

## SESIÓN PLENARIA Y TALLER TEMÁTICO DENTRO DEL PROYECTO FORBIOENERGY “Forest Bioenergy in the Protected Mediterranean Areas”

### Introducción:

A fin de alcanzar los objetivos fijados del proyecto, el martes 9 de Mayo 2017 la Asociación de Municipios Forestales de la Comunitat Valenciana (AMUFOR) y la Cámara de Comercio de Valenciana (CCV), establecieron en la Sede central de la Cámara Oficial de Comercio, Industria, Servicios y Navegación de Valencia, la primera sesión plenaria seguida de la sesión temática “Plan de Acción para desbloquear las barreras administrativas” del proyecto ForBioEnergy.

### Objetivos:

- *Objetivo central de AMUFOR en el proyecto:* salvar las barreras (administrativas, técnicas, sociales y económicas) para desarrollar cadenas de valor bioenergéticas de base forestal como pilar de una bioeconomía a nivel local, promoviendo la gestión forestal sostenible y subsidiaria como herramienta para el desarrollo rural en áreas protegidas.

### - *Objetivos del taller:*

- Dar a conocer el proyecto ForBioEnergy: objetivos, socios, actividades previstas y en desarrollo.
- Situación actual del sector forestal de la Comunitat Valenciana en áreas protegidas y su vinculación con el proyecto ForBioEnergy.
- Involucrar a las partes interesadas en el desarrollo del proyecto.
- Presentación del informe preliminar realizado por AMUFOR y la CCV a fin de hacer partícipes a las partes interesadas a través de un debate de las barreras presentadas y posibles soluciones. Enunciar alternativas no consideradas, modificaciones, etc.
- Obtener una clarificación en la priorización de las barreras, dependiendo de los diferentes sectores, que afectan al área de estudio y propuestas sobre cómo llevar a cabo los diferentes procesos que pueden conducir a salvar las barreras detectadas y que afectan al proyecto.
- Dar a conocer los siguientes pasos en el marco del proyecto ForBioEnergy.

### Asistentes:

La sesión estuvo integrada por un total de 19 participantes procedentes de diferentes sectores: Autoridad pública local/regional, Agencia sectorial, infraestructura y proveedores públicos de servicios, grupos de interés (incluidas las ONGs), enseñanza superior e investigación, empresas y PYMES, organización de apoyo empresarial, así como Institutos tecnológicos. A los participantes se les dio un folleto informativo sobre la situación actual del sector forestal en la Comunitat Valenciana y una serie de esquemas a fin de facilitar la dinámica del taller.

### Contexto proyecto:

Actualmente, existen elevadas restricciones que dificultan el desarrollo del sector forestal, este hecho se refleja al ver los escasos porcentajes de montes gestionados y/o bajo ningún instrumento de gestión en la Comunitat Valenciana (CV).

España es el país que mayor superficie protegida aporta a la Red Natura 2000 (RN2000), representando casi el 30% de la superficie total estatal (media europea 20%). En el caso del suelo forestal de la CV el 78 % está en zonas ZEPA y el 68,18% en LIC. Por ello, la RN2000 se podría considerar como una oportunidad para el sector. Sin embargo, la realidad es que existen elevados obstáculos que dificultan a los propietarios de los montes, especialmente privados, poder realizar una gestión activa debido a la ausencia de sinergia entre la gestión forestal sostenible y la correspondiente a la de espacios protegidos; existen diferentes figuras de protección

superpuestas con diferentes instrumentos de gestión. A ello se le suma la fragmentación de la propiedad que incrementa la complejidad de actuación forestal y la visión conservadora sin intervención forestal.

La presencia de figuras de protección es perfectamente compatible con la ordenación y el aprovechamiento sostenible de nuestros montes; no hay gestión sin conservación ni conservación sin gestión. La necesidad de una simplificación administrativa en la redacción y aprobación de los proyectos de ordenación forestal, la optimización en la logística que conecta los eslabones de la cadena de valor y la mejora tecnológica de los sistemas de producción de energía es primordial para salvar las principales barreras existentes en la CV.

