



**ARCADIS Belgium**

**Sustainability  
Report 2011**

 **ARCADIS**

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# ARCADIS... A brief introduction

## Re-shaping the future

ARCADIS delivers consulting, design, engineering, urban planning and project management services for infrastructure, water, environment and buildings. All over the world, our experts focus on improving mobility, enhancing sustainability and raising the quality of life. We strive to exceed our client's expectations, making a positive and lasting impact on environments, people and places. ARCADIS helps clients to imagine the results and reshape the future.

## Creating balance

From feasibility studies through implementation and maintenance, ARCADIS is all about balance. Balance between creativity and functionality, conceivability and reality, local objectives and global challenges, present needs and future legacies.

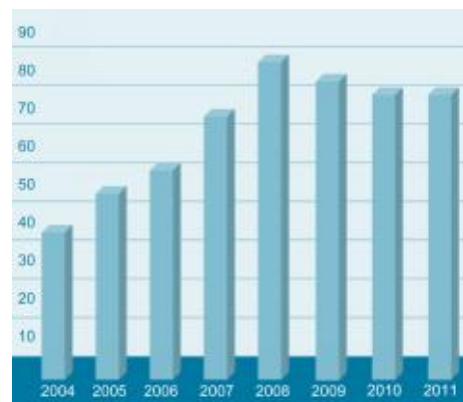


## ARCADIS worldwide

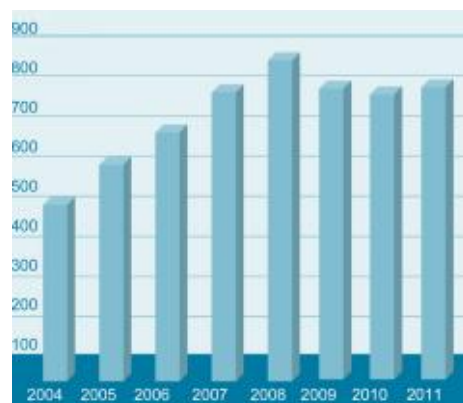
With 21.000 employees, ARCADIS ranks third in Europe en ninth in the world. Strong home market positions in Europe as well as in the United States and South America, allow us to combine deep knowledge of local conditions with fresh global perspectives.

## ARCADIS in Belgium

With 778 employees and an annual turnover of €80 million, ARCADIS Belgium secured a leading position in its field. More importantly, however, ARCADIS Belgium earned a reputation as a solid, reliable and innovative market leader.



Annual turnover ARCADIS Belgium



Employees ARCADIS Belgium (FTE)

