Parliament shall have its seat in Strasbourg where the 12 periods of monthly plenary sessions, including the budget session, shall be held. The periods of additional plenary sessions shall be held in Brussels. The committees of the European Parliament shall meet in Brussels. The General Secretariat of the European Parliament and its departments shall remain in Luxembourg.'

*Source: The Secretary General of the European parliament, D/24355; NT/475413EN.doc; PE 320.860/BUR./fin. (Page 2/8)* 

2.2 In its judgment of 1 October 1997 (Case C-345/95, French Republic v European Parliament), the Court of Justice of the European Communities held that:

'The decision [taken in Edinburgh] must be interpreted as defining the seat of the Parliament as the place where 12 ordinary plenary part-sessions must take place on a regular basis, including those during which the Parliament is to exercise the budgetary powers conferred upon it by the Treaty. Additional plenary part-sessions cannot therefore be scheduled for any other place of work unless the Parliament holds the 12 ordinary plenary part-sessions in Strasbourg, where it has its seat.'

## and that

'... the Governments of the Member States have not, by so defining its seat, encroached upon the power of the Parliament to determine its own internal organisation, conferred by Articles 25 of the ECSC Treaty, 142 of the EC Treaty and 112 of the EAEC Treaty.'

On the basis of an exchange of letters, implementing procedures have been agreed with the Grand Duchy of Luxembourg which stipulate that, out of the total number of staff employed by the European Parliament (excluding political group and external office staff), at least half must be assigned to Luxembourg. Similarly, half of the new posts created as a result of enlargement must also be assigned to Luxembourg. *Source:* The Secretary General of the European parliament, D/24355; NT/475413EN.doc; PE 320.860/BUR./fin. (page 3/8)

2.3 Parliamentary activities are organised over a four-week cycle, with two weeks being set aside for meetings of parliamentary committees and delegations, followed by one week earmarked for political group meetings and one plenary part-session week. During the first three weeks, meetings are held in Brussels, with the fourth week being spent in Strasbourg.

No plenary part-session is held in August during the parliamentary recess. However, a second part-session is usually held in Strasbourg in late September or early October. When Parliament is in session in Strasbourg, political group meetings and any parliamentary committee meetings convened to address urgent problems are also held in Strasbourg. Six times a year, an additional short plenary part-session is held in Brussels, during a week set aside for parliamentary committee meetings.

Source: The Secretary General of the European parliament, D/24355; NT/475413EN.doc; PE 320.860/BUR./fin. (Page 3/8)

- 2.4 The effect of these geographical dispersion arrangements is that the European Parliament buildings in Strasbourg are largely empty for 307 days each year and in use for the remainder of the year. There are efforts to use the chamber more efficiently, in terms of finding alternative uses for when the Parliament is not in session (e.g. for large-scale civil society congresses and youth events), but these are only occasional.
- 2.5 With a view to meeting requirements relating to parliamentary meetings and to offices for Members, staff and support services, building complexes have had to be constructed in the three places of work with twice the amount of equipment. For example, the conference rooms in Brussels and Strasbourg are generally not used simultaneously (although the Social and Economic Committee of the EU and the Committee of the Regions do occasionally use the chamber and large conference rooms). The same applies to Members' offices. A very large number of officials of the European Parliament and of the political groups have a permanent office in Luxembourg, plus a temporary office in one or even both of the other places of work. Alternating the organisation of parliamentary activities between Brussels and Strasbourg also requires twice the amount of infrastructure and of technical equipment for IT, simultaneous interpretation and telecommunications, as well as of general amenities.

Concentration of parliamentary activities in one single place of work would, therefore, render redundant:

- one Chamber
- 21 large conference rooms (seating between 100 and 350 persons) and 13 small conference rooms (seating between 20 and 60 persons) with interpreters' booths and 13 small conference rooms without interpreters' booths
- 2 650 offices
- the corresponding technical areas and general amenities

i.e. a total surface area of about 300 000  $m^2$ , the rent for which amounts annually to EUR 60 million, to which must be added another EUR 18 million in ancillary costs (water, gas, electricity, insurance, maintenance of technical installations, security), i.e. a total of EUR 78 million.

Source: The Secretary General of the European parliament, D/24355; NT/475413EN.doc; PE 320.860/BUR./fin. (Page 4/8)

2.6 One other important budget item concerns <u>mission expenses</u> for staff travelling between the three places of work. The total cost of mission expenses is EUR 18 million.

When a part-session is held in Strasbourg, 1 220 officials and other servants of Parliament and of the political groups, as well as freelance interpreters, travel from Brussels to Strasbourg as do another 525 from Luxembourg to Strasbourg<sup>1</sup>.

1 The document dates from 2002 but unfortunately no more up-to-date figures were available. Since two waves of enlargement have happened since then and the EU has gone from 15 Members to 27, the current figure is likely to be significantly higher.

*Source: The Secretary General of the European parliament, D/24355; NT/475413EN.doc; PE 320.860/BUR./fin. (page 6/8)* 

- 2.7 The geographical dispersion of the European Parliament also generates costs charged to budgets other than its own. For example, when a part-session is held in Strasbourg, the following staff travel there at their employer's expense:
  - 400 hundred personal assistants of Members employed in Brussels
  - 120-160 journalists based in Brussels
  - Dozens of officials employed by the Commission, the Council and the Permanent Representations of the Member States
  - Lobbyists

Source: The Secretary General of the European parliament, D/24355; NT/475413EN.doc; PE 320.860/BUR./fin. (Page 7/8)

2.8 The operation of two Parliamentary locations in Brussels and Strasbourg also generates freight movements by lorry:"...including the fifteen lorries which ferry cupboards and tin trunks full of

documents each month from Brussels or Luxembourg to Strasbourg and back again."

Source: The Secretary General of the European parliament, D/24355; NT/475413EN.doc; PE 320.860/BUR./fin. (Page 6/8)

## 3 Data sources: budgets

- 3.1 The Secretary General's report on Parliament's draft estimates for the financial year 2007 is revealing about the costs of running the European Parliament and the areas of cost that could offer potential reduction if all meetings took place in Brussels (our one-seat in Brussels assumption). The report quantifies the potential savings from adopting the one-seat option at 206 617 million Euros (Table C, page 10/11 of DV/603846EN.doc; PE 368.766/BUR/ANN.IV).
- 3.2 The budget headings in the report are not as helpful as they could be in quantifying savings under different headings (e.g. energy consumption in the EP's Strasbourg buildings and travel expense between Brussels and Strasbourg for MEPs, assistants and other staff). Nevertheless they give an outline indication of the scale of the budget commitment to Strasbourg, which in turn gives an indication of the scale of environmental impact including climate change impact.
- 3.3 The main headings relevant to environmental impact and climate change impact are summarised in Table 3.1

Table 3.1: Parliament Budgets relevant to environmental and climate change impacts (draft estimates for 2007 in millions of Euros)

Travel and subsistence of members	77.5
Missions (staff)	25.0
Expenditure on energy in buildings	13.1
Political group expenditure on travel and subsistence	13.5
Travelling between the three main locations	2.4

Source: Annexe 4 to the Secretary-General's report to the members of the Bureau on Parliament's preliminary draft estimates for the financial year 2007 DV/603846EN.doc; PE 368.766/BUR/ANN.IV.

- 3.4 The geographical dispersion arrangements described in section 2 generate significant movements of staff between Brussels, Strasbourg and Luxembourg. These are quantified in Para 2.6 and are estimated to cost 18 million Euros.
- 3.5 The Secretary General has provided a summary table of the costs of the annual cost of the geographical dispersion (Table 2).

## Table 3.2: Annual cost of the geographical dispersion

These figures provide a basis for estimating the annual cost arising from the geographical dispersion of the European Parliament. They break down as follows:

Infrastructure costs	-	premises		78 r	nillion
	-	IT and other equipmer	nt	42 r	nillion
Staff costs	-	supernumerary staff		22 r	nillion
	-	mission expenses		18	million
Sundry operating costs	-			<u>9 m</u>	illion
			Total:	169	million
Expected impact of enlarg	ement			<u>34 r</u>	<u>nillion</u>

General total: 203 million

That amount, before and after enlargement, accounts for about 16% of Parliament's total budget.

Source: The Secretary General of the European Parliament, D/24355; NT/475413EN.doc; PE 320.860/BUR./fin. (Page 8/8)

#### 4 Data sources: energy

4.1 Energy consumption data for 2006 has been supplied by the European Parliament for Strasbourg. The raw consumption data and its  $CO_2$  equivalent are shown in Table 4.1.

Table 4.1: Raw energy consumption data for Strasbourg (kWh) and its  $CO_2$  equivalent (tonnes)

	kWh	CO <sub>2</sub> tonnes (Note 1)	CO <sub>2</sub> tonnes (Note 2)
Electricity	42 402 955	3 472	2078
Gas	9 736 105	1 850	1850
Totals		5 322	3928

Source of kWh data: Communication from the Directorate General for the Presidency, Secretariat of the Bureau, the Conference of Presidents and Quaestors, 27<sup>th</sup> March 2007, letter to Caroline Lucas MEP (under the name of Peder Kyst)

#### Note 1

The  $CO_2$  tonnage figure is based on the conversion factors in the Climate Care report. This uses a conversion factor of 80g/kWh for electricity and 0.19kg/kWh for gas

#### Note 2

The  $CO_2$  tonnage figure is based on our own calculations, which use the same value as Climate Care for gas, but 49g/kWh for electricity. The 49g/kWh conversion factor is from the French electricity supplier EDF.

Source: <u>http://particuliers.edf.fr/141288i/EDF-Particuliers/pages-</u> transverses/questions-frequentes/ethique-et-developpement-durable.html

4.2 It is clear that the transfer of activities from Strasbourg to Brussels would add an additional amount of energy consumption, maintenance and purchases to the Brussels total, and so not all of the consumption in the above calculations would be removed if a one-seat in Brussels operation were to become a reality. Unfortunately the data available were not sufficiently detailed to accurately quantify the additional burden on Brussels under such a scenario. However, they suggest that in fact the majority of consumption in both places is a base load, and so the additional amounts related to the increased activity during plenary sessions is likely to be relatively insignificant.

#### 5 Data sources: Non MEP Travel

#### 5.1 Mission staff travel: Secretariat General and Political Group staff

The 2007 estimates for European Parliament staff state that the staff total is 5959.