#### **Conclusiones del informe:**

##### **- Principales barreras:**

1. Excesivos procedimientos administrativos que se incrementan en el caso de propietarios forestales privados. Complejidad en las autorizaciones de procedimientos en terrenos no urbanizables a nivel regional (Ley 5/2014). Superposición de competencias que aumentan la complejidad de los procedimientos de aprobación.
2. Atomización y fragmentación de la propiedad forestal. Falta de compromiso de los propietarios para realizar una gestión forestal por falta de conocimiento, así como de rentabilidad en áreas protegidas.
3. Alto número de figuras de protección y superposición de las mismas que dificultan la gestión forestal.
4. Falta de conocimiento y opinión pública a corto y medio plazo de la gestión forestal; escasa conciencia.
5. Falta de un mercado establecido y garantizado; no hay equilibrio entre la oferta y la demanda.
6. Presión de grupos locales conservacionistas que obstaculizan/impiden la ejecución de trabajos forestales en áreas protegidas.

**A continuación, se presenta como Anejo el estudio realizado por la Cámara de Comercio de Valencia y AMUFOR.**

# ForBioEnergy

## Forest Bioenergy in the Protected Mediterranean Areas

### ANNEX OF SPAIN

#### Administrative and technical barriers to the production of biomass in the protected areas

Barriers and potential solutions for increasing biomass production in  
the protected areas

Authors:

Association of Forest Municipalities of the Comunitat Valenciana (AMUFOR)  
Valencia Official Chamber of Commerce, Industry, Services and Shipping (CCV)

## CONTENTS:

1. Inventory, classification and integration of all barriers across the forest based-bioenergy value chain.....	1
2. Identification of barriers in national/regional/local protected areas (National Parks, Nature Parks).....	6
3. Identification of barriers in Natura 2000 protected areas (SCI, SPA)*.....	7
4. Selection of maximum 3 key barriers in national/regional/local protected areas (National Parks, Nature Parks).....	12
5. Selection of maximum 6 key barriers in NATURA 2000 protected areas (SCI, SPA).....	12
6. Involvement of regional stakeholders, proposal of possible solutions and definition of operational recommendations.....	13
7. References.....	18

\*SCI: Site of Community Importance

\*SPA: Special Protection Area

# 1. Inventory, classification and integration of all barriers across the forest based-bioenergy value chain

## Legislative barriers:

	Forest management	Forest harvesting & logistics	Biofuels industry			Distribution	Thermal/electrical energy conversion	Distribution to public consumption
			Woodchip	Pellet	Firewood			
LEGISLATIVE	<p>(1)The environmental legislation and the rural development are not coordinated with the energy legislation. Furthermore, an excessive normative exists which follows the '80 normative, difficulting the forest management; the Territorial Management System is out-of-date.</p> <p>(2)Lack of forest regulation.</p> <p>(3)Difficulties derived of the own forest law.</p> <p>(4)High restrictions and prohibitions due to protection figures (e.g. Natura 2000 or Natural Parks) which block the civil rights of the forest owners.</p> <p>(5)Not effective application in the measure 8, submeasure 8.5<sup>1</sup> of the EAFRD 2014-2020.</p>	<p>(1)There is a regulation which forbids working in emergency alert 3 (the most restrictive level: extreme). In some cases, there is not a real risk for forest fires and automatically the emergency level pass from 2 to 3.</p> <p>(2) Excessive normative which difficulties the use of forest biomass.</p>	<p>(1)Unfavourable VAT (Value Added Tax) in regards with the other EU countries.</p>			<p><i>No obstacles found</i></p>	<p>(1)Real Decreto ley 1/2012<sup>2</sup> (27 enero 2012) – Royal Decree-Law 1/2012 (27 January 2012 – affects negatively to the profitability of a CHP plants at local level, having a risk in the final objective of the elimination of the tarif deficit.</p>	<p><i>No obstacles found</i></p>
			<p>(1)Lack of interministerial coordination for an industrial sector which is between competencies of different Ministers.</p>	<p><i>No obstacles found</i></p>	<p>(1)Lack of normative to classify firewoods.</p>			

<sup>1</sup> Submeasure 8.5: investments improving the resilience and environmental value of forest ecosystems.