## Office locations in Belgium



### Headquarters: Brussels

Koningsstraat 80 Rue Royale  
1000 Brussels

### Antwerp

Posthofbrug 12  
2600 Antwerp-Berchem

### Ghent

Kortrijksesteenweg 302  
9000 Ghent

### Hasselt

Eurostraat 1 - box 1  
3500 Hasselt

### Charleroi

Avenue de Philippeville 119  
6001 Charleroi

### Liège

Rue des Guillemins 26 - 2nd floor  
4000 Liège

**Health, welfare and safety are top priorities** embedded in ARCADIS' Health & Safety Management System.

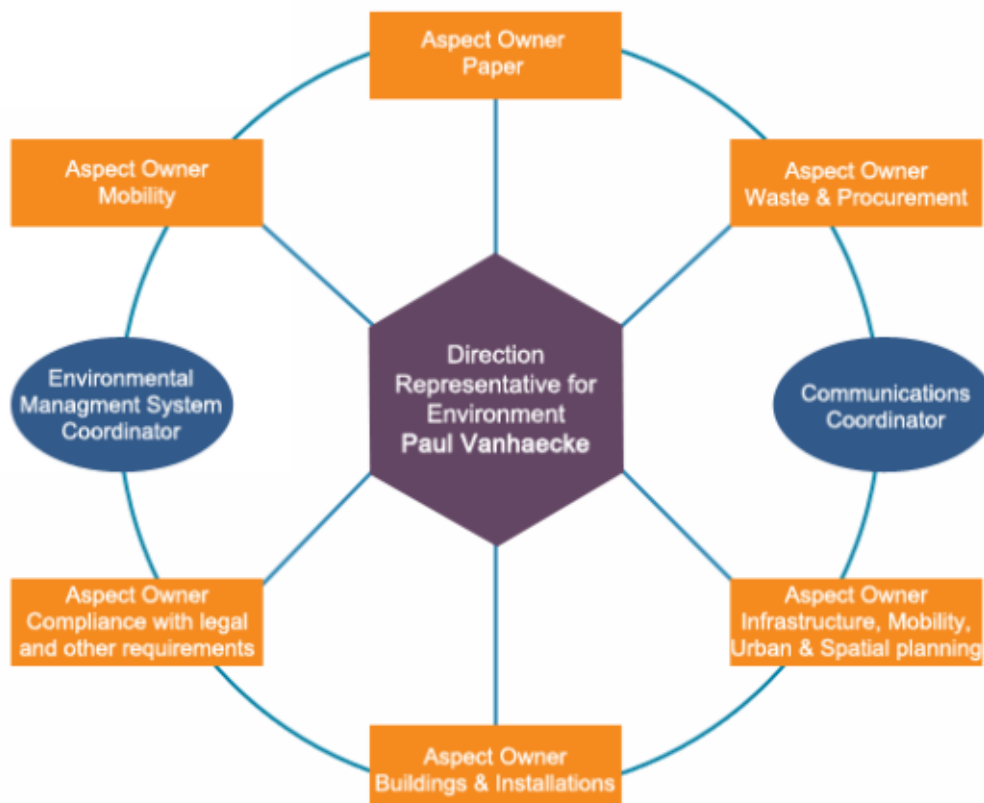
## Sustainability Working Group

The Sustainability Working Group supports the **Corporate Sustainability Program** to minimize the environmental impact of ARCADIS' activities.

The working group continues to be the driving force for all activities related to

- » The identification of indicators and the inventory of the state of the art with respect to the sustainability performance of ARCADIS Belgium;
- » The identification, priority setting and coordination of actions to promote sustainability;
- » The communication of sustainability activities within ARCADIS Belgium;
- » The preparation and implementation of the ISO 14001 system.

In 2011 the working group met 6 times to prepare and organize the follow-up of these activities.





# Realizations in 2011

**F**or 2011 the major goal of the Sustainability Working Group was to establish an Environmental Management System (EMS) compliant with the ISO 14001 standard. The implementation of a certified EMS aims at a structured improvement of ARCADIS Belgium's environmental performance and at minimizing our ecological footprint. In general, goals for 2011 have been achieved or reached an advanced state of completion.

## Environmental management

Most steps for creating the ARCADIS' EMS programme in compliance with ISO 14001 have been taken. They include:

- » Policy statement;
- » Inventory of environmental aspects relevant to ARCADIS.
- » Inventory of environmental legislation relevant to ARCADIS.
- » Evaluation of the state of the art with respect to environmental performance and definition of important environmental aspects.
- » Definition of objectives and activities to be realized.
- » Developing a manual.
- » Improvement/adjustment of indicators for measuring environmental performance.
- » Developing procedures to monitor environmental performance, communication, registration, etc.



## Paper

In Flanders, ARCADIS uses FSC-certified paper for copies, while the use of recycled paper is limited. In Wallonia, the transition to eco-friendly paper was successful.

Further actions:

- » Introduction of recycled envelopes.
- » Continued transition to paperless internal document management.

ARCADIS Belgium's paper consumption for 2011 was calculated using data from our suppliers (see indicator sheet).

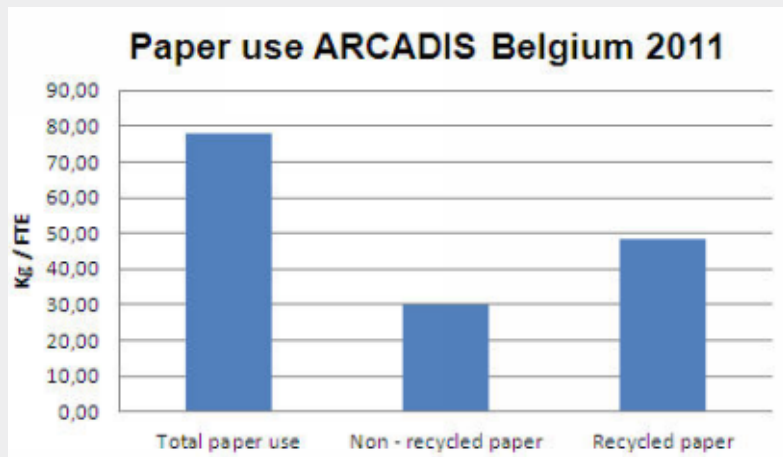
**Total paper use and use of recycled paper 2011**

