rotork®

Environment Report 2012

Summary for the year ending 31st December 2011

Redefining Flow Control

1. Executive Summary

Rotork is a flow control company that manufactures products that are operated worldwide in markets where the flow of gasses, liquids or powders needs to be controlled across the industrial landscape.

When you turn on a tap or switch on a light, turn on a kettle or put fuel in your car, a flow control product is being used somewhere in the process of delivering that service. We are the only UK listed company with a global presence that is dedicated to this and nothing else.

Rotork is fully committed to the prevention of pollution, compliance with all relevant legal and regulatory requirements and to the continuous improvement of environmental performance. Through Global Compact and FTSE4Good and the other benchmarks we use; we set an example of good, responsible and effective business.

This year's report includes performance data from five out of six new acquisitions in 2011 and brings the total number of reporting companies for the reporting year to 37. Of the reporting companies 19 are manufacturing sites, two produce adaptions and associated products and the remainder are varying sizes of sales and service centres, many have warehouse facilities.

Highlights per £M of turnover against the base year:

- Waste has reduced by 26%
- Water consumption down by 45%
- Electricity down by 16%
- Gas by 15% and
- Total CO_2-e Emissions are down by 18%

Since 2005 we have reported our direct operational performance data and from 2009 we have publically reported this information via the Carbon Disclosure Project (CDP). In 2010 we made a commitment to capture our scope 3 data for supply chain and all business travel, leading to establishing the carbon footprint for our products and full disclosure of our scope 3 emissions via the CDP.

The scope 3 project will establish and calculate the emissions of all 19 Rotork manufacturing companies, currently the product ranges of two Rotork manufacturing companies are complete with a third company more than 50% complete.

Peter France

Chief Executive, Rotork p.l.c.

2. Operational impacts (excluding supply chain and business travel)

2.1. Waste generation and recycling

Primarily we operate an assembly only philosophy using specialised suppliers for the manufacture of our components and sub-assemblies. Effectively this enables us to reduce our operational impact on the environment and keep it to a minimum. However, we recognise that packaging waste is one of our most significant impacts and since 2003 we have been actively working to reduce this. Since 2007 recycling has been a Group KPI that has been published in our Annual Report & Accounts. It is measured against the total waste generated by the Group.

2011 results include the five acquisitions made during the year. The recycling rate has improved with an increase by 5% and the amount of waste sent to landfill has decreased by 6%. Table 1 shows the extent of our recycling programme which increased by 13% against the base year.

Table 1			Base year	Change 2009 to
Waste	**2011**	**2010**	**2009**	**2011**
Total waste generated (Tonnes)	**2,296**	**1,970**	**1,871**	**23%**
Waste generated per £M of turnover	5.13	5.17	5.30	**-26%**
Waste generated per employee	0.90	0.93	1.06	**-10%**
Total waste recycled (Tonnes)	**1,754**	**1,391**	**1,249**	**40%**
Waste - Percentage recycled (Group KPI)	**76%**	**71%**	**67%**	**13%**

2.2. Water

For the majority of Rotork sites, water consumption derives from normal operation and sanitary use. The water is supplied by local utility providers, except for Rotork's facilities in Lucca, (Italy) where the water is metered and extracted direct from boreholes.

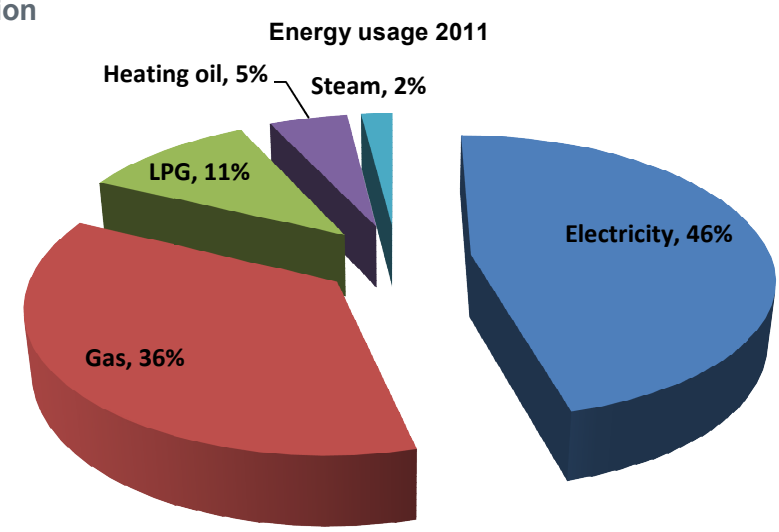
A number of our sales offices are located in shared facilities where water consumption is not metered separately. Some landlords have assisted Rotork with measuring water consumption; however, we are still in the process of encouraging others to assist.