<sup>2</sup> Real Decreto-ley 1/2012, de 27 de enero, al Decreto-ley 1/2012, de 27 de enero, por el que se procede a la suspensión de los procedimientos de preasignación de retribución y a la supresión de los incentivos económicos para nuevas instalaciones de producción de energía eléctrica a partir de cogeneración, fuentes de energía renovables y residuos (Royal Decree-Law 1/2012, 27 January 2012, suspending the pre-allocation of remuneration procedures and eliminating the economic incentives for new installations for the production of electricity from cogeneration, renewable energy sources and waste). <https://www.boe.es/buscar/doc.php?id=BOE-A-2012-1310>

### Administrative barriers

	Forest management	Forest harvesting & logistics	Biofuels industry			Distribution	Thermal/electrical energy conversion	Distribution to public consumption
			Woodchip	Pellet	Firewood			
ADMINISTRATIVE	<p>(1)Lack of coordination between different departments and actors of the Generalitat Valenciana, existing a complexity scenario also due to the overlapping of competences, blocking their services. All affects to the administered people or project promoter who cannot exercise their rights.</p> <p>(2)Long time to approve forest management projects and complexity to elaborate them. Moreover, in the forest administration there are a lot of management projects expired which need to be reviewed and updated to be implemented.</p> <p>(3)High number of administrative procedures to obtain authorizations managed by different departments of the administration; all these procedures are increased in the protected areas as Natura 2000.</p>	<p>(1)Difficulties to obtain grants due to their administrative procedures which block the starting of the forest harvesting activities.</p> <p>(2)Lack of transparency in the information regarding to the auctions and also with the foreseen volumes; carrying out a high accumulation of lots to guarantee the machine efficiency.</p> <p>(3)Lack of priority in the biomass supply in regards to the forest ownership (public and private).</p> <p>(4)Lack of execution and design of the forestry works due to a lack of normative applications (logistics and extraction).</p>	<p>(1)Procedures to obtain the label of traceability and the guarantee quality.</p>	<p><i>No obstacles found</i></p>	<p>(1)Market is not so much transparent; more people could be beneficiary of this product.</p>	<p><i>No obstacles found</i></p>	<p>(1)The use of biomass as bioenergy has some difficulties in regard to the contracts between the owner of the plant and the forest owners to guarantee a long term, the continuous supply of raw material for the operation of the biomass plants.</p> <p>(2)Lack of coordination between administrations to articulate a policy which promote the use of bioenergy.</p> <p>(3)Increase of the number of procedures to start the activity of an industrial plant/facility.</p>	<p><i>No obstacles found</i></p>

Technical barriers:

	Forest management	Forest harvesting & logistics	Biofuels industry			Distribution	Thermal/electrical energy conversion	Distribution to public consumption
			Woodchip	Pellet	Firewood			
T E C H N I C A L		(1)Lack of reception centres of biomass.  (2) Scarcity and precarious state of infrastructures (forest roads) to carry out forest works.	(1)Availability of biofuels, seasonality and variability.  (2)The industrial infrastructure of recovered wood managers in the CV is greatly reduced.			(1)Low technological level in the distribution, consumption and transformation of bioenergy products.  (2)Limited efficiency due to the necessity to have a homogeneity biomass mix for the gasification procedures.		
	(1)The forest ownership is atomized and fragmented.  (2)Lack of technical formation of the forest owners.  (3)Dispersion and seasonality of the agricultural biomass (bi-annual pruning).	(3)Complexity in the situation of large forest harvesting loading platform.  (4)Lack of coordination between forest owners and agricultural cooperatives; a strong tradition exists to make agricultural burnings.	(1)Problems to the compaction and the diversification of components (e.g. chemical composition: heavy metals, different heating power).  (2)The woodchips are not classified as is needed.	(1) Difficulty to implement the normalized quality labels (EN+).  (2)Difficulty for mixing different types of biomass in the pellet production.	(1)Lack of firewood management.	(1)Availability of the biofuels.	(1)The delay in the execution of forest works (e.g. cleaning) due to extreme meteorological events (e.g. strong winds, snow accumulation) leads to an excessive accumulation of biomass and therefore, the existent bioenergy facilities (boilers) are unable to assimilate all forest biomass.  (2)Most of the heat equipments are imported and there is a difficulty in performing maintenance/technical tasks.  (3)Limited space for the facilities.  (4)Lack of assessment to determine the most suitable biofuels for each kind of boiler regarding its necessity.  (5)In the case of cooling systems there is a lack of experience in regards to the absorption units and its maintenance.	<i>No obstacles found</i>

Social barriers:

	Forest management	Forest harvesting & logistics	Biofuels industry			Distribution	Thermal/electrical energy conversion	Distribution to public consumption
			Woodchip	Pellet	Firewood			
S O C I A L	(1)Lack of institutional strategy of communication and divulgation. (2) Lack of awareness about the benefits of carrying out a sustainable forest management. (3)Lack of awareness of some owners about the location of the forest ownership. (4)Lack of studies to quantify and valorize the risk management regarding bushfires. (5) Lack of awareness about the benefits to consume wood at local level; this consumption reduces 60% the bushfire risk.	(1)Short-medium term vision of the effects after forest interventions. (2)Environmental local groups against forest interventions who slow-down the forest value chain, creating a wrong view about sustainable forest management. (3)Fear to legislative changes which increase the taxes, putting in risk the supply security.	(1)Lack of awareness about the different biomass products to obtain bioenergy and their ecological benefits in the environment. (2)Lack of promotion of the use of biofuels by the society (end consumers).			<i>No obstacles found</i>	(1) Lack of awareness and specific formation of technical staff in rural areas about the management and maintenance systems as district heating.  (1)Low experience and knowledge in projects carried out by the administrations. (2)Reticence due to a low availability and the lack of a consolidated market.	(1) Uncertainty of potential actors at the end of the bioenergy value chain. (2) Lack of awareness of the citizens of promoting centralized systems. (3) Lack of normative knowledge which allows regulating the implication of the administration to promote the sector.
			<i>No obstacles found</i>	(1)Lack of awareness that prevents the progress of the sector.	(1)Lack of awareness to the importance to have a regulated market regarding the use of firewood as bioenergy.			