	FTE	Kg	Kg/FTE
<b>Total paper use</b>	497	38.879,90	78,23
<b>Non-recycled paper</b>	497	14.948,84	30,08
<b>Recycled paper</b>	497	23.931,06	48,15

<b>% of recycled paper</b>	61,55%
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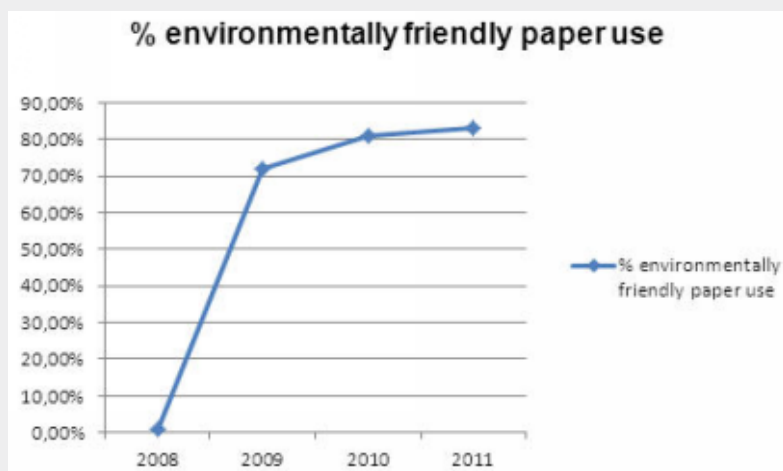
*Table 1: Total paper use and use of recycled paper by ARCADIS Belgium 2011*



*Graph 1: Paper use ARCADIS Belgium 2011 Total / Recycled / Non-recycled*

**Trend 2007 - 2011**

Since 2011, ARCADIS has a subcontractor for the plotting and copywork. This service does not offer the use of recycled paper. It involved a lot of convincing adapting this. Our effort was partly succesful: FSC paper is used. However, 83% of the paper use fully controlled by ARCADIS (excluding plotting services) is eco-friendly. Graph 2 illustrates the trend of eco-friendly paper usage over the past 4 years. Clearly, a lot of progress has been made.



*Graph 2: Trend in using environmentally friendly paper*

Table 2: Paper use ARCADIS Belgium 2007-2011

	2007	2008	2009	2010	2011
<b>Total paper use (Kg)</b>	52.605	46.843	56.042	49.268	38.880
<b>FTE</b>	539*	518*	573	579	497
<b>Total paper use (Kg/FTE)</b>	98	90	97	85	78
<b>% of Recycled paper use</b>	0,00%	0,80%	72,00%	81,00%	83%**

\*: Only FTE's in offices providing data on paper use.

\*\* : Excluding external plotting services.

## Transport and mobility

In 2011, the following specific transport and mobility related actions have been undertaken:

- » Checking tyre pressure of ARCADIS employees' cars as an awareness campaign to demonstrate the importance of proper tyre pressure to reduce fuel consumption and car emissions.
- » Participation to the / Kyoto event to promote sustainable commuting alternatives. Compared to last year, the number of participants remained the same. Kilometres of sustainable commuting, however, decreased considerably. To increase response, a new approach may be needed.
- » Subscription to the bike renting system in Brussels, allowing ARCADIS' staff to swiftly reach our Brussels office and clients.
- » All employees cycling to work had free bikes at their disposal.
- » Railease formula encouraging the combination of train travel and company car use.
- » Bicycle pumps, racks and showers have been installed.





## Business related car transport

Table 3 summarizes business related car transport of ARCADIS Belgium in the past four years.