*Source: European Parliament, Committee on Budgets, Report on the estimates of revenue and expenditure of the EP for the financial year 2007 (2006/2022(BUD)).RR/371734EN.doc PE 371.734v03-00. Page14/63* 

Precise travel data concerning mission staff numbers for the period 2006 was provided by the Secretary General – *Directorate General Presidency, Secretariat of the Bureau of the Conference of Presidents and the Quaestors on 16/04/2007 by courtesy of Mr Peder Kyst.* Full details of the Secretary General communication and the mission staff travel data can be found in appendix VI in this report. These data cover all staff of the Parliament's Secretariat General (e.g. civil servants of the Committees; interpreters; ushers), but not staff of the political groups (see below).

The travel data shows total movements of European Parliament staff of the Secretariat General on mission during the year 2006 between the parliamentary seats in both Brussels and Luxembourg to Strasbourg. We will assume that this movement between parliamentary seats takes place 12 times per year in accordance with the timing of plenary sessions held in Strasbourg.

Section 5.2 details the movement of these staff between Brussels & Strasbourg, mode of transport used and  $CO_2$  emissions generated. Data for mission staff movements between Luxembourg and Strasbourg are supplied in Section 5.3.

Besides the staff of the Secretariat General, each of the Parliament's nine political groups employs staff in numbers proportional (or very nearly so) to the number of MEPs in that group. Unfortunately no specific data were received on the movements of this category of staff so appropriate assumptions and scenarios have been constructed, as set out in Section 5.4.

Emission factors have been taken from the following source: "To shift or not to shift, that's the question." The environmental performance of the principal modes of freight and passenger transport in the policy-making context. CEC 2003. Annex C, pg 93 (table 1). This source will henceforth be referred to as CEC 2003.

## 5.2 Mission staff travel (Secretariat General): Brussels - Strasbourg

5.2.1 The travel data provides the total number of Parliament staff of the Secretariat General on mission to Strasbourg from Brussels in 2006 and the mode of transport used to complete the journey. Data is provided for both outward and return journeys made by staff and this information is presented in tables 5.1 and 5.2:

Table 5.1: Total number of Secretariat General staff on mission to Strasbourgin 2006 and mode of transport. **Outward journeys** Brussels - Strasbourg

	Outward Journey Brussels			
	12 plenary sessions	1 plenary session		
Air	4896	408		
1st Class Rail	1418	118		
2nd Class Rail	273	23		
Sleeper Rail	4	C		
Shared car	264	22		
Own car	5895	491		
Service car	605	50		
Other	69	6		
Total	13424	1119		

Source: Adapted from Directorate-General Presidency. Secretariat of the Bureau of the Conference of Presidents and the Quaestors on 16/04/2007 by courtesy of Mr Peder Kyst (see appendix VI)

Table 5.2: Total number of Secretariat General staff on mission to Strasbourg in 2006 and mode of transport. *Return journeys* Brussels - Strasbourg

Return Journey Brussels			
12 plenary sessions	1 plenary session		
4858	405		
1387	116		
221	18		
4	0		
311	26		
5878	490		
696	58		
69	6		
13424	1119		
	Return Journe 12 plenary sessions 4858 1387 221 4 311 5878 696 69 13424		

Source: Adapted from Directorate-General Presidency. Secretariat of the Bureau of the Conference of Presidents and the Quaestors on 16/04/2007 by courtesy of Mr Peder Kyst (see appendix VI) Notes on tables 5.1 & 5.2:

- 1 Travel data provided by the Secretary General shows total numbers of staff on mission to Strasbourg and their mode of transport for the period 2006 (See Appendix VI for original data). As Parliament in Strasbourg is held during 12 plenary sessions over the period of one year, this has been reflected in tables 5.1 and 5.2. In order to establish the number of Secretariat General staff attending 1 plenary session in Strasbourg and the mode of transport used, we have divided the original data by 12 for each mode.
- 5.2.2 Table 5.3 shows total travel mode figures for Secretariat General staff on mission to Strasbourg under the three main modal headings: Air, Rail, and Road. We have arrived at these figures by totalling the individual data provided for rail and road:

Table 5.3: Total number of Secretariat General staff on mission to Strasbourg under three main headings: Air, Rail, and Road (Outward & Return journeys)

	Outward Journ	ey Brussels	Return Journe	ey Brussels
	12 plenary sessions	1 plenary session	12 plenary sessions	1 plenary session
Air	4896	408	4858	405
Rail	1695	141	1612	134
Road	6764	564	6643	554
Total	13355	1113	13113	1093

Source: Directorate-General Presidency. Secretariat of the Bureau of the Conference of Presidents and the Quaestors on 16/04/2007 by courtesy of Mr Peder Kyst (see appendix VI) and own calculations for modal categories Rail & Road

#### Notes on table 5.3

- 1 Considering the fact that we cannot establish a distance band per mode of transport for the travel mode category 'other', this information will be omitted from the final analysis.
- 2 Table 5.3 incorporates the sum of rail travel and road travel categories for outward and return journeys respectively identified in tables 5.1 & 5.2. These totals will be used in the following analysis to identify total  $CO_2$  emissions per mode.

Total  $CO_2$  emissions per annum relating to above staff movements between parliamentary seats have been calculated for each mode: Air, Rail and Road. Data is provided for best-case and worst-case emissions for each category, however only Best Case  $CO_2$  emissions figures have been incorporated into the final analysis in order to reflect a conservative approach.

The source of specific emission data that we have used in this analysis (CE, Delft, 2003) presents these data as both "best case" and "worst case". In our detailed analysis of  $CO_2$  emissions for staff, MEP, assistant and journalist travel as well as freight transport we have presented the results for both best case and worst case. It is, however, our view that the totals carried forward to the final table (Table 8.1) should use only best-case data.

Our reasons are 3-fold:

- The data and the arguments presented in this report do not depend on the differences between best and worst for their impact. The best-case impact is sufficiently serious to require a change in the way Parliament operates.
- Some of our categories of emissions e.g. energy and expenditure on buildings and supplies do not have best and worst case variants. It is logical therefore to use one only and in our view that selection should be based on a conservative variant that runs the risk of underestimating impacts rather than over-estimating impacts.
- There is uncertainty in the data that were made available to us and the correct way to deal with uncertainties is to avoid exaggeration and over-estimation. Those readers interested in the best and worst-case scenarios are referred to the original publication.

Tables 5.4 to 5.7 detail total  $CO_2$  emissions for Secretariat General staff travel by Road, Rail and Air. Total  $CO_2$  emissions by mode of transport are estimated by calculating the sum of the emissions for the outward trip and the return trip. For clarity, this figure is labelled as the 'round trip total' in the following tables.

It is important to note that aviation is widely accepted to have a climatic impact that is 2-5 times greater than its direct  $CO_2$  impact (Sausen et al, 2005), due to NOx emissions; cirrus clouds; contrails and other effects. This study considers only  $CO_2$  emissions; clearly, however, the effect of taking the greater real impact of aviation's emissions into account would be to give a higher figure for the  $CO_2$ -equivalent impact of the two-seat operation.

## 5.2.3 Secretariat General staff travel by Road: Brussels - Strasbourg

Table 5.4: Passenger car g  $CO_2$  /pkm assumed calculation factor for fuel type

	Passenger car gCO <sub>2</sub> /pkm				
	BEST CASE	WORST CASE			
Petrol	69	93			
Diesel	61	82			
Assumed figure	65	87			

NB: Assumes 2.5<sup>1</sup> occupancy

<sup>1</sup> The assumed vehicle occupancy of 2.5 is quite high by EU standards, but this is reported to be quite reasonable since efforts are made between staff to lift-share. The effect of this is to give a lower figure than might be the case for  $CO_2$  emissions.

Source: CEC 2003 and own assumed figure

	No. of people	Distance (km)	Total passenger kilometres (pkm)	gCO₂/pkm	g CO₂/pkm	Total CO <sub>2</sub> by road to Strasbourg (Tonnes) 1 Plenary session	Total CO <sub>2</sub> by road to Strasbourg (Tonnes) 1 Plenary session	Total annual CO <sub>2</sub> emissions (Tonnes)	Total annual CO <sub>2</sub> emissions (Tonnes)
			BEST CASE	WORST CASE	BEST CASE	WORST CASE	BEST CASE	WORST CASE	
Outward Journey	564	488	275232	65.00	87.00	17.89	23.94	214.68	287.28
Return Journey	554	488	270352	65.00	87.00	17.57	23.52	210.84	282.24
Round trip totals	1118	976	545584			35.46	47.46	425.52	569.52

Table 5.5: Secretariat General staff travel emissions Brussels - Strasbourg by ROAD

Source: CEC 2003 g CO<sub>2</sub>/pkm data & own calculations

European Parliament: a study of the environmental costs of the European Parliament two-seat operation Eco-Logica Ltd. April 2007.

## 5.2.4 Secretariat General staff travel by Rail: Brussels - Strasbourg

Table 5.6: Secretariat General staff travel emissions, Brussels – Strasbourg by RAIL

	No. of people	Distance (km)	Total passenger kilometres (pkm)	g CO₂/pkm	g CO₂/pkm	Total CO₂ by air to Strasbourg (Tonnes) 1 Plenary session	Total CO <sub>2</sub> by air to Strasbourg (Tonnes) 1 Plenary session	Total annual CO <sub>2</sub> emissions (Tonnes) 12 Plenary sessions	Total annual CO <sub>2</sub> emissions (Tonnes) 12 Plenary sessions
		BEST CASE	WORST CASE	BEST CASE	WORST CASE	BEST CASE	WORST CASE		
Outward Journey	141	428	60348	29.00	79.00	1.75	4.76	21.00	57.12
Return Journey	134	428	57352	29.00	79.00	1.66	4.53	19.92	54.36
Round trip total	275	856	117700			3.41	9.29	40.92	111.48

Source: CEC 2003 g CO<sub>2</sub>/pkm data & own calculations

<sup>1</sup> Emissions based on 'Intercity Electric' and not 'High Speed Train'

## 5.2.5 Secretariat General staff travel by Air: Brussels - Strasbourg

	No. of people	Distance (km)	Total passenger kilometres (pkm)	gCO₂/pkm	gCO₂/pkm	Total CO <sub>2</sub> by air to Strasbourg (Tonnes) 1 Plenary session	Total CO <sub>2</sub> by air to Strasbourg (Tonnes) 1 Plenary session	Total annual CO <sub>2</sub> emissions (Tonnes) 12 Plenary sessions	Total annual CO <sub>2</sub> emissions (Tonnes) 12 Plenary sessions
				BEST CASE	WORST CASE	BEST CASE	WORST CASE	BEST CASE	WORST CASE
Outward Journey	408	350	142800	444.00	709.00	63.4	101.24	760.80	1214.88
Return Journey	405	350	141750	444.00	709.00	62.93	100.5	755.16	9061.92
Round trip total	813	700	284550			126.33	111.74	1515.96	10276.8

