

# Feasibility or Case Study for gas supply expansion for PRAGUE, CZECH REPUBLIC

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<b>Work Package</b>	WP 4: Supply and distribution infrastructure for gas fuels
<b>Country</b>	Czech Republic
<b>Region</b>	Prague
<b>Are there existing filling stations and natural gas and biogas driven cars already in the region?</b>	Yes
<b>Status (F:Final, D:Draft)</b>	F

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This case study will look at the successful installation of at least one new gas filling station and one new biogas plant (where appropriate) in your area, and analyse the reasons why this has been successfully installed. Please copy this whole form for each Feasibility Study you undertake

## A. Gas filling station

### A1. Case Study or Feasibility Study

A1.1. How many feasibility studies or case studies have you undertaken for new gas filling stations from 1 Sep 2007 to 20 Aug 2009

Number of case studies:	1
Number of feasibility studies:	4

A1.2 This is Case Study number 1 Reporting date 5

A1.3 This is Feasibility Study number Reporting date

A1.4 Title of this Case Study/Feasibility Study: The new CNG filling station opened within the premises of Prazske sluzby

A1.5 How was the Case study/Feasibility study selected. According to what criteria?

The CNG filling station was opened in May 2009 as the third publicly accessible filling station on CNG in capital city of Prague. Its main purpose, however, is to serve to CNG heavy-duty vehicle fleet of Prazske sluzby. That required construction of the station with large filling capacity, the largest of any station built so far in the country. Together with the high technical standard that makes the station special and worthwhile to be described by the case study.

A1.6 Would this Case Study/Feasibility Study have taken place without the input from Madegascar

Yes or No No

Please give details: (Was it planned before, was it started before, was it initiated by Madegascar, etc)

The construction of the filling station was part of the corporate strategy of Prazske sluzby which set forth the plan to convert large part of its fleet of refuse lorries, vans for street cleaning and other utility vehicles onto CNG. The case study was undertaken just to document how exemplary and far-sighted such a strategy is.
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A1.7 Did you carry out the Study for a particular company or as a marketing tool?

Marketing tool

### A2. The Study

A2.2 List partners in your study

**For whom did you carry out the Study**

Company name:  
 Public/private:  
 Business/role:  
 Address:  
 Contact person:  
 Tel:  
 Fax :  
 E-mail:  
 Website:

**Gas supplier**

Company name: Prazska plynarenska  
 Public/private: public/private  
 Address: Národní 37, 110 00 Praha 1  
 Contact person: Jan Žároveň  
 Tel: 420 267 171 111  
 Fax : 420 267 171 030  
 E-mail: jan.zakovec@ppas.cz  
 Website: www.ppas.cz

**Filling station construction company**

Company name Bonett Bohemia a.s.  
 Public/private: Private  
 Address: Sudoměřická 32, 130 00 Praha 3  
 Contact person: Vaclav Holofcak  
 Tel: 420 222 801 911  
 Fax: 420 222 801 917  
 E-mail: management@bonett.cz  
 Website: www.bonett.cz

**Owner of new filling station**

Company name: Prazske sluzby a.s.  
 Public/private: public  
 Address: Pod Šancemi 444/1, 180 77 Praha 9  
 Contact person: František Sedláček  
 Tel: 420 284 091 111  
 Fax: 420 284 091 105  
 E-mail: info@psas.cz  
 Website: www.psas.cz

**Principal users of new filling station**

Company name: Prazske sluzby  
 Public/private:  
 Address:  
 Contact person:  
 Tel:  
 Fax:  
 E-mail:  
 Website:

**Other relevant partners (please copy this section as many times as is required)**

Company name:

Public/private:

Address:

Contact person:

Tel:

Fax

E-mail:

Website:

**A2.3 Describe new/proposed filling station:**

**NEW GAS FILLING STATION**

Name of filling station and address	Prazske sluzby CNG filling station, Pod Šancemi 444/1, 180 77 Praha 9
Type of location, eg. urban, motorway, industrial estate,	industrial estate
Type of filling station eg stand-alone, within petrol/diesel filling station	stand-alone
Number of fast filling points	4
Number of slow filling points	
Number and make of compressors	2, 2x 614 Nm <sup>3</sup> /hour @ 1 bar, manufacturer IMW INDUSTRIES Ltd.
Storage pressure (bar)	270 bar
Storage capacity (water litres)	5600 water litres
Ownership of station	
Method of financing station	supplier credit
Main user of station	Prazske sluzby
Number of vehicle fills per week	tens of vehiclesKg or m <sup>3</sup>
Total weekly supply of gas to vehicles	8 thous. (kg) Kg or m <sup>3</sup>
Types of vehicles already using the filling station eg HGV, bus, van, taxi, car	Primary used by HD fleet of Prazske sluzby
What proportion of the gas is biomethane	0%
Name of gas supplier	Prazska plynarenska
Price of gas to vehicle owner	€ 0,85 per kg
Price of gas to station owner	€ N/Aper kg
Opening hours	nonstop
Method of payment, eg. credit card, special card, number plate recognition and account	Possible to pay via credit card, special card (CNG Card Centrum), cash
Profitable or not, with figures if possible	The station is designed with supplying capacity of as much as 2 mil. Nm <sup>3</sup> /year. The present utilization is at 30 %, therefore, as gas sales are expected to increase, the profitability willimprove as well and reach the targetted level

**A2.4 What was MADEGASCAR's major contribution to the Study**

MADEGASCAR contributed to the increased attention via working out the case study.