Table 3: Business related car transport ARCADIS Belgium 2008 - 2011

Indicator		2008	2009	2010	2011
<b>Business related transport by company and pool cars</b>	km	3.732.241	3.220.606	3.206.587	4.454.055
» No of company cars	#	121	144	156	221
» No of pool cars	#			35	34
» Total transport by company and pool cars	km	5.115.961	4.895.246	5.003.347	6.848.273
» Commuting transport from staff with company car	km	1.383.720	1.674.640	1.796.760	2.394.218
FTE (legal entity ARCADIS Belgium including secondment staff)	#	695	647	661	767
Business related transport by company and pool cars/FTE	km/FTE	5.369	4.976	4.848	5807
Business related transport by company and pool cars/FTE	kg CO <sub>2</sub> /FTE	811	751	732	877
<b>Business related transport by staff cars (privately owned)</b>	km	1.302.337	1.591.082	1.630.506	1.111.918
Business related transport by staff cars (privately owned)	kg CO <sub>2</sub>				162.345
FTE (staff ARCADIS Belgium including secondment staff & VDS)	#	724	677	685	767
Total business related auto transport by staf cars (privately owned)/FTE	km/FTE	1.798	2.349	2.379	1450
Total business related auto transport by staf cars (privately owned)/FTE	kg CO <sub>2</sub> /FTE	272	355	359	212
<b>Total business related auto transport in km/FTE</b>	km/FTE	7.167	7.325	7.227	7257
Total business related auto transport in km/FTE	kg CO <sub>2</sub> /FTE	1.082	1.106	1.091	1.089

### Business related international air and rail transport

Business related international air and rail transport is calculated using an online *direct distance* tool (<http://nl.afstand.org/Brussel/leuven>). The exact number of kilometres covered is unknown.

Table 4: Business related international air and train transport

Indicator	2007		2008		2009		2010		2011	
	Air	Train	Air	Train	Air	Train	Air	Train	Air	Train
No of trips	226		211		201	29	246	41	61	22
Km	96.800		849.956		577.206	19.606	871.920	22.748	209.994	10.168
FTE (Legal entity ARCADIS Belgium including secondment staff)	661,82		695,12		647	647	661,38	661,38	497	497
Km/FTE	146,26		1222,75		892,13	30,3	1318,33	34,39	422,52	20,46
kg CO <sub>2</sub> /FTE*	12,66		105,83		126,77	0,94	187,34	1,07	60,04	0,63

The number of trips, kilometres and CO<sub>2</sub> emissions depend strongly on the contracts and projects worked on during the year. Consequently, significant differences between the years are normal.

### Commuting transport

In 2011 company or private cars covered a total distance of 5,965,574 km for commuting purposes. This corresponds to 7,778 km and 1,174 kg CO<sub>2</sub> per FTE and represents over half of total CO<sub>2</sub> emissions (table 8). Commuting transport clearly has a significant share in ARCADIS Belgium's CO<sub>2</sub> emissions and will be monitored more closely from now on.

Of our employees, about 77% drive to work by car, 13% use public transport and 11% commute by bike or on foot.

## Offices and energy

In the renovated offices in Ghent, several actions have been taken to reduce the consumption of energy; i.e., presence of detection systems for lighting in meeting rooms, renewal of lamps, lux measurements and optimization of the location of lighting in relation to that of desks. In sanitary blocks, reusable towel systems were introduced.

A sustainability audit was carried out for the new office in Brussels. From the sustainability point of view, the office appears to be convenient.

As a result of a more stringent office space organization and the introduction of flex-sites, office space per FTE has been reduced in Ghent and Berchem.

### Office energy use

Tables 5, 6 and 7 summarize ARCADIS Belgium's office energy use from 2008 to 2011.

*Table 5: Electricity use ARCADIS Belgium offices 2008 to 2011*

Electricity	2008 kWh	2009 kWh	2010 kWh	2011 kWh
Total (kWh)	1.337.697	1.193.428	1.266.432	790.421
FTE (legal entity ARCADIS Belgium)	437,10	418,97	440,83	298,35
kWh/FTE	3.060	2.849	2.873	2649
kg CO <sub>2</sub> /FTE	817,12	760,55	767,05	707,28

*Table 6: Gas use ARCADIS Belgium offices 2008 to 2011*

Natural gas	2008 kWh	2009 kWh	2010 kWh	2011 kWh
Totaal (kWh)	1.154.498	1.102.106	1.305.148	452.316
FTE	437,10	418,97	440,83	202,1
kWh/FTE	2.641	2.631	2.961	2238
kg CO <sub>2</sub> /FTE	485,99	484,02	544,76	411,79

*Table 7: Fuel oil use ARCADIS Belgium offices 2008 to 2011*

Fuel oil	2008 	2009 	2010 	2011 
Total (kWh)	11.850	12.145	12.000	3.000
FTE (legal entity ARCADIS Belgium)	437,10	418,97	440,83	442,72
l/FTE	27,11	28,99	27,22	6,78
kg CO <sub>2</sub> /FTE	72,11	77,11	72,41	18,02

Fuel oil is no longer used in ARCADIS Belgium.