Water consumption increased by 15% in 2011 against 2010 results; however it was 11% down against the base year. Rotork does not operate any processes that consume large amounts of water.

Table 2 shows the year on year variation in water usage, however against per £M turnover and per employee water consumption has decreased against the base year.

Table 2			Base year	Change 2009 to
Water	**2011**	**2010**	**2009**	**2011**
Total Cubic Metres of Water consumed	**21,770**	**18,488**	**24,485**	**-11%**
Cubic Metres of water consumed per £M of turnover	49	49	69	**-45%**
Cubic Metres water consumed per employee	9	9	14	**-31%**

2.3. Energy consumption



2.3.1. Electricity purchased

Purchased electricity accounts for 46% of total energy (KWh's) consumed. In 2011 the amount of purchased KWh's of electricity increased by 11% against 2010 results and by 7% against the base year. However, the number of KWh's per £M turnover decreased by 6% against 2010 results and by 16% against the base year. The number of KWh's per employee also decreased by 7% against 2010 results and by 26% against the base year.

2.3.2. Gas consumption

Gas accounts for 36% of total of energy (KWh's) consumed. In 2011 gas consumption (KWh's) increased by 8% against both 2010 results and the base year. Consumption per £M turnover decreased by 8% against 2010 results and by 15% against the base year. Per employee, consumption decreased by 10% against 2010 results and by 25% against the base year.

2.3.3. Liquid Petroleum Gas (LPG)

LPG accounts for 11% of the totals energy (KWh's) consumed. In 2011 the consumption of LPG, in terms of KWh's, increased by 20% against 2010 results and by 68% against the base year. Consumption per £M of turnover increased by 2% against 2010 results and by 33% against base year. Per employee, consumption increased by 1% against 2010 results and by 17% against the base year.

2.3.4. Heating oil

Heating oil accounts for 5% of total energy (KWh's) consumed. In 2011 the consumption of heating oil increased by 19% against 2010 results and 35% against the base year.

2.3.5. Purchased steam

Purchased steam accounts for 2% of total energy (KWh's) consumed. In 2011 the amount of purchased steam in terms of KWh's decreased by 19% against 2010 results and 33% against base year.

2.3.6. Summary

The overall 11% increase in energy consumption is due to increased business activity and new acquisitions.

Summary of Energy Use (excluding supply chain and business travel)

Table 3

Electricity	2011	2010	Base year 2009	Change 2009 to 2011
Total KWh's of Electricity purchased	**7,377,031**	6,652,219	6,914,786	**7%**
KWh's of electricity purchased per £M of turnover	16,467	17,460	19,589	**-16%**
KWh's of electricity purchased per employee	2,901	3,128	3,900	**-26%**
Gas				
Total Kwh's of gas consumed	**5,726,698**	5,320,424	5,320,168	**8%**
KWh's of gas consumed per £M of turnover	12,783	13,964	15,071	**-15%**
KWh's of gas consumed per employee	2,252	2,501	3,001	**-25%**
Liquid Petrolium Gas LPG				
Total KWh's of LPG consumed	**1,720,810**	1,431,892	1,021,546	**68%**
KWh's of LPG consumed per £M of turnover	3,841	3,758	2,894	**33%**
KWh's of LPG consumed per employee	677	673	576	**17%**
Heating Oil				
Total KWh's of heating oil consumed	**880,273**	738,576	651,996	**35%**
KWh's of heating oil consumed per £M of turnover	1,965	1,939	1,847	**6%**
KWH's of heating oil consumed per employee	346	347	368	**-6%**
Steam				
Total KWh's of steam purcahsed	**390,310**	479,980	582,000	**-33%**
KWh's Steam purchased per £M of turnover	871	1,260	1,649	**-47%**
KWh's Steam purchased per employee	153	226	328	**-53%**

2.4. Emissions

The Group's emissions are divided into three parts, **2.4.1** gives a summary **& 2.4.2** a detailed breakdown of scope 1, 2 & 3 emissions excluding supply chain and business travel, **2.4.3** give a detailed breakdown of scope 1, 2 & 3 including supply chain and business travel. (An explanation of Scope 1, 2 & 3 emissions is given in 'About this Report' on page 8).

2.4.1. Detailed Breakdown of Scope 1, 2 & 3 Emissions (excluding supply chain and business travel)

The overall operating emissions for 2011 increased by 12% against 2010 results and reflect the 11% increase in energy usage as stated in 2.3. However table 4 shows emissions per £M turnover decreased by 4% against 2010 results and by 18% against the base year. Per employee, emissions decreased by 6% against 2010 results and by 20% against the base year.