**A2.5 Were there any incentives to help establish the new filling station?**

The capital city of Prague subsidized the procurement of new CNG vehicles of Prazske sluzby, the major purchaser of the gas sold at the filling station.

**A2.6 Barriers to establishing new gas filling station:**

AS the major barrier to establishing of filling station was insufficient number of cars in the fleet of Prazske sluzby, fortunately, the decision to gradually increase the number of vehicles on CNG by 5-10 led to the decision to establish the CNG filling station in that location.

**A2.7 How did MADEGASCAR help to overcome these barriers**

MADEGASCAR contributed via persuading the Prague City Administration to subsidize the procurement of CNG refuse lorries and other HD vehicles needed by Prazske sluzby.

**A2.8 How did others help to overcome these barriers****A2.9 Was a new gas filling station built as a result of your Study**

No

**A2.10 Total capital cost of new filling station**

Estimate: 1 mil.  
EUR

**A2.11 How long did it take to execute the Case Study/Feasibility Study**

20 hours

**A2.12 What is the current status (e.g. finished, work in progress)**

finished

**A2.13 When did the Case Study/Feasibility Study start**

6/2009

**A2.14 When did/will the Case Study/Feasibility Study end**

6/2009

**A2.15 How long did you spend working on this Case Study/Feasibility Study**

20 hours

**A2.16 How did this Case Study/Feasibility Study cost**

20	hours
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**A2.17 General conclusions and recommendations**

<p>Thanks to the multilateral cooperation established between Prazske sluzby, Prazska plynarenska, and Prague City Administration there was established the exemplary model which effectively promotes introduction of CNG into transportation. Each partner contributed to the partnership in the appropriate way to "break the vicious circle" and help CNG vehicles on Prague roads. The filling station described in the given case study represented one of the concerted actions to the successful implementation.</p>
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**A2.18 Comments**

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**B. New biogas plants****B1. Case Study or Feasibility Study**

B1.1. How many feasibility studies or case studies have you undertaken for new gas filling stations from 1 Sep 2007 to 20 Aug 2009

Number:
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Number of case studies: Number of feasibility studies:
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B1.2 This is Case Study number                      Reporting date

B1.3 This is Feasibility Study number                      Reporting date

B1.4 Title of this Case Study/Feasibility Study:

B1.5 How was the Case study/Feasibility study selected. According to what criteria?

B1.6 Would this Case Study/Feasibility Study have taken place without the input from Madagascar

Yes or No

Please give details: (Was it planned before, was it started before, was it initiated by Madagascar, etc)

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B1.7 Did you carry out the Study for a particular company or as a marketing tool?

**B2. The Study**

## B2.2 List partners in your study

**Owner of biogas plant**

Company name:

Address:

Contact person:

Tel:

Fax

E-mail:

Website:

**Supplier of waste**

Company name:

Address:

Contact person:

Tel:

Fax

E-mail:

Website:

**Plant construction company**

Company name:

Address:

Contact person:

Tel:

Fax

E-mail:

Website:

**Purchaser of biogas**

Company name:

Address:

Contact person:

Tel:

Fax

E-mail:

Website:

**Other relevant partners (please copy this section as many times as is required)**

Company name:

Address:

Contact person:

Tel:

Fax

E-mail: Website:
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B2.3 Describe new biogas plant:

**NEW Biogas PLANTS**

Name of biogas plant and address  
 Type of location, eg. farm, municipal, industrial estate,  
 Make of biogas plant e.g.  
 Principal feedstocks e.g. municipal waste, cattle slurry  
 Tonnes per annum of waste treated tpa  
 Cubic metres of biogas produced m<sup>3</sup> per annum  
 Proportion of biogas upgraded to biomethane %  
 Method of upgrading the biogas to biomethane  
 Whether biomethane is fed into the gas grid Yes/No  
 Name of gas filling station where biomethane is used  
 Method by which biomethane reaches a gas filling station e.g. gas grid, pipeline, trailer, etc  
 Price paid for gas to biogas plant owner € per m<sup>3</sup>

B2.4 What was MADEGASCAR's major contribution to the Study

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B2.5 Were there any incentives to help establish the new filling station?

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B2.6 Barriers to establishing new gas filling station:

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B2.7 How did MADEGASCAR help to overcome these barriers

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B2.8 How did others help to overcome these barriers

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B2.9 Was a new gas filling station built as a result of your Study

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B2.10 Total capital cost of new filling station

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B2.11 How long did it take to execute the Case Study/Feasibility Study

B2.12 What is the current status (e.g. finished, work in progress)

B2.13 When did the Case Study/Feasibility Study start

B2.14 When did/will the Case Study/Feasibility Study end

B2.15 How long did you spend working on this Case Study/Feasibility Study

B2.16 How did this Case Study/Feasibility Study cost

B2.17 General conclusions and recommendations

B2.18 Comments