

Ensuring the supply of wood for energy

Creation of ABSRA (Approvisionnement Biomasse Sécurisé Rhône-Alpes)

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One of the objectives of the European project WOODE3 was to know as exactly as possible the volume of wood for energy available in Europe. In France, this study was carried out by Fibois 07-26, the inter-professional body for the wood sector in the Ardèche and Drôme départements (south central France) which coordinates the Wood for Energy Plan in these two départements. This work has produced more accurate figures for the amounts theoretically available and provided a solid base for reflecting on the creation of a structure aimed at ensuring for large-scale projects their supplies of wood for energy, assembling big sources of supply.

Context : ABSRA was set up thanks to a sector-wide collective dynamic

In 2008 in the Rhône-Alpes region in S.-W. France, there were 115 companies producing wood chips and most were typically small:

- 1 to 5 employees,
- throughput from felling to selling,
- output from 500 T - 50,000 T / year,
- located throughout the whole region.

While the small local heating furnaces ($P < 3\text{MW}$) could be sure of supply, more ambitious projects for bigger facilities emerged which would require much larger quantities — for example Aubenas in 2010 (10,000 t/yr), Pierrelatte in 2013 (150,000 t/yr) and the *Projet Robin* in 2013 (66,000 t/yr).

Faced with such demand, the companies in the wood-for-energy sector have felt the need to group together in order to structure the supply of biomass for these projects.

1 - ADEME: Agence de l'environnement et de la maîtrise de l'énergie
Official french environmental and energy body.

2 - DRAAF: Direction régionale de l'agriculture, de l'alimentation et de la forêt.
Regional Government council's service for agriculture, food and forest.
SERFOB: Service régional de la forêt et du bois.
Regional Government's forest and wood service

3 - Fibois Ardèche-Drôme led the initiative for the first local group of seven companies -Synerbois - in the Ardèche département in the wood-for-energy sector to supply the heating facility at Aubenas (10,000 t/yr).

4 - Class A: clean wood with no paint or varnish (chipped/ground palets and cases).

In 2011, a regional initiative financed by the ADEME¹, the Rhône-Alpes Regional Council and the central government via the DRAAF/SERFOB² (Regional Council forestry department and wood-for-energy body) and led by FIBRA (Rhône-Alpes forest and wood federation) was launched with the aim of grouping together the companies in the wood-for-energy sector in order to ensure the supply of biomass for large-scale projects and assemble major sources of supply. The task of setting up the structure was given to FIBOIS Ardèche Drôme (the wood sector inter-professional organisation in these two French départements) by virtue of its experience in wood for energy and restructuring companies³.

Initially, the undertaking led to the emergence of a group of 25 companies from the Rhône-Alpes Region willing to consider how to structure the supply of biomass. After a number of working sessions, and helped by a law consultancy, the definition of a common strategy along with shared values resulted in an association set up in July 2011 - ABSRA, acronym for *Approvisionnement Biomasse Sud Rhône-Alpes*.

From sector-wide collective to SAS ABSRA

During the last quarter of 2011, the association was asked to supply projects requiring several thousand tonnes of wood chips.

To meet the demands of these new markets, it soon became clear that a commercial business would be an indispensable format.

After one year of operations, at the end of 2012, the eleven companies decided to go one step further, founding the SAS (a company with simplified shares) ABSRA (*Approvisionnement Biomasse Sécurisé Rhône-Alpes*).

SAS ABSRA: company structure and aims

The company has 11 shareholders, all heads of independent businesses in the Rhône-Alpes Region's wood industries sector (forest owners/fellers, sawmills, waste wood handlers) which already supply various industries or heating utilities with wood chips.

Its scope is region-wide in order to meet the demands of the various large-scale projects that use biomass by ensuring their uninterrupted supply of the required product.

Types of raw material used profitably

Timber from forests is the main resource, representing 80% of overall supply. The remainder comes from lopping, sawmill left-overs and from Class A wood⁴.

Equipment and facilities available

Through its shareholder companies, ABSRA uses 13 centres, which include sheds, spread across the region. Most are located near to the forests which means as near as possible to the source of supply.

Along with the sites and their sheds, there is all the equipment necessary carry out in the best conditions the logistics involved in manufacturing and delivering a finished ready-to-use product.

Picture 1:

ABSRA members.

Standing, from left to right: Frédéric BLANC (Président d'ABSRA-Alpes Biomasse+), Stéphane CARRA (SARL SRT), Patrick RICHARD (SARL Richard Bois Energie), Aurélien et Bernard VIEUX-MELCHIOR (SARL Vieux Melchior Broyage) ; Alain TERRY (Bois Energie Services), Lionel PLANCHER (SARL La Forestière)
Seated, from left to right: Gérard DELAIRE (Sylveo Bois Energie), Frédéric CHAMPALLE (SARL Eau Energie), Corinne SIMIEN-BARON (SARL Sofoda), Franck FAYOLLE (Bois Nergis SAS), Christophe COTTE (SARL Cotte).