From the data above, it is clear that energy consumption continues to decline significantly. This is due primarily to the concentration of our colleagues in a limited number of offices and the limitation of office space per FTE. A number of measures to reduce energy use taken in each office also contributed to the decline.



### CO<sub>2</sub> emission ARCADIS Belgium 2008 - 2011

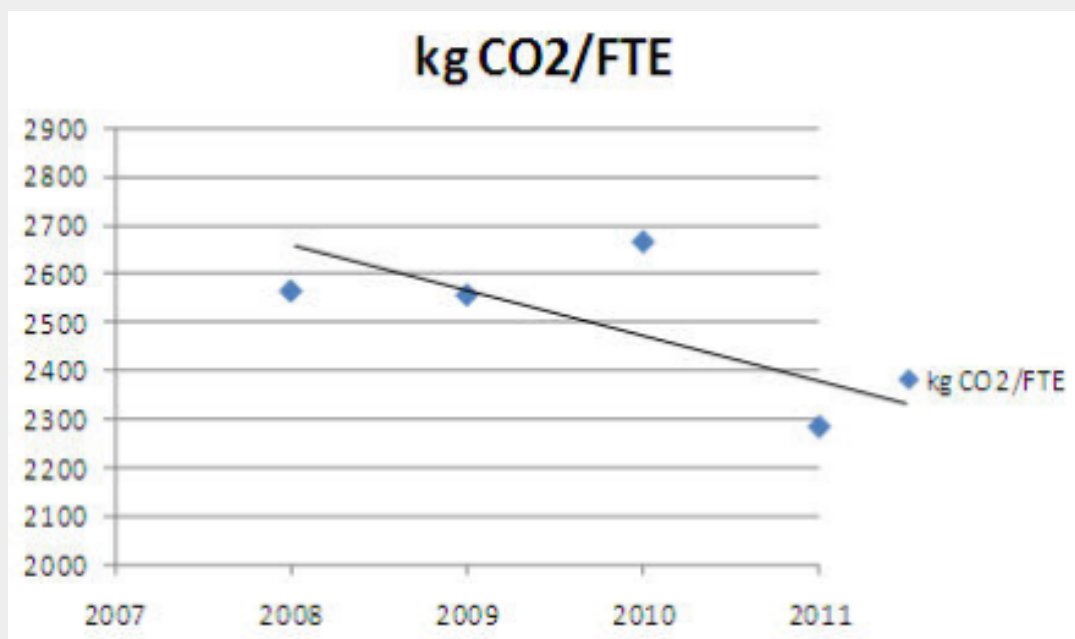
Table 8 presents an overview of the total CO<sub>2</sub> emissions for ARCADIS Belgium from 2008 to 2011 from office energy use and business related transport.

Table 8: ARCADIS Belgium CO<sub>2</sub> emission for office energy use and business related travel (2008-2011)

	2008 kg CO <sub>2</sub> /FTE	2009 kg CO <sub>2</sub> /FTE	2010 kg CO <sub>2</sub> /FTE	2011 kg CO <sub>2</sub> /FTE
<b>Office energy use</b>				
Electricity	817,12	760,55	767,05	707,28
Gas	485,99	484,02	544,76	411,79
Fuel oil	72,11	77,11	72,41	18,02
<b>Business related transport</b>				
Air transport		126,77	187,34	60,04
Train transport	105,83	0,94	1,07	0,63
Total business related auto transport	1.082,27	1.106,06	1.091,27	1088,55
<b>Total</b>	<b>2.563,33</b>	<b>2.555,45</b>	<b>2.663,89</b>	<b>2286,31</b>

Since office energy use for 2011 is not yet completely known, the value of this indicator will change once all data is available. Nevertheless, the current value gives a good indication.

Graph 3: Trend of CO<sub>2</sub> production per FTE



## Integration of sustainability in the services of ARCADIS

The most significant environmental impact of our work is through the projects we do for clients, although much of our work has a direct positive impact. In our Environment business line, we clean up legacies and help clients reduce their waste and emissions. In Infrastructure, we design renewable energy and public transport systems that reduce carbon emissions. In Water, we work to supply clean, safe, potable water and treat waste water. In Buildings, we design 'green buildings' on behalf of a growing number of clients. Our aim is to integrate energy and resource efficiency into our designs and minimize the impact of our projects on the environment.

