

Feasibility or Case Study for gas supply expansion for Aragon, La Rioja, Castilla y Leon, Spain

Del. 4.3.5



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Country	Spain
Region	Aragón
Are there existing filling stations and natural gas and biogas driven cars already in the region?	No
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 E-mail: zrt@zoilorios.com
 Website: www.zoilorios.com

Gas supplier

Company name: GAS NATURAL
 Public/private: Private
 Address: Plaça del Gas, 1 08003 Barcelona
 Contact person: Enrique García Poggio
 Tel: 91 589 61 31
 Fax :
 E-mail: epoggio@gasnatural.com
 Website: www.portalgasnatural.com

Filling station construction company

Company name Pending contract award
 Public/private:
 Address:
 Contact person:
 Tel:
 Fax:
 E-mail:
 Website:

Owner of new filling station

Company name: ZOILO RIOS
 Public/private: Private
 Address: Autovía de Logroño, km. 0,300 50011 Zaragoza
 Contact person: Zoilo Ríos
 Tel: 976 330 745
 Fax:
 E-mail: zrt@zoilorios.com
 Website: www.zoilorios.com

Principal users of new filling station

Company name: Public in general
 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: Aragón Regional Government (Energy Management Office)
 Public/private: Public
 Address: Paseo María Agustín, 36

Contact person:	Sergio Breto
Tel:	+ 34 976 71 59 06
Fax:	
E-mail:	sbreto@aragon.es
Website:	

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

Company name:	Alosa
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Website:	www.alosa.es

A2.3 Describe new/proposed filling station:

NEW GAS FILLING STATION

Name of filling station and address	Pending
Type of location, eg. urban, motorway, industrial estate,	Motorway
Type of filling station eg stand-alone, within petrol/diesel filling station	Within petrol/diesel filling station
Number of fast filling points	2
Number of slow filling points	2
Number and make of compressors	1
Storage pressure (bar)	750/nm ³ /h bar
Storage capacity (water litres)	Pending water litres
Ownership of station	Private
Method of financing station	Private
Main user of station	Public in general
Number of vehicle fills per week	Pending Kg or m ³
Total weekly supply of gas to vehicles	Estimated first year 20.000 Kg or m ³
Types of vehicles already using the filling station eg HGV, bus, van, taxi, car	Bus, car
What proportion of the gas is biomethane	Pending %
Name of gas supplier	Gas Natural
Price of gas to vehicle owner	€ 0,70 per kg
Price of gas to station owner	€ 0,54 per kg
Opening hours	Pending

Method of payment, eg. credit card,
special card, number plate
recognition and account
Profitable or not, with figures if
possible All

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

The decision making of installing the first natural gas filling station in the Aragon region and with the agreement of the main stakeholders of the Spanish network

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

Foreseen a public contribution up to 60.000 €

A2.6 Barriers to establishing new gas filling station:

Oil companies' interests .
Citizens' lack of information.
Lack of enough NGC in the Spanish market.

A2.7 How did MADEGASCAR help to overcome these barriers

It promoted an independent gas supplier (non oil company) and it helped to involve the regional stakeholders such as the regional government.

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

Not yet, it is
being planned

2000.000 €

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

150 hours

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

In progress

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

October 2008

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

It has not yet
finished

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

350 hours

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

60 hours

A2.17 General conclusions and recommendations

It is urgent the widening of the natural gas net in Spain in order to activate the commercialisation of gas driven cars. It is necessary to foster the dissemination of gas oil / natural gas hybrid vehicles gas motivated by the lack of filling stations and the poor scope of the existing natural gas net.

A2.18 Comments

The first NG filling station is foreseen to be finished by the second semester

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: 1

Number of case studies: 0
Number of feasibility studies: 1

B1.2 This is Case Study number Reporting date

B1.3 This is Feasibility Study number 1 Reporting date 6th August

B1.4 Title of this Case Study/Feasibility Study: Biogas plant for treatment and elimination of liquid manure.

B1.5 How was the Case study/Feasibility study selected. According to what criteria?
It was selected by reason of the agriculture residues potential for generating energy.

B1.6 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)

It was not directly initiated by Madegascar, although the initiative has been of the Regional Aragón Government, who is one of the stakeholders of the Madegascar network in Spain. The project in fact supported the initiative by generating mass behaviours.

B1.7 Did you carry out the Study for a particular company or as a marketing tool?
The feasibility case is being supported by the Aragón Government in collaboration with the stakeholders. 2012 year is the deadline foreseen, the biogas plant to be operative.

B2. The Study

B2.2 List partners in your study

Owner of biogas plant



Company name: Aragón Government (Sodemasa)
Address: Avenida Cesaraugusto, 14, 7ª planta 0004 Zaragoza
Contact person: Jesús Jiménez Muniesa
Tel: + 34 976 070 000
Fax:
E-mail: sodemasa@sodemasa.com
Website: Sodemasa.com

Supplier of waste

Company name: Bajo Cinca ADS
Address: Plaza España, 20 22520 –Fraga (Huesca)
Contact person: Victor Romía
Tel: + 34 974 47 18 89
Fax: + 34 974 47 30 06
E-mail:
Website:

Plant construction company

Company name: Pending public tender
Address:
Contact person:
Tel:
Fax:
E-mail:
Website:

Purchaser of biogas

Company name: Energy producer (pending public tender)
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:

B2.3 Describe new biogas plant:

NEW Biogas PLANTS

Name of biogas plant and address	Biogas plant in Zaidín
Type of location, eg. farm, municipal, industrial estate,	Biogas plant installed in public soil with a great concentration of livestock holding
Make of biogas plant e.g.	
Principal feedstocks e.g. municipal waste, cattle slurry	Liquid manure
Tonnes per annum of waste treated	200.000 tpa
Cubic metres of biogas produced	30 m ³ / tonne per annum
Proportion of biogas upgraded to biomethane	80 %
Method of upgrading the biogas to biomethane	Codigestion
Whether biomethane is fed into the gas grid	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	Making decision pending
Price paid for gas to biogas plant owner	€ m ³ Making decision pending the plant to be operative

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

Generation of mass behaviour promoting the project

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

Yes, public support from the Aragón Government

B2.6 Barriers to establishing new gas filling station:

Injection into the gas grid. High cost of the investment. Administrative barriers (licences, authorisations...).

B2.7 How did MADEGASCAR help to overcome these barriers

Generating positive mass behaviours

B2.8 How did others help to overcome these barriers

The regional government adopted the public initiative of installing the first biogas plant in Aragón.

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

No

B2.10 Total capital cost of new filling station

7.013.000 €

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

720 hours

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

Work in progress

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

February 2009

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

2011

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

60 hours

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

hours

B2.17 General conclusions and recommendations

Participation of the public authorities is advisable at the time of promoting investments in biogas plants in regions where there is no "biogas plant culture".

B2.18 Comments

There are another two projects in the region in progress too. Two additional biogas plant will be installed. The Madagascar project has contributed also by favouring the introduction of this culture, the generation of mass behaviours, etc..Both will be operative in 2011 year too. These last two projects are less advanced than the first mentioned one.