Such equipment includes harvesters for felling and skidding the trees, 9 chippers and grinders, 4 raddlers and a fleet of 30 vehicles for deliveries (container, articulated and blower trucks). Additionally, the vehicles and equipment belonging to the shareholder companies are also available.

All these resources together make for great reactivity and uninterrupted supply chains.

ABSRA's guarantee of supplies

First of all, the certainty of a reliable supply for a project depends on “ensuring uninterrupted supply”. This is made possible by ABSRA's shareholder make-up.

The geographical spread of the partner companies enables ABSRA to diversify its sources of supply and optimise the stream of biomass. The 13 plants and sites ensure that in the event of any breakdown, the other facilities can step in.

Also, the certainty of a reliable supply is underpinned by the knowhow of the companies grouped together in ABSRA.

The firms are family businesses, often operating for several generations. They have already been supplying numerous biomass-based projects (heating amenities, pulp and paper plants, other industries...). They have thus acquired expertise, unique in the region, in recovering and supplying ready-to-use biomass.

For the record, as of today the total biomass output of ABSRA's shareholder companies represents 100,000 T/year delivered..

9 of the 11 partner businesses have already been committed for several years to certification under the CBQ+ (heat, wood, quality+) scheme ⁵.

In order to guarantee unvarying quality for all its products, ABSRA has established production procedures specific to each of its plant sites. Each product is thus determined precisely as function of the species that make it up, its moisture content, particle size, calorific value and residual ash.

A comprehensive record is maintained of each source of biomass within the group (forested area or massif concerned, period of exploitation, type of product...).

Each centre has a drying timber for carrying out weekly checks on moisture content of the different products.



ABSRA can supply a wide range of types of biomass, varying as much by particle size as moisture content. The products supplied are all coded in accordance with the international standard currently in effect (norme NF EN ISO 17225).

Such are the reasons that ABSRA is able to make binding agreements for all its products at a fair price: as a function of potential energy (MWh delivered at heating facility input) or, according to customer requirements, of any other contractual unit of measurement (tonne, MAP...).

Fig. 1:
Location of ABSRA's
various production sites

5 - www.chaleur-bois-qualite-plus.org

Picture 2:
Stocking chips outside.



Picture 3:
Stocking chips in sheds.



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Current activity and perspectives for development

Since its recent launch, ABSRA has contracted to supply 4 facilities with a total 10,000 tonnes in 2013.

In 2014, ABSRA has already made contractual agreements for 40,000 tonnes.

Future prospects look good because there have been serious discussions with project holders (industrial firms and local government councils) which should lead to supply contracts within the next two years.

Through ABSRA's activities, its partner companies have themselves developed.

In his duties of representing and running the company, the company chairman is backed up by a monitoring committee with six shareholder members.

Within five years, ABSRA expects to be able to deliver, over and above the present volumes, some 100,000 tonnes of further biomass in the Rhône-Alpes Region and neighbouring *départements*.

ABSRA's message to its future partners and clients

As to future partners, ABSRA is not limited to its present stakeholders. Indeed, within the framework of partnership agreements, ABSRA looks forward to close collaboration with other independent businesses.

Such companies will benefit from ABSRA's sales and marketing strengths and ABSRA will also provide all or part of the supply for projects near to their production sites.

For its future clients, ABSRA sees itself as an effective partner, enabling its customers to obtain guaranteed supplies over the long term.

ABSRA is ready as of now to work with project developers to study questions of locally-based supply, thus contributing to the sustainable development of the industrial wood sector in the Rhône-Alpes Region.

M.P., P.M., F.B.

Summary

SAS ABSRA, acronym for (*Approvisionnement Biomasse Sécurisé Rhône-Alpes*) is a region-wide grouping of suppliers of chip wood aiming to ensure the supply of biomass for large-scale projects and assemble major sources of supply. The company, founded as a result of action by FIBOIS Ardèche Drôme (the wood sector inter-professional organisation in these two French *départements*), presently supplies 40,000 T of wood for energy composed of a wide range of biomass, typed by particle size and moisture levels, with a potential output of 100,000 T within five years. ABSRA is made up of family companies, some working in the region for several generations, and already supplies various projects (industries, heating utilities, paper producers...). ABSRA has acquired expertise, unique in the region, in the production and supply of ready-to-use biomass. Furthermore, the geographical spread of the partner companies enables ABSRA to diversify its sources of supply and optimise the stream of biomass. The certainty of a reliable supply for a project depends on "ensuring uninterrupted supply". This is made possible by ABSRA's shareholder make-up.