Clients expect us to provide them with information about the environmental considerations of their projects and how adverse effects can be minimized in a cost-effective way. We may provide unsolicited sustainable alternatives to our clients and decline to be associated with projects if a client is unwilling to support adequate efforts to evaluate environmental issues or mitigate adverse effects.

## Conclusions

In 2011, total paper consumption decreased to less than 39,000 kg, in sharp contrast to the results of the previous year, trending towards 50.000 kg/year.

Since 2007, as a result of the various actions taken to reduce **paper consumption**, an overall decline of about 20% can be observed. With average paper consumption settling at around 78 kg/FTE, this remarkable achievement cannot be explained purely on the basis of the drop in the number of employees.

The drop in our once high percentage of recycled paper use is due to the paper selected by our external provider. Taking into account only the paper procurement over which we have full control, the overall use of environmentally friendly paper increased to 83%.

**Business related air and train transport** decreased in comparison to 2010. The number of trips, kilometres and CO<sub>2</sub> emissions depend highly on the contracts and projects of the year. The total number of business related kilometres by car did not change during the last 4 years, in spite of efforts to promote public transport. As a result, neither did CO<sub>2</sub> emissions by cars. In coming years, however, the shift to low carbon cars should lead to a decrease in CO<sub>2</sub> emissions.

As a result of the reorganisation of ARCADIS Belgium's office network, **consumption of both electricity and gas** decreased considerably. Taking into account the opening of a flagship office in Brussels, the closure of four offices lead to a substantial drop in total energy use. In several offices, actions to reduce energy consumption contributed to this result. Fuel oil is no longer used.

Compared to 2010, total CO<sub>2</sub> emission per FTE decreased with 14%. Compared to 2008, however, the reduction amounts to 11%. It takes time to observe the results of the various actions to reduce the CO<sub>2</sub> footprint and reduction is often slower than anticipated. To reach the reduction target of 25% by 2013, a continued effort is paramount.

# Goals for 2012

The **first goal for 2012** is the ISO 14001 certification of ARCADIS Belgium's Environmental Management System (EMS) and its further implementation.

The following actions will be taken:

- » Rollout of the EMS and communication/training of staff with respect to the system.
- » Internal audit of the EMS.
- » External audit of the EMS.
- » Management review of the EMS worked out.
- » Certification.

The aim is to obtain the ISO 14001 certificate by April. Once the EMS is certified, it will be used as the overall system to envelop the different goals and actions from the sustainability action program.

Further implementation of the system in 2012 will involve:

- » Gathering monitoring data.
- » Update of environmental aspects, objectives and environmental action plan.
- » Further implementation of the environmental action plan.

A **second important goal** is to further integrate sustainability in the services of ARCADIS Belgium. A process will be developed to better integrate all environmental aspects and sustainability related aspects in our engineering and design services. A checklist will be developed and our project leaders will be trained to use it consistently. The integration of our environmental know-how in infrastructure, design and engineering will be promoted at an early stage.

Next to these goals the following **priority actions** have been defined for implementation in 2012:

- » Development of a policy for green procurement.
- » Continued focus on paper use.
- » Offices and energy: Implementation of an energy audit in each office and definition of actions to improve rational use of energy.
- » Mobility: Organization of a course on eco-driving is still on the agenda; development of a mobility action to replace / *Kyoto*.
- » Development of a waste register for all offices and further implementation of the waste management plan, including the installation of collection boxes for waste batteries in all offices.
- » Awareness raising and communication: Development of a sustainability toolbox for our colleagues; organization of a road show to roll out the EMS; regular communication of our activities.
- » Installation of individual energy and water use meters to obtain better data.
- » Organization of an inquiry with ARCADIS staff for further ideas on possible sustainability measures.
- » Continued participation in the Shelter Programme, our partnership with UN-HABITAT.





# Contact information

Paul Vanhaecke  
ARCADIS Belgium nv  
Koningsstraat 80 Rue Royale  
1000 Brussels  
T. +32 2 505 75 00  
F. +32 2 505 75 01

[info@arcadisbelgium.be](mailto:info@arcadisbelgium.be)  
[www.arcadisbelgium.be](http://www.arcadisbelgium.be)