Table 5.7: Secretariat General staff travel emissions Brussels – Strasbourg by AIR

Source: CEC 2003 g CO<sub>2</sub>/pkm data & own calculations

## 5.2.6 Total Secretariat General staff CO<sub>2</sub> emissions by modal split: Brussels – Strasbourg

Table 5.8: Total Secretariat General staff annual  $CO_2$  emissions by modal split. Brussels – Strasbourg. BEST CASE scenario

Mode	Total annual CO <sup>2</sup> emissions (Tonnes)
Air	1515.96
Rail	40.92
Road	425.52
Total	1982.4

Source: CEC 2003 g CO<sub>2</sub>/pkm data & own calculations

Notes on table 5.8

1 Total annual CO<sub>2</sub> emissions figures for each mode are extracted from the total annual CO<sub>2</sub> emissions (Tonnes) <u>best case round trip total</u> figures from tables 5.5, 5.6 & 5.7

The total  $CO_2$  emissions from Brussels mission staff travel to Strasbourg are 1982.4 tonnes (best case). The  $CO_2$  emissions attributable to travel mode are shown in figure 5.1

Figure 5.1: Brussels Secretariat General staff travel mode – % total annual  $CO_2$  emissions





## 5.3 Mission staff travel (Secretariat General) – Luxembourg to Strasbourg

5.3.1 As in Section 5.2, the travel data supplied by the Secretary General provides the total number of Parliament staff of the Secretariat General on mission between Luxembourg and Strasbourg in 2006 and the mode of transport used to complete these journeys. Data is provided for both outward and return journeys made by staff and this information is presented in tables 5.9 and 5.10:

Table 5.9: Total number of Secretariat General staff on mission to Strasbourgin 2006 and mode of transport. **Outward journeys** Luxembourg - Strasbourg

	Outward Journey Luxembourg						
Mode	12 plenary sessions	1 plenary session					
Air	0	0					
1st Class Rail	315	26					
2nd Class Rail	45	4					
Sleeper Rail	0	0					
Shared car	62	5					
Own car	3884	324					
Service car	225	19					
Other	12	1					
Total	4543	379					

Source: Adapted from Directorate-General Presidency. Secretariat of the Bureau of the Conference of Presidents and the Quaestors on 16/04/2007 by courtesy of Mr Peder Kyst (see appendix VI)

Table 5.10: Total number of Secretariat General staff on mission to Strasbourgin 2006 and mode of transport. **Return journeys** Luxembourg - Strasbourg

	Return Journey Luxembourg				
Mode	12 plenary sessions	1 plenary session			
Air	2	0			
1st Class Rail	304	25			
2nd Class Rail	42	4			
Sleeper Rail	0	0			
Shared car	64	5			
Own car	3895	325			
Service car	224	19			
Other	12	1			
Total	4543	379			

Notes on tables 5.9 & 5.10

Travel data provided by the Secretary General shows total numbers of staff on mission to Strasbourg and their mode of transport for the period 2006 (See Appendix VI for

original data). As Parliament in Strasbourg is held during 12 plenary sessions over the period of one year, this has been reflected in tables 5.9 and 5.10. In order to establish the number of mission staff attending 1 plenary session in Strasbourg and the mode of transport used, we have divided the original data by 12 for each mode.

5.3.2 Table 5.11 shows total travel mode figures for staff on mission between Strasbourg and Luxembourg under the three main modal headings: Air, Rail, and Road. We have arrived at these figures by totalling the individual data provided for rail and road:

Table 5.11: Total number of Secretariat General staff on mission between Luxembourg and Strasbourg: Air, Rail, and Road (Outward & Return journeys)

	Outward Journey	Luxembourg	Return Journey Luxembourg		
	12 plenary sessions	1 plenary session	12 plenary sessions	1 plenary session	
Air	0	0	2	0	
Rail	360	30	346	29	
Road	4171	348	4183	349	
Total	4531	378	4531	378	

Source: Directorate-General Presidency. Secretariat of the Bureau of the Conference of Presidents and the Quaestors on 16/04/2007 by courtesy of Mr Peder Kyst (see appendix VI) and own calculations for modal categories Rail & Road

Notes on table 5.11

- 3 Considering the fact that we cannot establish a distance band per mode of transport for the travel mode category 'other', this information will be omitted from the final analysis.
- 4 Table 5.11 incorporates the sum of rail travel and road travel categories for outward and return journeys respectively, identified in tables 5.9 & 5.10. These totals will be used in the following analysis to identify total CO<sub>2</sub> emissions per mode.
- 5.3.3 Total CO<sub>2</sub> emissions per annum relating to above staff movements between the parliamentary seats in Strasbourg and Luxembourg have been calculated for each mode of travel: Air, Rail and Road. Data is provided for best-case and worst-case emissions scenarios for each category, however only best-case CO<sub>2</sub> emissions figures have been incorporated into the final analysis in order to reflect a conservative approach.

Tables 5.12 to 5.15 detail total  $CO_2$  emissions for Secretariat General staff travel by Road, Rail and Air. Total  $CO_2$  emissions by mode of transport are

estimated by calculating the sum of the emissions for the outward trip and the return trip. For clarity, this figure is labelled as 'round trip total' in the following tables.

- 5.3.4 Secretariat General staff travel by Road: Luxembourg Strasbourg
  - Table 5.12: Passenger car g CO<sub>2</sub> /pkm assumed calculation factor for fuel type

	Passenger	car gCO <sub>2</sub> /pkm		
	BEST CASE	WORST CASE		
Petrol	69	93		
Diesel	61	82		
Assumed figure	65	87		

NB: Assumes 2.5<sup>1</sup> occupancy

 $^1$  The assumed vehicle occupancy of 2.5 is quite high by EU standards. The effect of this is to give a lower figure that might be the case for CO<sub>2</sub> emissions.

Source: CEC 2003 and own assumed figure

	No. of people	Return distance (km)	Total passenger kilometres (pkm)	gCO <sub>2</sub> /pkm	gCO <sub>2</sub> /pkm	Total CO <sub>2</sub> by road to Strasbourg (Tonnes) 1 Plenary session	Total CO <sub>2</sub> by road to Strasbourg (Tonnes) 1 Plenary session	Total annual CO <sub>2</sub> emissions (Tonnes)	Total annual CO <sub>2</sub> emissions (Tonnes)
				BEST CASE	WORST CASE	BEST CASE	WORST CASE	BEST CASE	WORST CASE
Outward Journey	348	220	76560	65.00	87.00	4.97	6.66	59.64	79.92
Return Journey	349	220	76780	65.00	87.00	4.99	6.67	59.88	80.04
Round trip totals	697	440	153340			9.96	13.33	119.52	159.96

Table 5.13: Secretariat General staff travel emissions Luxembourg – Strasbourg by ROAD

Source: CEC 2003 g CO<sub>2</sub>/pkm data & own calculations

## 5.3.5 Secretariat General staff travel by Rail: Luxembourg - Strasbourg

Table 5.14: Secretariat General staff travel emissions Luxembourg – Strasbourg by RAIL

	No. of people	One-way distance (km)	Total passenger kilometres (pkm)	gCO₂/pkm	gCO₂/pkm	Total CO <sub>2</sub> by air to Strasbourg (Tonnes) 1 Plenary session	Total CO <sub>2</sub> by air to Strasbourg (Tonnes) 1 Plenary session	Total annual CO <sub>2</sub> emissions (Tonnes) 12 Plenary sessions	Total annual CO₂ emissions (Tonnes) 12 Plenary sessions
				BEST CASE	WORST CASE	BEST CASE	WORST CASE	BEST CASE	WORST CASE
Outward Journey	30	220	6600	29.00	79.00	0.19	0.52	2.28	6.24
Return Journey	29	220	6380	29.00	79.00	0.18	0.50	2.16	6.0
Round trip totals	59	440	12980			0.37	1.02	4.44	12.24

Source: CEC 2003 g CO<sub>2</sub>/pkm data & own calculations

<sup>1</sup> Emissions based on 'Intercity Electric' and not 'High Speed Train'

## 5.3.6 Secretariat General staff travel by Air: Luxembourg - Strasbourg

Table 5.15: Secretariat General staff travel emissions Luxembourg – Strasbourg by AIR

	No. of people	One-way distance (km)	Total passenger kilometres (pkm)	gCO₂/pkm	gCO₂/pkm	Total CO <sub>2</sub> by air to Strasbourg (Tonnes) 1 Plenary session	Total CO <sub>2</sub> by air to Strasbourg (Tonnes) 1 Plenary session	Total annual CO <sub>2</sub> emissions (Tonnes) 12 Plenary sessions	Total annual CO <sub>2</sub> emissions (Tonnes) 12 Plenary sessions
				BEST CASE	WORST CASE	BEST CASE	WORST CASE	BEST CASE	WORST CASE
Outward Journey	0	220	0	444.00	709.00	0.00	0.00	0.00	0.00
Return Journey	0.17	220	37	444.00	709.00	0.01	0.02	0.12	0.24
Round trip totals	0.17	440	37			0.01	0.02	0.12	0.24

Source: CEC 2003 g CO<sub>2</sub>/pkm data & own calculations

## 5.3.7 Total Secretariat General staff CO<sub>2</sub> emissions: Luxembourg – Strasbourg

Table 5.16: Total Secretariat General staff annual CO<sub>2</sub> emissions by modal split. Luxembourg – Strasbourg. BEST CASE scenario

Mode	Total annual CO <sup>2</sup> emissions (Tonnes)
Air	0.12
Rail	4.44
Road	119.52
Total	124.08

Source: CEC 2003 g CO<sub>2</sub>/pkm data & own calculations

Notes on table 5.16

2 Total annual  $CO_2$  emissions figures for each mode are extracted from the total annual  $CO_2$  emissions (Tonnes) best case <u>round trip total</u> figures from tables 5.13,5.14 & 5.15

The total  $CO_2$  emissions from Luxembourg mission staff travel to Strasbourg are 124.08 tonnes (best case). The  $CO_2$  emissions attributable to travel mode are shown in figure 5.2:

Figure 5.2: Luxembourg Secretariat General staff – % total annual  $CO_2$  emissions by modal split



Source: CEC 2003 g CO2/pkm data & own calculations

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## 5.4 Mission staff travel (Political Groups)

- 5.4.1 Each of the Parliament's nine political groups employs staff in numbers proportional (or very nearly so) to the number of MEPs in each group, a large number of whom travel to Strasbourg. Specific data on these movements, like that used in sections 5.2 and 5.3 for staff of the Secretariat General, were not available so estimates have been made on the basis of information supplied by the Secretariat of the Greens / European Free Alliance group. As there are 785 MEPs, it has been assumed that there are 785 group staff; of whom 75% i.e. 589 travel to Strasbourg each session. It is assumed that all this travel takes place from the base of Brussels.
- 5.4.2 In the absence of data on the mode of transport used by group staff travelling to Strasbourg, total CO<sub>2</sub> emissions per annum relating to these staff movements have been estimated using scenario assumptions. Data is provided for Best case and Worst case emissions estimates for all scenarios. The following simple scenarios based on modal travel split are provided:
  - 1. All staff travel by road
  - 2. All staff travel by rail
  - 3. All staff travel by air
  - Comparative modal split 33.3% split scenarios 1-3, 50% split scenarios 1 & 2

In the tables presented below we carry out the calculations for staff travel based on these four scenarios. The results that are taken forward in our estimates of total  $CO_2$  emissions are those from scenario 4 (the one third split for each of road, rail and air). This avoids a bias towards the environmentally damaging mode (air) and also avoids a bias towards the environmentally benign mode (rail). The results of the above scenarios are shown in tables 5.18-5.21.