Table 4	2011	2010	Base year 2009	Change 2009 to 2011
Total scope 1 emissions	1,848	1,613	1,503	**23%**
Total scope 2 emissions	4,079	3,528	3,538	**15%**
Total scope 3 emissions	1,857	1,781	1,744	**6%**
Total Tonnes of CO_2-e emissions	**7,784**	**6,922**	**6,785**	**15%**
Tonnes CO_2-e emissions per £M of turnover	**17**	**18**	**21**	**-18%**
Tonnes CO_2-e emissions per employee	3	3	4	**-20%**

2.4.2. Detailed Breakdown of Scope 1, 2 & 3 Emissions (excluding supply chain and business travel)

Table 5 shows the scope 1 emissions, which accounts for 24% of the Group's direct operating emissions. In 2011 our scope 1 emissions for the consumption of gas, heating oil, LPG, use of Volatile Organic Compounds (VOC's) and refrigerants increased 15% against 2010 results and 23% against the base year. VOC is being reported for the first time.

Table 5 **Scope 1 Emissions (Tonnes of CO_2-e)**	2011	2010	Base year 2009	Change 2009 to 2011
Gas combustion – Heating	1,170	1,087	1,087	**8%**
Oil combustion – Heating	229	192	169	**36%**
LPG combustion – Heating	396	329	235	**69%**
**VOC emissions through the use of paints and thinners	41	n/a	n/a	**0%**
Refrigeration gases (Air conditioning units)	12	5	12	**0%**
Total Scope 1 Emissions	**1,848**	**1,613**	**1,503**	**23%**

Scope 2 emissions (Table 6) accounts for 52% of the total direct operating emissions. In 2011 our scope 2 emissions for the use of purchased electricity and steam increased by 16% against both 2010 results and the base year. Purchased steam decreased by 16% (2010) and 21% against the base year.

Table 6 **Scope 2 Emissions (Tonnes of CO_2-e)**	2011	2010	Base year 2009	Change 2009 to 2011
Electricity – Purchased	4,064	3,509	3,515	**16%**
District Heating – Purchased Steam	15	19	23	**-35%**
Total Scope 2 Emissions	**4,079**	**3,528**	**3,538**	**15%**

Scope 3 emissions (Table 7) accounts for 24% of the total direct operational emissions. In 2011 our operational scope 3 emissions for waste to landfill, recycling and treatment of waste and the use of water and disposal of sewerage increased by 4% against 2010 results and by 6% against the base year.

Table 7 Scope 3 Emissions (Tonnes of CO_2-e)	2011	2010	Base year 2009	Change 2009 to 2011
Waste (at landfill)	1,222	1,355	1,312	**-7%**
Waste (By Recycling)	612	408	408	**50%**
Water	23	19	26	**-12%**
Total Scope 3 Emissions	**1,857**	**1,782**	**1,746**	**6%**

2.4.3. Detailed Breakdown of Scope 1, 2 & 3 Emissions (excluding supply chain and business travel)

The following table details the total carbon emissions for the Group and includes data from tables 5, 6 and 7. (See also Scope 3 Indirect Emission in 'About this Report' on page 8.)

Table 8 Scope 1 Emissions (Tonnes of CO_2-e)	#2011
Gas combustion – Heating	1,170
*Oil combustion – Heating	229
LPG combustion – Heating	396
†Company car – Petrol	1,026
†Company car - Diesel	1,491
†Transportation of Product via company vehicle - Diesel	44
**VOC emissions through the use of paints and thinners	41
Refrigeration gases (Air conditioning units)	12
Total Scope 1 Emissions	**4,409**
Scope 2 Emissions (Tonnes of CO_2-e)	
Electricity – Purchased	4,064
DHC – Heating	15
Total Scope 2 Emissions	**4,079**
Scope 3 Emissions (Tonnes of CO_2-e)	
‡Product	182,923
†Rail – travel	22
†Coach travel	2
†Air travel	1,554
†Waste (at landfill)	1,222
†Waste (By Recycling)	612
Water	23
Total Scope 3 Emissions	**186,358**
Total emissions	**194,846**

†Measurement started 2009
‡Measurement started 2010 (see page 8 for further explanation)
****Up to 2011 only UK data was a available**
#Base year yet to be established (see page 8 for further explanation)

About this Report

1. Greenhouse gasses

All greenhouse gas (GHG) emissions figures are in tonnes of carbon dioxide equivalents (CO_2-e) and include all six greenhouse gases covered by the Kyoto Protocol – carbon dioxide (CO_2), methane (CH4), Nitrous oxide (N2O), Perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), and sulphur hexafluoride (SF6) emissions, plus other greenhouse gases not covered under the Kyoto protocol.