### Economic barriers:

	Forest management	Forest harvesting & logistics	Biofuels industry			Distribution	Thermal/electrical energy conversion	Distribution to public consumption
			Woodchip	Pellet	Firewood			
E C O N O M I C	(1)Resources to extinction but not for prevention. Not clear balance between the strategies for forest fires prevention in regard with the extinction strategies.		(1)Lack of established market in the CV; supply (offer), distribution and consumption (demand).				(1)Variability of the forest waste prices which difficult the estimate cost-effectiveness of the plants/facilities.	(1) Currently, there is not an established connexion between the offer and the demand. The market is not adjusting to the biomass. Concretely, in the Comunitat Valenciana is not available an established market of demand of forest biofuels.
	(2)Not enough investment by the govern to have a sustainable forest management in public forests.					(2)Lack of presence in sectors which consume a lot of thermal energy; big public primary consumers, as agri-food sector, also ceramic sector.	(2)Incipient market of boilers and facilities; high prices of stoves and boilers due to a lack of supply diversification and increasing demand; fragmentation. Lack of stockpiling in the offer.	
	(3)Lack of funding which entails that the owners have more global costs to redact forest management projects regarding the economic benefits of the use of forest biomass at short term.	(1)Costs to remove and transport biomass; low added value of the product and high transport costs.				(1)Large volumes, by logistics and biomass supply enterprises, are not insured.	(3)Lack of contracts between the owner of the plant and the forest owners to guarantee a continuous supply of raw material a long term.	(3)High prices to pellet distribution to domestic use.
	(4)Minimum subsidies (e.g. Rural Development Plan) to the owners and sometimes lack of subsidies which endanger the viability of local enterprises.	(2)Costs in the exploitation of densified forest with complicated orography.	(1)Infrastructure costs to the supplies and industrial transformation in rural areas.	(1)Globalization of pellet markets a short and a médium term.	(1)Cost of supply and production.	(2)Logistic costs between the forest and the valorization plant.	(4) Logistic costs in transformation: expensive technology; the biomass boilers facing the traditional alternatives based in using fossil fuels.	(4)Dependence on the price of diesel.
	(5)Lack of economic profitability in forest management units included in Natura 2000.	(3)Costs to maintain the infrastructure of the forest roads.	(2)Market distortion due to conjunctural supply/demand situations of woodchip.	(2)High competence with consolidated markets.	(2)Lack of value due to a market neither established nor transparent.	(3)Currently, in the CV is not available an established market of distribution of forest biofuels.	(5)Obstacles in the construction of Industrial Parks, facilities and infrastructures in rural areas.	(5)High price of the final product.
	(6) Lost job opportunities.	(4) Machine costs which entailed non profitable works.	(3)Costs to classify the woodchip.				(6)Dependence of the grants and the necessity to regulate the market by itself in the future.	(6) The market has the final decision to determine the price (e.g. di-generation).
	(7)Dependence of the grants which finally affect to the industrial fabric.	(5)Less industrial fabric due to the lack of grants.					(7) External financing is complicated by fears of ensuring a long-term the supply.	(7) The electrical sector based in forest biomass has a complexity due to the existing auctions and for political reasons.
	(8) Currently costs of agricultural residues management and seasonality of the resource.	(6)Doubt about the profitability of clearings proposals for forest improvements.					(8)High initial investment (without grants) that slows down the starting of the facilities.	(8)The commercial centres have a majority electrical consumption and the displacement of this kind of technology is complicated.
	(9)Absence of bonus in a more favorable tax regime of the costs which the administration saves herself when a sustainable forest management is made in relation to bushfire risks.						(9) Lack of steadied supply to demand bank subventions.	(9)The facilities which are dimensioned just for heating are antieconomical due to the intensified use is reduced. (10)Lack of innovative equipment which is economical. (11) Due to a lack of enough proposals to the grants, the total budget is not awarded.

## 2. Identification of barriers in national/regional/local protected areas (National Parks, Nature Parks)

The analysis of this set of barriers (6.4.3.) has been made together with the 6.4.4. identification of barriers national/regional/local protected areas (Natura 2000) due that the most part of the Valencia territory is under Natura 2000 figure<sup>3</sup>, being overlapping in a high percentage with Protected landscape, Municipal protected sites, Natural reserve and Natural Park, among others (see figure n.1). Nevertheless, it is noted that even though this part has not been done separately, there is a high number of barriers detailed in the part 6.4.7 which are in common. Therefore, the procedure has been carried out clustering all protective barriers in the same part of this study.