5.4.3 Scenario 1. All political group staff travel by road between Brussels & Strasbourg

Table 5.18: Political group staff travel emissions Brussels – Strasbourg by road

No. of people	Return distance (km)	Total passenger kilometres (pkm)	gCO₂/pkm	gCO₂/pkm	Total CO₂ by road to Strasbourg (Tonnes) 1 Plenary session	Total CO₂ by road to Strasbourg (Tonnes) 1 Plenary session	Total annual CO <sub>2</sub> emissions (Tonnes) 12 sessions	Total annual CO <sub>2</sub> emissions (Tonnes) 12 sessions
		BEST CASE	WORST CASE	BEST CASE	WORST CASE	BEST CASE	WORST CASE	
589	976	574864	65.00	87.00	37.37	50.01	448.39	600.16

Source: CEC 2003 g CO<sub>2</sub>/pkm data & own calculations

5.4.4 Scenario 2: All political group staff travel by rail between Brussels & Strasbourg

Table 5.19: Political Group Staff travel emissions Brussels – Strasbourg by rail

No. of people	Distance one-way	Return distance (km)	Total passenger kilometres (pkm)	g CO₂/pkm¹	gCO₂/pkm¹	Total CO₂ by rail to Strasbourg (Tonnes) 1 Plenary session	Total CO <sub>2</sub> by rail to Strasbourg (Tonnes) 1 Plenary session	Total annual CO <sub>2</sub> emissions (Tonnes) 12 sessions	Total annual CO <sub>2</sub> emissions (Tonnes) 12 sessions
				BEST CASE	WORST CASE	BEST CASE	WORST CASE	BEST CASE	WORST CASE
589	428	856	504184	29.00	79.00	14.62	39.83	175.46	477.97

Source: CEC 2003 g CO<sub>2</sub>/pkm data & own calculations

 $^{1}$  Emissions based on 'Intercity Electric' and not 'High Speed Train'

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## 5.4.5 Scenario 3: All political group staff travel by air

Table 5.20: Political Group Staff travel emissions Brussels – Strasbourg by air

No. of people	One- way distance (km)	Total passenger kilometres (pkm)	gCO₂/pkm	gCO₂/pkm	Total CO <sub>2</sub> by air to Strasbourg (Tonnes) ONE WAY - 1 Plenary session	Total CO <sub>2</sub> by air to Strasbourg (Tonnes) ONE WAY - 1 Plenary session	Total annual CO <sub>2</sub> emissions (Tonnes) ONE WAY - 12 Plenary sessions	Total annual CO <sub>2</sub> emissions (Tonnes) ONE WAY - 12 Plenary sessions	Total annual CO <sub>2</sub> emissions (Tonnes) RETURN - 12 Plenary sessions	Total annual CO <sub>2</sub> emissions (Tonnes) RETURN - 12 Plenary sessions
			BEST CASE	WORST CASE	BEST CASE	WORST CASE	BEST CASE	WORST CASE	BEST CASE	WORST CASE
589	350	206150	444.00	709.00	91.53	146.16	1098.37	1753.92	2196.73	3507.85

Source: CEC 2003 g CO<sub>2</sub>/pkm data & own calculations

5.4.6 Scenario 4: Comparative Political Group Staff travel emissions by modal split. Brussels – Strasbourg

Table 5.21: Political Group Staff travel  $CO_2$  emissions (tonnes) Brussels – Strasbourg by modal split

BEST CASE         WORST CA           Road         100%         448.39         600.16           Rail         100%         175.46         477.97           Air         100%         2196.73         3507.85           Total         2820.58         4585.98           Road         50%         224.39         300.08	
Road100%448.39600.16Rail100%175.46477.97Air100%2196.733507.85Total2820.584585.98Road50%224.39300.08	SE
Rail         100%         175.46         477.97           Air         100%         2196.73         3507.85           Total         2820.58         4585.98           Road         50%         224.39         300.08	
Air         100%         2196.73         3507.85           Total         2820.58         4585.98           Road         50%         224.39         300.08	
Total         2820.58         4585.98           Road         50%         224.39         300.08	
Road 50% 224.39 300.08	
Rail 50% 87.73 238.99	
Total 312.12 539.07	
Boad 33.33% 149.46 200.05	
Rail 33.33% 58.49 159.32	
Air 33.33% 732.24 1169.28	
Total 940.19 1528.65	

Source: CEC 2003 g CO<sub>2</sub>/pkm data & own calculations

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## 5.5 Assistants' travel

- 5.5.1 According to estimates provided by the office of Caroline Lucas, approximately half of the 785 MEPs travel with one assistant to the parliamentary seat in Strasbourg. For the purposes of analysis, the total number of assistants travelling to Strasbourg for plenary sessions is estimated at 400.
- 5.5.2 We assume assistants' residency to be in Brussels and that the journey between Brussels and Strasbourg is completed over land by road or rail. This provides a conservative estimate as some assistants do fly, and it is possible that considerably more than 400 assistants travel. However in the absence of detailed survey data on this we have erred on the side of caution.
- 5.5.3 Total CO<sub>2</sub> emissions per annum relating to assistant movements between parliamentary seats have been estimated using scenario assumptions. Data is provided for best-case and worst-case emissions estimates. The following simple scenarios based on modal travel split are provided:
  - 1. All staff travel by road
  - 2. All staff travel by rail
  - 3. Comparative modal split 50% travel by road, 50% travel by rail Results of the above scenarios are shown in tables 5.23, 5.24 and 5.25.
- 5.5.4 Scenario 1. All Assistant travel by road between Brussels & Strasbourg

Table 5.22: Passenger car g CO<sub>2</sub> /pkm assumed calculation factor for fuel type

	Passenge	er car g/pkm
	BEST CASE	WORST CASE
Petrol	69	93
Diesel	61	82
Assumed	65	87

NB: Assumes 2.5<sup>1</sup> occupancy - see note 1 to Table 5.12 Source: CEC 2003 and own assumed figure

This provides a conservative estimate as some assistants do fly, and it is possible that considerably more than 400 assistants travel. However in the absence of detailed survey data on this we have erred on the side of caution.

Table 5.23: Assistants	s' travel emissions	Brussels -	Strasbourg by road
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No. of people	Return distance (km)	Total passenger kilometres (pkm)	g CO₂/pkm	g CO₂/pkm	Total CO₂ by road to Strasbourg (Tonnes) 1 Plenary session	Total CO <sub>2</sub> by road to Strasbourg (Tonnes) 1 Plenary session	Total annual CO <sub>2</sub> emissions (Tonnes) 12 Plenary sessions	Total annual CO <sub>2</sub> emissions (Tonnes) 12 Plenary sessions
			BEST CASE	WORST CASE	BEST CASE	WORST CASE	BEST CASE	WORST CASE
400	976	390400	65.00	87.00	25.38	33.96	304.51	407.58

Source: CEC 2003 g CO<sub>2</sub>/pkm data & own calculations

5.5.5 Scenario 2: All Assistant travel by rail between Brussels & Strasbourg

Table 5.24: Assistants' travel emissions Brussels – Strasbourg by rail

No of people	Distance one-way	Return distance (km)	Total passenger kilometres (pkm)	g CO₂/pkm	g CO₂/pkm	Total CO <sub>2</sub> by rail to Strasbourg (Tonnes) 1 Plenary session	Total CO₂ by rail to Strasbourg (Tonnes) 1 Plenary session	Total annual CO <sub>2</sub> emissions (Tonnes) 12 Plenary sessions	Total annual CO <sub>2</sub> emissions (Tonnes) 12 Plenary sessions
				BEST CASE	WORST CASE	BEST CASE	WORST CASE	BEST CASE	WORST CASE
400	428	856	342400	29.00	79.00	9.93	27.05	119.16	324.60

Source: CEC 2003 g CO<sub>2</sub>/pkm data & own calculations

1 Emissions based on 'Intercity Electric' and not 'High Speed Train'

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## 5.5.6 Scenario 3: Comparative assistants' travel emissions by modal split. Brussels – Strasbourg

Table 5.25: Assistants' travel  $CO_2$  emissions (tonnes) Brussels – Strasbourg by modal split

		BEST CASE	WORST CASE
Road	100%	304.51	407.58
Rail	100%	119.16	324.60
Road	50%	152.26	203.79
Rail	50%	59.58	162.30
Total		212	366

Source: CEC 2003 g CO<sub>2</sub>/pkm data & own calculations

#### 5.6 Other travel - Brussels to Strasbourg

5.6.1 As mentioned in para 2.7, between 120 and 160 journalists based in Brussels travel to Strasbourg to report on parliamentary plenary sessions.

Source: The Secretary General of the European Parliament, D/24355; NT/475413EN.doc; PE 320.860/BUR./fin. (Page 7/8)

In a communication concerning mission staff numbers for the period 2006 it is also noted that on average some 150 journalists are present in the press room during plenary sessions in Strasbourg (i.e. journalists issued with press passes). This number increases to 250/300 when the agenda features subjects of high media interest. Out of journalists present in plenary sessions in Strasbourg, 10 to 15 are based in Strasbourg. Full details of the Secretary General communication and the mission staff travel data can be found in Appendix VI in this report.

Source: Communication from The Secretary General – Directorate General Presidency, Secretariat of the Bureau of the Conference of Presidents and the Quaestors on 16/04/2007 by courtesy of Mr Peder Kyst)

- 5.6.2 We will therefore assume a figure of 150 journalists travelling from Brussels to Strasbourg. Data is provided for best-case and worst-case emissions estimates for all scenarios. The following simple scenarios based on modal travel split are provided:
  - 5. All journalists travel by road
  - 6. All journalists travel by rail
  - 7. All journalists travel by air
  - Comparative modal split 33.3% split scenarios 1-3, 50% split scenarios 1 & 2

The calculations for staff travel are based on these four scenarios. The results that are taken forward in our estimates of total  $CO_2$  emissions are those from scenario 4 (one third split for each of road, rail and air). This avoids a bias towards the environmentally damaging mode (air) and also avoids a bias towards the environmentally benign mode (rail).