2. Organisational boundary

Both the Carbon Disclosure Standard Board (CDSB) and the Greenhouse Gas Protocol (GHGP) allow a company to define the organisational boundaries for carbon reporting according to definitions of 'equity share', 'financial control' or 'operational control'. To give the most representative footprint for Rotork we take a hybrid approach. In essence we report on the emissions associated with energy that we buy or generate worldwide. Where the energy is provided by landlords as part of a full service contract we have not included these emissions.

3. Operational boundary

The Rotork Group of companies has grown considerably since we started gathering environmental performance data in 2003 and still continues to grow with more acquisitions in 2011. Between 2003 and 2009 the performance data gathered fell short of that required by the Carbon Disclosure Project (CDP) and the World Reporting Institute (WRI).

Rotork operates an assembly only philosophy in all but three of its business units. In all facilities energy is used for IT systems, lighting, heating and cooling. Exceptions are Rotork Gears BV (Losser), Rotork Sweden (Falun), and Rotork Valvekits UK (Nottingham) where machining processes are in operation.

Scope 1: Direct GHG emissions

Direct GHG emissions occur from sources that are owned or controlled by the company, such as emissions from combustion in owned or controlled boilers, vehicles, emissions from chemical production in owned or controlled process equipment etc.

Direct emissions under scope 1, which we include in our reporting, are:
• Fuel used in backup generators – consumption is via suppliers invoices
• Company car mileage when driven on Rotork business – miles is via accounts reports
• Loss of refrigeration gases covered under the Kyoto protocol – losses are reported on maintenance reports
• Fuel used to heat or cool Rotork premises – consumption is via supplier invoices

Scope 2: Electricity indirect GHG emissions

Indirect GHG emissions include the generation of purchased electricity or steam by the company. These emissions occur at the electricity generation facilities or steam generating company.
Indirect emissions under scope 2, which we include in our reporting, are:
• All purchased electricity – electricity purchased at grid average carbon intensity – usage is via utility invoices
• District Heating – steam purchase to heat Rotork premises – Usage via utility invoices.

Scope 3: Indirect Emissions

These emissions are a consequence of the activities of the company, but occur from sources not owned or controlled by the company, such as extraction and production of purchased materials, transportation of purchased fuels, use of sold products etc.
Indirect emissions under scope 3 which we include are:
• Employee business travel (rail, air and car hire) – travel data is via supplier invoices and mileage calculations
• Non-Kyoto refrigerant gases (e.g. CFCs) – data via maintenance reports
• Water consumption and sewage – utility invoice and meters
• Waste generation and recycling – data via utility invoices
– Where waste is not weighed amounts, it is estimated based on the type of waste the size of the container and the number of lifts.

Scope 3 emissions that we are in the first year of calculating include:
• Extraction and production of purchased materials and fuels used in the product – carbon footprint project
Scope 3 emissions that we currently do not report on are:
• Transport-related activities
- Transportation of purchased fuels and packaging materials
- Employees commuting to and from work
- Transportation of sold products
- Transportation of waste
• Outsourced activities
- Disposal of sold products at the end of their life

Research into supply chain operations, and gathering data on business travel started in 2010 as part of our commitment to the Carbon Reduction Project (CRP). With 19 manufacturing sites operating in different parts of the world and producing different products we see this as a long-term project. The project is a cradle-to-gate study. The reason for selecting cradle to gate is because the product is engineered to customer specific requirements with regards to its operational speeds and torques. Once the product leaves the factory there is no in service data available, the product may operate once every few minutes to once a year. In addition we manufacture industrial components where its use and disposal is controlled by many varying factors.

4. Geographic scope

CO_2-e emissions that fall within the organisational and operational boundaries have been reported for all worldwide operations.

5. Conversion factors

• UK - conversion factors published by Department for Environment Food and Rural Affairs (DEFRA) and the Department of Energy and Climate Change (DECC).
• Rest of the world - as electricity fuel mix and associated carbon intensity differs from one country to another we use conversion factors:
- The Greenhouse Gas Protocol (GHGP)
- The International Energy Agency (IEA)
- The Environment Protection Agency (EPA)
- The Canadian Environment Assessment Agency (CEAA)
- Unless specific national factors exist

6. Base Year

The base year stated in the tables in this report is for the company's direct operational impacts for purchased electricity and steam, the consumption of gas, LPG and heating oil, landfill and recycled waste and water consumption and sewerage.

The base year for supply chain and business travel emissions (Table 8) will be 2011. As we continue to calculate the carbon footprint for the range of products across the Group, the base year results will be updated.

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