The results of the above scenarios are shown in Tables 5.21, 5.22 & 5.23 An additional number of lobbyists also travel to the parliamentary seat. There is no source of data on the number of lobbyists making this journey and this category of trip has been omitted from our calculations.

No. of people	Return distance (km)	Total passenger kilometres (pkm)	GCO₂/pkm	g CO₂/pkm	Total CO₂ by road to Strasbourg (Tonnes) 1 Plenary session	Total CO₂ by road to Strasbourg (Tonnes) 1 Plenary session	Total annual CO <sub>2</sub> emissions (Tonnes) 12 Plenary sessions	Total annual CO <sub>2</sub> emissions (Tonnes) 12 Plenary sessions
			BEST CASE	WORST CASE	BEST CASE	WORST CASE	BEST CASE	WORST CASE
150	976	146400	65.00 <sup>1</sup>	87.00 <sup>1</sup>	9.52	12.74	114.19	152.84

## Table 5.26: Journalist travel- Brussels to Strasbourg by ROAD

<sup>1</sup>see table 5.17 for passenger car g  $CO_2$  /pkm assumed calculation factor for fuel type

## Table 5.27: Journalist travel– Brussels to Strasbourg by RAIL

No. of people	Distance one- way	Return distance (km)	Total passenger kilometres (pkm)	g CO₂/pkm	g CO₂/pkm	Total CO₂ by rail to Strasbourg (Tonnes) 1 Plenary session	Total CO₂ by rail to Strasbourg (Tonnes) 1 Plenary session	Total annual CO <sub>2</sub> emissions (Tonnes) 12 Plenary sessions	Total annual CO <sub>2</sub> emissions (Tonnes) 12 Plenary sessions
				BEST CASE	WORST CASE	BEST CASE	WORST CASE	BEST CASE	WORST CASE
150	428	856	128400	29.00	79.00	3.72	10.14	44.68	121.72

## Table 5.28: Journalist travel- Brussels to Strasbourg by AIR

No. of people	One-way distance (km)	Total passenger kilometres (pkm)	g CO₂/pkm	g CO₂/pkm	Total CO₂ by air to Strasbourg (Tonnes) ONE WAY - 1 Plenary session	Total CO₂ by air to Strasbourg (Tonnes) ONE WAY - 1 Plenary session	Total annual CO <sub>2</sub> emissions (Tonnes) ONE WAY - 12 Plenary sessions	Total annual CO <sub>2</sub> emissions (Tonnes) ONE WAY - 12 Plenary sessions	Total annual CO <sub>2</sub> emissions (Tonnes) RETURN - 12 Plenary sessions	Total annual CO <sub>2</sub> emissions (Tonnes) RETURN - 12 Plenary sessions
			BEST CASE	WORST CASE	BEST CASE	WORST CASE	BEST CASE	WORST CASE	BEST CASE	WORST CASE
150	350	52500	444.00	709.00	23.31	37.22	279.72	446.64	559.44	893.28

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		BEST CASE	WORST CASE
Road	100%	114.19	152.84
Rail	100%	44.68	121.72
Air	100%	559.44	893.28
Total		718.31	1167.84
Road	50%	57.10	76.42
Rail	50%	22.34	60.86
Total		79.44	137.28
Road	33.33%	38.06	50.95
Rail	33.33%	14.89	40.57
Air	33.33%	186.29	297.46
Total	100.00%	239.24	388.98

Table 5.29: Journalist travel  $CO_2$  emissions (tonnes) Brussels – Strasbourg by modal split

The total  $CO_2$  emissions generated through journalists travel between Brussels and Strasbourg are 239.24 tonnes (best case).

### 6 Data sources: MEP travel

- 6.1 CO<sub>2</sub> emissions for MEP travel have been estimated in the following way:
  - All trips are from the capital city of the home country to either Brussels or Strasbourg.
  - It is taken as a simplifying assumption that all MEPs fly, although acknowledged that around 50-100 (particularly those based near Strasbourg) may not.
  - Emission factors have been taken from the following source: "To shift or not to shift, that's the question." The environmental performance of the principal modes of freight and passenger transport in the policy-making context. CEC 2003. Annex C, pg 93 (table 1). This source is referred to throughout as CEC 2003.
  - CO<sub>2</sub> emissions are calculated by multiplying the actual distance by the appropriate emission factor (see note 1)

Note 1

Distance bands for aircraft of 500km and 1500km have been used. All subsequent distances from MEP capital city to the parliamentary seat are allocated a distance band of 500km or 1500km. See Table 4.2

The emission factors expressed in g/passenger km are detailed in the following table.

Table 6.1: Aircraft g/passenger km  $CO_2$  emissions – best-case and worst-case scenario figures

Distance band	Best case	Worst case		
500km	444.54	709.02		
1500km	216.47	345.87		

Source: CEC 2003

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Table 6.2: Distances from MEP country principal airport to parliamentary seat (in Brussels and Strasbourg) for a one-way journey and distance bands allocated

			Distance	Distance	Distance	Distance
ELL Osumetru		line have	to	band	to	band
EU Country	NO. MEPS	Home base	Brussels	allocated	Strasbourg	allocated
			(km)	(km)	(km)	(km)
Bulgaria	18	Sofia	1700	1500	1374	1,500
Belgium	24	Brussels	0	0	350	500
Czech Republic	24	Prague	722	500	514	500
Denmark	14	Copenhagen	768	500	854	500
Germany	99	Berlin	652	500	592	500
Estonia	6	Tallinn	1601	1500	1631	1500
Greece	24	Athens	2091	1500	1745	1500
Spain	54	Madrid	1316	1500	1283	1500
France	78	Paris	262	500	397	500
Ireland	13	Dublin	774	500	1112	1500
Italy	78	Rome	697	500	363	500
Cyprus	6	Nicosia	2905	1500	2575	1500
Latvia	9	Riga	1457	1500	1435	1500
Lithuania	13	Vilnius	1470	1500	1385	1500
Luxembourg	6	Luxembourg	186	500	164	500
Hungary	24	Budapest	1133	1500	851	500
Malta	5	Valletta	1850	1500	1516	1500
Netherlands	27	Amsterdam	173	500	464	500
Austria	18	Vienna	916	500	637	500
Poland	54	Warsaw	1161	1500	1022	1500
Portugal	24	Lisbon	1712	1500	1740	1500
Romania	35	Bucharest	1772	1500	1475	1500
Slovenia	7	Ljubljana	919	500	582	500
Slovakia	14	Bratislava	969	500	693	500
Finland	14	Helsinki	1651	1500	1694	1500
Sweden	19	Stockholm	1283	1500	1369	1500
United Kingdom	78	London	318	500	648	500
Total MEPs	785					

Sources:

MEP names & representation numbers: <u>www.europarl.europa.eu/members/</u> Distances between cities ('as the crow flies') <u>www.geobytes.com</u> Distances by air between cities: <u>www.webflyer.com</u>

#### Notes

- MEP home base is assumed as principal airport in each respective EU country
- Table shows total number of MEPs representing each EU country in 2007
- All distances are represented as a one way journey

- The distance from an MEP home base principal airport to Brussels, and from an MEP home base to Strasbourg have been calculated using an internet "as the crow flies" tool (www.webflyer.com)
- The distances between home base principal airport and the parliamentary seat in Brussels and Strasbourg have been allocated a distance band according to Note 1 (pg 9)
- Subsequent calculations for MEP CO<sub>2</sub> emissions from aircraft are based on the distance from their home base principal airport to the parliamentary seat in Brussels and Strasbourg

We can now estimate  $CO_2$  emissions associated with the travel of all MEPs to Brussels or Strasbourg (one way trip) and the results are summarised in Table 6.3 and Figure 6.1.

Table 6.3: Best case & Worst case scenarios - Tonnage  $CO_2$  all trips home base principal airport -Brussels/home base principal airport -Strasbourg for a one-way journey

	Best case	Worst case
Parliamentary seat	Total CO₂	(Tonnes)
Brussels	208.48	332.8
Strasbourg	314.52	327.19

Source: Own calculation based on data from tables 6.1 and 6.2

#### Notes on table 6.3:

Step 1: Multiply one way trip distance per EU country from home base to Brussels & Strasbourg by aircraft g/passenger km  $CO_2$  emissions – 'Best case' and 'Worst case' scenario figures (data in table). This provided g/ $CO_2$  emissions per MEP.

Step 2: Multiply  $g/CO_2$  per MEP by the number of MEPs in the EP representing each region. This provides the total  $CO_2$  emissions.

Step 3: Convert this total into tonnes  $CO_2$  (/1000000). The total of these calculations is shown in table 3 and table 1.

6.2 We will now provide a  $CO_2$  estimate for the *return journey* and this can be done through doubling the values in table 6.3. This is summarised in table 6.4 and repeated again in figure 6.2.

Table 6.4: Best case & Worst case scenarios - Tonnage  $CO_2$  all trips home base principal airport - Brussels/home base principal airport - Strasbourg for a return journey

	Best case	Worst case
Parliamentary seat	Total CC	D <sub>2</sub> (Tonnes)
Brussels	416.96	665.59
Strasbourg	629.05	654.38

Source: Own calculation based on data from tables 6.1 and 6.2

Figure 6.1: Total  $CO_2$  emissions based on MEP numbers and distance from home base principal airport to parliamentary seat (return journey)



6.3 All calculations provided up to this point refer to total CO<sub>2</sub> emissions expended during MEP travel to parliamentary seat for <u>one</u> plenary session. European Parliament plenary sessions are known to be held 12 times per year in the Strasbourg seat. We will now provide estimates for total CO<sub>2</sub> emissions for all MEP travel over a period of one year. The total CO<sub>2</sub> emissions estimates are provided for return journeys based on data supplied in table 6.4. These totals are multiplied by a factor of 12 in order to provide annual total CO<sub>2</sub> emissions are shown in table 6.5 and figure 6.2.

	Best case	Worst case
Parliamentary seat	Total CO <sub>2</sub>	(Tonnes)
Brussels	5,003.52	7,987.08
Strasbourg	7,548.60	7,852.56

Table 6.5: Total  $CO_2$  emissions (tonnes) per annum, all MEP return journey trips from home base principal airport – parliamentary seat

Source: Own calculations based on data from table 4.3

The impact of MEP travel to Strasbourg is the difference between all trips going to Brussels and all trips going to Strasbourg which is 2545 tonnes in the best case and negligible in the worst case.

Figure 6.2: Total  $CO_2$  emissions (tonnes) per annum, all MEP return journey trips from home base principal airport – parliamentary seat



## 7 Data Sources: freight

Information on the movement of freight from Luxembourg and Brussels to Strasbourg has been supplied by the European Parliament and is summarised in table 7.1.

Table 7.1: Lorry movement from Luxembourg and Brussels to Strasbourg

LS1	Luxembourg to Strasbourg	2 small lorries max 10 tonnes	Meeting documents
LS2	Luxembourg to Strasbourg	2 lorries, one with trailer (max 20 tonnes each)	
BS1	Brussels to Strasbourg	5 semi-trailers (max 30 tonnes)	Trunks and other equipment
BS2	Brussels to Strasbourg	2 lorries with trailers (max 20 tonnes each)	
BS3	Brussels to Strasbourg	1 lorry (max 20 tonnes)	

Source: e-mail to Caroline Lucas MEP dated 26.3.07

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The information in table 7.1 is now related to distances, specific emission factors and a calculation of total  $CO_2$  emissions (see Appendix 1 for details of emission factors). The results are summarised in Table 7.2.

Table 7.2:  $CO_2$  emissions from Freight transport from Luxembourg and Brussels to Strasbourg (Data is for one-way trip to Strasbourg for one session)

	Distance (km)	Tonne kms	No of lorries	Total Tonne- kms	gCO₂/tkm	Total CO <sub>2</sub> (tonnes)
LS1	220	10x220=2200	2	4400	104.51	0.459
LS2	220	20x220=4400	2	8800	104.51	0.919
BS1	488	30x488=14640	5	73200	58.78	4.3
BS2	488	20x488=9760	2	19520	104.51	2.03
BS3	488	20x488=9760	1	9760	104.51	1.01
						8.71

#### Notes:

Distances are sourced from: <u>http://www.europe.org/drivingdistances.html</u> Specific emission factors are sourced from: *CEC 2003* 

The total in table 7.2 now has to be doubled for the return journey to produce a total round trip figure of 17.42 tonnes and then multiplied for 12 (the number of sessions pa) to produce an annual round trip figure of 209.04 tonnes.



Photo: European Parliament 2007



Photo: European Parliament 2007

## 8 Climate Change Impact

- 8.1 The purpose of this section of the report is to collate the results from all sources of  $CO_2$  emissions and present an estimate of the total  $CO_2$  impact of all the activities directly related to the operation of Strasbourg component of the European parliament. This is done in table 8.1
- 8.2 We will also incorporate additional information from Integrated Sustainability Analysis <sup>™</sup> to ensure that the carbon dioxide emissions of the European Parliament in Strasbourg from all direct and indirect sources are included. This is shown in table 8.1 under the title 3BL (Triple Bottom Line) and further explained in paragraphs 8.4 to 8.13.

Table 8.1 Summary of  $CO_2$  emissions for 12 sessions in Strasbourg (data in tonnes)

	Original calculations in this report	CO <sub>2</sub> emissions in tonnes (Best case)
MEP travel (see Note 1)	Table 6.5, page 48	2545
Secretariat General staff travel Brussels to Strasbourg	Table 5.8, page 24	1982
Secretariat General staff travel Luxembourg to Strasbourg	Table 5.16, page 31	124
Political Group Staff travel Brussels to Strasbourg	Table 5.21, page 36	940
Assistant Travel	Table 5.25, page 39	212
Journalist travel	Table 5.29, page 43	239
Freight (see Note 2)	Table 7.2, page 49	209
Electricity Consumption	Table 4.1, page 15	2078
Gas consumption	Table 4.1, page 15	1850
3BL (see Note 3)	Page 51	8722
Totals		18901

Notes to table 8.1

- 1 The tonnes of  $CO_2$  identified for MEP travel is the difference between all MEPs going to Brussels as opposed to all MEPs going to Strasbourg. In the best case calculation the difference is 2545 tonnes
- 2 Because the freight transport totals are low we see little point in carrying out a best and worst case analysis and we have taken the best case, which shows lower levels of  $CO_2$  emissions than the worst case. This is a more conservative assumption.
- 3 The original 3BL estimate (see para 8.9) was 9800 tonnes. We have taken a precautionary approach to this number and reduced it by 11%. This is to avoid any possibility of double counting travel carbon dioxide emissions. We have specifically calculated the impact of travel and transport in this Table (lines 1-5 inclusive) and in our judgement the "mission expenses" in the budget (Table 3.2, page 12) of 18

million Euros also refers to transport. 18 million Euros is 11% of the total of 169 million Euros. We do not want to run the risk of counting this twice. If we reduce 9800 tonnes by 11% we have a new total of 8722 tonnes.

8.3 Table 8.1 shows that on conservative assumptions the total CO<sub>2</sub> emissions attributable to the operation of the Strasbourg seat as defined in that table amount to 18901 tonnes pa. It is important to note that the transport component of this total includes all staff and assistant travel from Luxembourg and Brussels to Strasbourg and only that MEP travel which is additional to that if they were travelling to Brussels. The staff and assistant travel component includes only Brussels to Strasbourg and does not include home country or any other origin to Strasbourg.

Factors which are likely to contribute to the actual figure being higher than 18901 tonnes include the fact that deliberately cautious estimates for modal splits have been used; likewise for the number of assistants travelling. Furthermore no account has been taken of the travel of lobbyists, Commission staff or officials of other institutions; and the final figure uses the results of calculations all using best case emission factor figures. As can be seen from the tables in the text, travel emissions under the worst case are considerably higher. There is also the significant fact that aviation emissions have a climatic impact that is 2-5 times higher than their direct  $CO_2$  impact (Sausen et al 2005), which has not been taken into account (see page 18).

The bulk of the total in table 8.1 is travel and energy, which are the two sectors examined in detail by this study. Clearly travel and energy are not the only activities that generate  $CO_2$ . All organisations and all human activities are responsible for  $CO_2$  generation through the purchase of goods and services, building maintenance and IT. These activities can be tracked in national input-output statistics and then related to  $CO_2$  emissions through an analysis of the budgets allocated to these activities.

8.4 We have taken these other factors into account and produced an estimate of CO<sub>2</sub> emissions related to purchasing behaviour and expenditure and have done this through the Integrated Sustainability Analysis methodology. Integrated Sustainability Analysis ™ has been developed in both the UK and Australia to measure CO<sub>2</sub> impacts through budget information on the purchase of goods and services within any named organisation. The methodology is based on environmentally extended input-output analysis and can be seen on wwwBottomline3.co.uk. We are grateful to the UK owners of this methodology and especially to Tommy Wiedmann for his help and encouragement.

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8.5 We have used budget information on the European Parliament Strasbourg operation given in "European Parliament, the Secretary General, Note to members of the Bureau, D/24355, NT/475413EN.doc, PE 320.860/BUR./fin. (Page 1/8). This document shows the annual costs of "geographical dispersion" as:

Table 8 2.	Δnnual	rnsts	of	°aeoaranhica	disnersion"
10010 0.2.	Annuur	0303	01	geographice	i uispersion

	Million Euros
Infrastructure Costs: premises	78
Infrastructure Costs: IT and other equipment	42
Staff costs: supernumerary staff	22
Infrastructure Costs: mission expenses	18
Sundry operating costs	9
TOTAL	169

Notes on Table 8.2

- 1 The document dates from 2002 but unfortunately no more up-to-date figures were available.
- 8.6 This total cost of 169 million Euros is qualified in the following way:

"After enlargement, that figure might rise to EUR 203 million"

This is a 20% increase. Enlargement has now taken place but we have carried out our calculations on the original 169 million Euros because of the uncertainty associated with "might rise".

8.7 These expenditure figures are summarised in Figure 8.1

Figure 8.1 Costs of geographical dispersion



- 8.8 The software tool (3BL) then relates these expenditure headings to standard input-output tables and data from the economic sector "Central Government Services" and then produces an estimate of  $CO_2$  emissions. These emissions are 9 800 tonnes pa.
- 8.9 The 3BL methodology uses standard national input-analysis tables and relates the totality of CO<sub>2</sub> emissions to the economic sectors and sub-sectors of the national economy responsible for those emissions. Our results are based on standard "industry" performance for the economic sector known as "public administration and defence". This is the sector closest to the characteristics of the European Parliament.
- 8.10 The input-output data used in these calculations is UK data and it is not possible within the time scale and budget of this project to interrogate French or Belgian input-output data. Our estimates are, therefore, only approximate but give a good guideline as to the scale of these indirect, budget reacted, CO<sub>2</sub> emissions.
- 8.11 The European Parliament compares unfavourably with the benchmarked sector "public administration and defence". This is summarised in figure 8.2.

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## Figure 8.2: CO<sub>2</sub> emissions per unit of expenditure



8.12 Figure 8.2 shows the  $CO_2$  emissions per unit of expenditure in the grey block on the left and the benchmarked UK figure in the pink block on the right. The European Parliament produces just under 280g of  $CO_2$  per £ of spending (190g per Euro of spend) which is approximately 25% "worse" than the benchmarked equivalent economic sector in the UK.

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## 9 Conclusion

- 9.1 The decision to base the European Parliament in both Brussels and Strasbourg brings severe penalties on the time, resources and energy of all those involved in supporting the geographically split model of a parliamentary operation. It also costs a great deal (over 200 million Euros per annum) and the cost estimates do not include costs associated with down time in travelling or time wasted on the inevitable disruption associated with operating from two bases. The geographical dispersion also generates significant costs associated with greenhouse gases and climate change and these are the subject of this report.
- 9.2 On uniformly conservative assumptions, the Strasbourg operation imposes a CO<sub>2</sub> burden that is at the very least 18901 tonnes greater (and probably much more) than if the sole seat was Brussels. A decision to adopt a one-seat mode of operation where that seat is Brussels would "save" almost 20,000 tonnes of CO<sub>2</sub> each year.
- 9.3 The saving would make a significant contribution to the urgent need to reduce CO<sub>2</sub> emissions. The UK Royal Commission on Environmental Pollution's recommendation for a target to cut emissions by 60% by 2050 has been widely accepted, though other expert recommendations call for much more drastic cuts e.g. the highly-respected Tyndall Centre for Climate Change Research in the UK urges 90% cuts by 2050. In March 2007 the EU agreed a target to cut emissions by 20% by 2020.
- 9.4 The CO<sub>2</sub> emissions of the European Parliament in Strasbourg, are, however, more important than the quantity itself. The continuation of an administrative arrangement which imposes a large extra burden when this need not be the case sends a very strong signal to every national and regional administration and every company that internal administrative convenience and historical accidents are more important than determined action to reduce emissions though re-engineering human activities and systems to operate at a lower level of emissions. This is the essence of the debate around de-carbonisation and low carbon societies and the Parliament is sending a very strong signal that it will not put its own house in order. This signal will be picked up by the thousands of businesses and public administrations in the 27 countries of the Union and will damage progress towards reduction in emissions that are urgently needed to reduce the probabilities of widespread economic, social, physical and ecological damage associated with climate change.
- 9.5 The signal is doubly counterproductive. It provides encouragement for those who wish to view all European institutions as self-serving and irresponsible and

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it robs the Parliament itself of credibility when it comes to making the bold decisions and recommendations associated with the totality of climate change policy. This deprives the Parliament of its catalytic role in producing the very initiatives that could deliver a successful climate change policy.

- 9.6 Our analysis of the scale of  $CO_2$  emissions associated with the two-seat operation must be regarded as indicative rather than a precise quantification. We have no direct survey data from the European Parliament on the travel behaviour of MEPs and their assistants or mode of transport. We are, however, grateful for the quantification by mode of Secretariat General staff travel from Brussels and Luxembourg to Strasbourg and this has been used in the analysis. Where necessary we have overcome data deficiencies by constructing scenarios and making assumptions and have erred on the side of caution in using these to estimate  $CO_2$  emissions - meaning that the actual environmental cost may be significantly higher than 18901 tonnes.
- 9.7 We have also been unable to carry out an exercise that would answer the question "If Strasbourg ceased to operate as a Parliamentary seat what additional burdens would fall on Brussels that might produce increased CO<sub>2</sub> emissions?" This question is especially relevant to buildings and the activities that take place in those buildings (maintenance, purchase of goods and services, energy). The reductions in CO<sub>2</sub> emissions through the elimination of travel to Strasbourg are not affected by this consideration.
- 9.8 The transfer of activities from Strasbourg to Brussels would add an additional amount of energy consumption, maintenance and purchases to the Brussels total but this requires more detailed data on these items to be able to identify the additional amounts to be attributed to Brussels if a one-seat operation there became reality. These data are not available. However the data available do imply that the majority of energy usage is a base load, and so the additional consumption in Brussels due to a transfer of activities may be relatively insignificant.
- 9.9 We have identified a total of 18901 excess tonnes of CO<sub>2</sub> that are associated with the Strasbourg operation. This could easily be removed from the CO<sub>2</sub> inventory of the European Union and its significance lies not so much in its quantitative importance but in the fact that it is so very easy to remove and yet so many obstacles are put in the path of those advocating this course of action.
- 9.10 Finally, we recommend that in all budgetary and fiscal discussions taking place in the European Parliament and in European institutions, the social cost of the

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extra carbon dioxide emissions associated with the operation of the Strasbourg seat be noted and incorporated into discussions. The Stern report into climate change in the UK in 2006 estimated that the social costs of these emissions was \$85 per tonne:

Preliminary calculations adopting the approach to valuation taken in this Review suggest that the social cost of carbon today, if we remain on a BAU trajectory, is of the order of \$85 per tonne of CO<sub>2</sub> - higher than typical numbers in the literature, largely because we treat risk explicitly and incorporate recent evidence on the risks,

Source:

http://www.hm-treasury.gov.uk/media/8AC/F7/Executive Summary.pdf

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It is both prudent and appropriate therefore to include a new budget line in European Parliament budgets making it clear that the two-seat operation of geographical dispersion brings an additional annual cost/debit item of 1.1 million Euros (17961 tonnes of carbon dioxide multiplied by the Stern figure of \$85 per tonne).

# **APPENDICES**

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## **APPENDIX I:** Freight Transport – long and medium distance 2000

				bes	st case			wo	rst case		
AVERAGE 2000	detour factor	Load factor	elasticity	Energy	CO2	NOx	PM10	Energy	CO2	NOx	PM10
Non-bulk				(MJprimary/tonne.km)	(g/tonne.km)			(MJprimary/tonne.km)	(g/tonne.km)		
Truck (diesel)	0% 0%										
< 3.5 tonnes		39%	not relevant	6.99	560.05	2.27	0.340	9.46	757.72	3.07	0.459
3.5 - 10 tonnes		50%	not relevant	2.45	196.29	1.97	0.080	3.32	265.57	2.67	0.108
10 - 20 tonnes		61%	not relevant	1.30	104.51	1.13	0.042	1.77	141.39	1.52	0.057
> 20 tonnes		62%	not relevant	0.73	58.78	0.68	0.022	0.99	79.52	0.92	0.030
trailers		62%	not relevant	0.75	59.96	0.68	0.014	1.01	81.13	0.93	0.019

Source: CEC 2003

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Chapters including appropriations related to having three places of work		Three place	s of work	Three places of work Est. savings with one place of work		
		Establish. plan	Amounts (€)	Establish. plan	Amounts (€)	
Chapter 10	Travelling between the three main locations		2433517		2433517	
Chapter 12	DG Presidency Services (DIT + Security)	216		-22		
	DG Internal Policies	408		-5		
	DG External Policies	157		-5		
	DG Information	638		-45		
	DG Personnel	342		-51		
	DG Infrastructure and Interpretation (drivers, buildings and canteens)	464		-144		
DG Translation and Publishing		48		-10		
DG Finance		157				
	Legal Service	79		-1		
	TOTAL / average salary cost)	2509	226891379	-283	25591973	
	Estimated pay represented by time spent on mission				5630000	
	Session auxiliaries		5143236		5143236	
Chapter 30	Article 300:		19067935		16207745	
	Mission expenses for political groups (Chap.30)				4230000	
Chapter 16	Item 1650: Medical Service		900000		225000	
Chapter 14	Mission expenses for freelance interpreters				1000000	
Chapter 20	Rentals and associated costs				86513979	
Chapter 21	Data processing and equipment		104261075		52130538	
Chapter 23	Administrative expenditure		15022200		7511100	
	TOTAL				206617088	

APPENDIX II: Estimated appropriations related to GEOGRAPHICAL DISPERSION (excluding external offices and regional information offices)

DV/603846EN.doc

PE 368.766/BUR/ANN.IV

Source: ANNEX IV to the Secretary-General's report to the members Bureau on Parliament's preliminary draft estimates for the financial year 2007

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**APPENDIX III:** List of normal routes to and from Strasbourg – on which the reimbursement of travel costs will be based in application of Article 3 of the Rules

#### LIST OF THE NORMAL ROUTES TO AND FROM STRASBOURG

Place of departure to	Normal Routes
Strasbourg	
Albania	by air to Strasbourg via Milan or Vienna
Pebanka	or by air to Frankfurt (direct or via Budapest) + rail / "navette" to Strasbourg 3
Andorra	by rail to Toulouse, then by air direct to Strasbourg
	by air to Frankfurt + rail ("navette" to Strasbourg
Armenia	or by air to Strasbourg via Vienna (if direct flight)
Azomailan	by air to Strasbourg via Istanbul (some days)
	or by air to Frankfurt + rail / "navette" to Strasbourg 3
Austria	by air direct from Vienna or by air to Frankfurt + rail / *navette* to Strasbourg *
Beigium Bagaia and Marmanian	by train or by air if direct connection and/or distance over 400 km
Boshia and Harzegovina	by air to Strasbourg via vienna or municit or oy air to Prankurt + rain/ navetair to Strasbourg
Bulgaria	by air to Strasbourg via Milan, Munich or Vienna or by air to Frankfurt + rail / "navette" to Strasbourg
Crodina	by air to Stasbourg via wurker of by air to Frankruit + fair/ flaverie to Stasbourg
Czech Republic	by air to Strasbourg via Munich or air to Frankfurt + rail / "navette" to Strasbourg
Denmark	by air direct to Strasbourg or via Paris or Brussels or by air to Frankfurt + rail ("navelle" to Strasbourg"
Estonia	by air of Strashouro via Paris or Russels or by air direct to Frankfurt + rair / navets to Strashouro <sup>1</sup>
Finland	by air via Paris or Brussels or by air to Frankfurt + rail / "navelle" to Strasbourg <sup>1</sup>
France	by train or by air if direct connection and/or distance over 400 km
	by air to Frankfurt + rail / "navette" to Strasbourg
Georgia	by air to Strasbourg via Istanbul (some days)
Germany	by train or by air if direct connection or via Frankfurt + rail / "navette" to Strasbourg 1
Greece	by air to Strasbourg via Milan or Paris or by air to Frankfurt + rail / *navette* to Strasbourg 1
Hungary	by air to Strasbourg via Munich or by air to Frankfurt + rail / "navette" to Strasbourg 1
keland	by air to Strasbourg via Copenhagen or Paris or by air to Frankfurt + rail / "navette" to Strasbourg 1
Ireland	by air to Strasbourg via Paris or Amstardam
taly	by air direct to Strasbourg or via Milan, Lyon or Nice
Labás	or by an to Frankrun + rail/ navelle to Strasbourg
Latvia	by all to Frankurt + fair/ navette to Strasbourg
I ibuania	by air to Strashown via Vianna or by air to Frankfurt + rail / "ogvatta" to Strashown 1
Luxembourg	by an or creation of the rest in a rest in a rest of the rest of t
Malta	by air to Strasbourg via Milan or air to Frankfurt + rail / "navette" to Strasbourg *
Moldova	by air to Frankfurt (direct or via Vienna or Budapest) + rail / "navetle" to Strasbourg 1
Monaco	by "navette" bus to Nice + air direct to Strasbourg
Montenegro	by air to Frankfurt + rail / "navette" to Strasbourg 1
Norway	by air to Strasbourg via Brussels or Paris or by air to Frankfurt + rail / "navette" to Strasbourg
Netherlands	by air direct to Strasbourg or via Paris or Brussels
Poland	by air to Frankfurt + rail /*navette* to Strasbourg *
Portugal	by air to Strasbourg via Paris or Bordeaux or by air to Frankfurt + rail / *navette* to Strasbourg 3
Romania	by air to Strasbourg via Vienna or to Frankfurt + rail / "navelte" to Strasbourg 1
Russian Federation	by air direct to Strasbourg or by air to Frankfurt + rail / "navette" to Strasbourg <sup>1</sup>
San Marino	by air to Strasbourg via Milan or Bologna
Serbia	by air to Strasbourg via Milan or by air to Frankfurt + rail /*navette* to Strasbourg 3
Slovak Republic	by air to Strasbourg from Vienna (see Austria)
Clavada	or by air to Frankfunt from Bratistava + rail / "navette" to Strasbourg
Snain	by an to beaseding via methor or to mathematic material to beaseding
Swadon	by air to Strashoura via Ruissels or by air to Frankfurt + rail ("navetla" to Strashoura 1
Switzerland	by train or by air if distance over 400 km, to Basel via Zurich + rail to Strasbourg 3
The Former Yucoslav	ter de la Alexandra en el Alexandra e en el la Paradal e dell'Alexandra de Alexandra de Alexandra de Second
Republic of Macedonia*	by air to Strasbourg via vienna or air to Frankfurt + rail / "naveite" to Strasbourg *
Turkev	by air direct to Strasbourg,
	or by air to Frankfunt or Stuttgart + rail / "navelte" to Strasbourg
Ukraine	py air to Strasbourg via Munich or air to Frankturt + rail / "naveite" to Strasbourg *
United Kingdom	by air direct to Strasbourg or via Paris or by air to Basel or Frankfurt + rail / "navette" to Strasbourg "
Dalasia	hundrete Englishet a mit (Angestelle) to Obschause
/Deterus	by an to manyout many inaveller to straspourg

#### on which the reimbursement of travel costs will be based in application of Article 3 of the Rules

Where possible, please use the same route and same company for your inward and outward journey (cost of ticket will be lower).
 You are strongly encouraged to request a prepaid ticket from the Council of Europe Secretariat, in order to benefit from negotiated fares

negotiated fares.
\* When the reimbursement of air travel is authorised but there is no direct air connection, part of the journey must be made by rail in order to comply with the shortest normal route.

"IMPORTANT: for normal routes "by air to Frankfurt + rail / "navette" to Strasbourg" you must ensure that the plane ticket from place of departure to Frankfurt is issued <u>SEPARATELY</u> from the "navette" (bus connection) for Frankfurt to Strasbourg, failing which you will be overcharged for the "navette". 01/09/2006

Source:http://www.coe.int/t/e/legal\_affairs/lega;\_cooperation/Public\_international\_law/Rules%202006.pdf **APPENDIX IV:** Energy consumption factors

Electricity: EDF, France

Nous améliorons notre parc de production en achetant auprès d'autres producteurs, et affichons de façon transparente l'origine de notre électricité appelé aussi mix énergétique: nucléaire (85,8 %), énergies renouvelables (4,7 %), charbon (4,1 %), gaz (3,2 %), fioul (1,8 %), autres (0,4 %).

Pour en savoir plus, consultez notre Agenda 21.

L'électricité contribue-t-elle au réchauffement de la planète ?

Ce sont les émissions de gaz carbonique (CO2) qui sont en grande partie responsables du réchauffement climatique. Or l'énergie fournie par EDF est une énergie qui émet très peu de CO2 : seulement 49g par kWh contre 440g dans les autres pays d'Europe, grâce à notre mix énergétique.

*Source:* <u>http://particuliers.edf.fr/141288i/EDF-Particuliers/pages-transverses/questions-</u> <u>frequentes/ethique-et-developpement-durable.html</u>

Gas: Fuel Conversion Factors

Defra July 2005

Guidelines for Company Reporting on Greenhouse Gas Emissions Annexes updated July 2005

Annex 1 - Fuel Conversion Factors

Table 2: Converting fuel types to CO<sub>2</sub>

Fuel Type	Amount used per year	Units	x	kg CO <sub>2</sub> per unit	Total kg CO <sub>2</sub>
Grid Electricity <sup>1</sup>		kWh	Х	0.43	
Natural Gas		kWh	Х	0.19	
		therms	х	5.43	

AUTHORISED STAFF FOR 2007 (DRAFT)												
Categor				2006 F	POSTS		2007 POSTS					
y and	Category and grade	Category and grade	Permane	nt posts	Tempora	ary posts	Permar	ent posts	Tempora	ary posts		
grade before	after	after	Other I				Other	Politica l				
1.5.2004	1.5.2004	1.5.2000		1		groups				groups		
Non- category	Non- category	Non- category	1	0	0	0	1	0	0	0		
A1	A* 16	AD 16	9	0	1	0	9	0	1	0		
A2	A* 15	AD 15	29	0	1	10	30	0	1	10		
A3/L3	A* 14	AD 14	127	1	6	20	129	2	6	20		
	A* 13	AD 13	49	0	1	19	72	8	_1	27		
A4/L4	A* 12	AD 12	583	2	7	61	563	0	7	62		
A5/L5	A* 11	AD 11	246	4	6	38	246	0	7	35		
A6/L6	A* 10	AD 10	92	3	5	47	92	0	6	42		
	A* 9	AD 9	197	0	1	14	203	0	2	13		
A7/L7	A* 8	AD 8	45	4	22	11	64	0	16	11		
A8/L8	A* 7	AD 7	97	0	0	11	78	0	0	15		
	A* 6	AD 6	10	0	0	18	67	0	0	23		
	A* 5	AD 5	565	0	4	53	593	0	8	44		
		AD total	204 9	1 4	54	302	214 6	- 1	55	302		
	B*11	AST 11	55	0	0	16	65	1	0	26		
B1	B*10	AST 10	175	4	17	30	165	0	17	21		
	B*9	AST 9	52	0	0	5	77	0	0	9		
B2	B*8	AST 8	60	2	1	30	65	0	3	30		
B3	B*7/C*7	AST 7	462	3	7	56	657	0	4	65		
B4/C1	B*6/C*6	AST 6	636	23	5	80	614	0	6	80		
B5/C2	B*5/C*5/ D*5	AST 5	621	5	8	74	429	0	6	68		
C3/D1	B*4/C*4/ D*4	AST 4	157	1 8	18	53	300	0	12	61		
C4/D2	B*3/C*3/ D*3	AST 3	283	8	0	64	158	0	0	62		
C5/D3	C*2/D*2	AST 2	99	2	5	53	94	0	4	48		
	C*1	AST 1	233	0	1	39	263	0	9	37		
		AST total	283 3	6 5	62	500	288 7	1 0	61	507		

## **APPENDIX V:** Staff figures for the European Parliament 2006 – 2007 (DRAFT)

	TOTAL	488 3	(1 )	7 9	(2 )	11 6	( <b>3</b> )	802	503 4	( <b>1</b> )	2 0	( <b>2</b> )	11 6	( <b>3</b> )	809
GR	AND TOTAL		5	801	(4)(	5)				5	959	(4)(	5)		

(1) Of which 25 'ad personam' promotions (two AD14 to AD15, two AST10 to AST11, three AST6 to AST7, 18 AST4 to AST4/5) granted in exceptional cases to deserving officials having reached the end of their career brackets (at least 60 years of age and having been in the last step of the highest grade in their category for at least two years) and after long service (at least 25 years). (2) Notional reserve for officials seconded in the interests of the service not included in the grand total. (3) Of which 22 for the President's Office, 14 for the Secretariat of the Vice-Presidents, five C for the Quaestors' Secretariat, 10 for DG Presidency, 12 for DG Internal Policies (of which seven AD8 until 31.12.2008), seven for DG External Policies (of which one AD8 until 31.12.2008), 17 for DG Information, nine for DG Personnel, nine for DG Infrastructure and Interpretation, two for DG Translation and Publishing, five for DG Finance (of which four half-time AD5), three for the Staff Committee AND one for the Directorate for Relations with Political Groups (NI Coordination). (4) Of which 67 AD and 125 AST for external offices. (5) The appropriations for the creation of one AD5 and four AST3 (professional training) and one AD5 and one AST3 (electronic voting) are placed in the reserve. The appropriations for the creation of 74 posts (one AD15, 30 AD, 43 AST) in the 2007 budget are placed in the reserve.

Source:

http://www.europarl.europa.eu/sides/getDoc.do?objRefId=116257&language=EN#title2

**APPENDIX VI:** Communication from the Secretary General regarding mission staff travel numbers and mode



Directorate-General Presidency Secretariat of the Bureau, of the Conference of Presidents and the Quaestors

Mrs Caroline LUCAS Member of the European Parliament ASP 08G103

306763 16.04.2007

#### Dear Mrs Lucas,

Thank you for your letter of 15 February 2007 addressed to Julian Priestley, Secretary-General, requesting data concerning mobility of persons and goods in connection with the activities of Parliament as well as the energy profile and size of buildings occupied by Parliament. Following your request, data was sent to you on 27 March 2007.

The relevant service has now provided the Secretariat of the Bureau with additional data as follows:

 total number of Parliament staff on mission to Strasbourg in 2006, including total cost and mode of transport.

Concerning your query on the number of press passes issued to journalists in Strasbourg, it is worth noting that on average some 150 journalists are present in the press room during sessions. When the agenda features subjects of high media interest, this number may increase to 250 to 300 journalists. Out of the journalists present during plenary sessions in Strasbourg, 10 to 15 are based in Strasbourg.

Yours sincerely,

YST

Copy: Mr Rømer, Secretary-General

Enclosure: annex

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## **Couts Missions Strasbourg**

transport aller	BRU	LUX	AUTRE	TOTAL
AV avion	4.245.318,42		626.154,62	4,871,473,04
14 train tere	996.171,83	187.502,07	35.531,54	1.219.205,44
12 Mar 20	186.101,40	26.290,13	6.130,27	218.521,80
TV acagous lits	1.227,65		429,11	1.656,76
VC voit collegue	168.747,92	37.068,94	22.373,90	228.190,76
VP herpen	4.370.480,79	2.592.029,94	7.506,03	6.970.016,76
VS cost service	440.892,86	119.331,65	0,00	560.224,51
	0,00	0,00		0,00
Sum:	10.408.940,87	2.962.222,73	698.125,47	14.069.289,07

## Nombre Missions Strasbourg

Voyages aller	BRU	LUX	AUTRE	TOTAL
AV	4896		500	5.396,00
7 :	1418	315	39	1.772,00
4.): -	273	45	8	326,00
Ψu	4		1	5,00
VC	264	62	22	348,00
$\Lambda_{t}$ ,	5895	3884	11	9.790,00
V.S	605	225	4	834,00
A regulariser	69	12		81,00
Sum	: 13424	4543	585	18.552,00

Voyages retour	BRU	LUX	AUTRE	TOTAL
AV	4858	2	501	5.361,00
<b>T</b> 1	1387	304	33	1.724,00
12	221	42	7	270,00
1V	4		2	6,00
V <sup>c</sup> .	311	64	23	398,00
A to	5878	3895	15	9.788,00
VS	696	224	4	924,00
A regulariser	69	12		81,00
Sum:	13424	4543	585	18.552,00

European Parliament: a study of the environmental costs of the European Parliament two-seat operation Eco-Logica Ltd. April 2007.