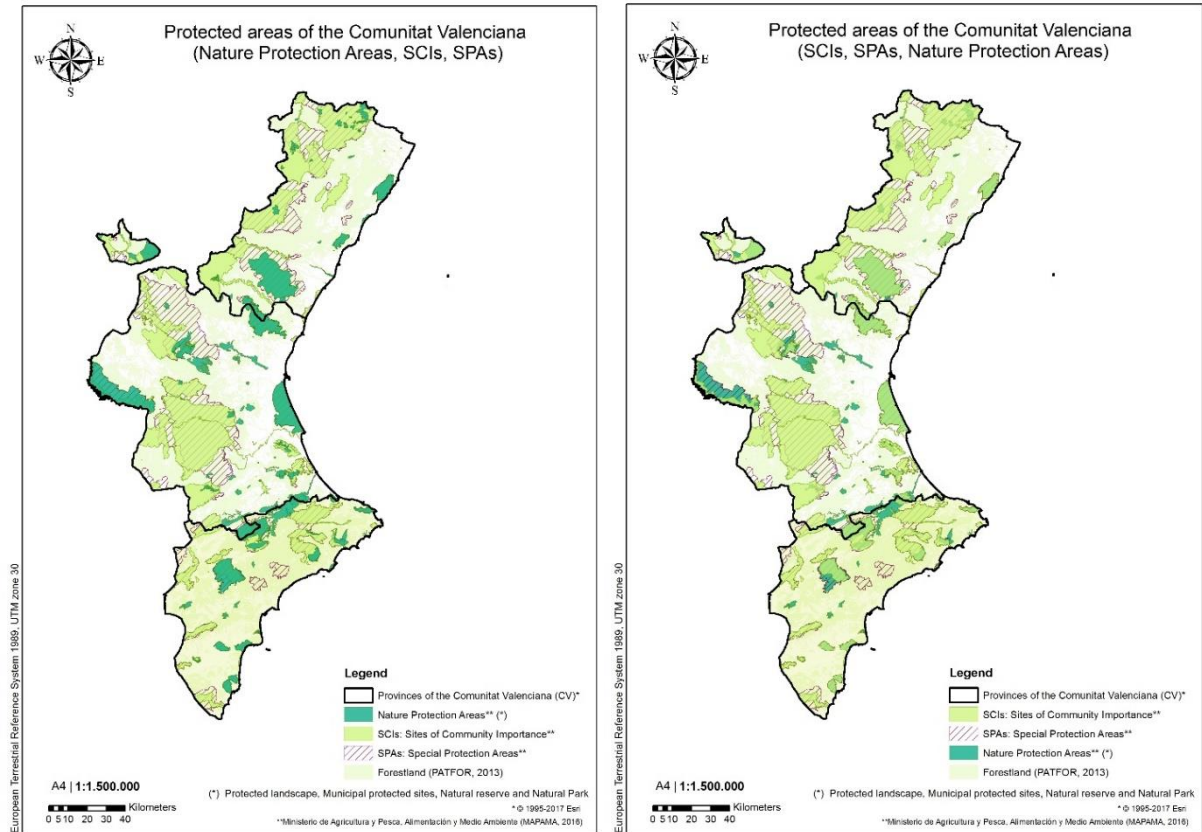


Figure 1. Overlapping of the protected areas of the Comunitat Valenciana

<sup>3</sup> Protection figures are overlapped and submitted to accumulative restrictions. More than 50% of the forest surface has some protection figure. Even two or more figures are overlapped in more than 30% of the forestland. More than 80% of the forests included in the 22 Natural Parks are part of Natura 2000.

### 3. Identification of barriers in Natura 2000 protected areas (SCI, SPA)

#### Legislative barriers

	Forest management	Forest harvesting & logistics	Biofuels industry			Distribution	Thermal/electrical energy conversion	Distribution to public consumption
			Woodchip	Pellet	Firewood			
LEGISLATIVE	<p>(1)High number of protection figures which difficulties the forest management projects.</p> <p>(2)Protection figures overlapped.</p> <p>(3)Contradictory and excessively protectionist policies preventing private and municipal management.</p> <p>(4)Differences through other Spanish Regions, lack of management of the competent Authority and lack of concretion of the authorized regime.</p> <p>(5)Lack of coherence between the objectives of Natura 2000 and those of the Region of Valencia in these protected areas; in Spain each Regional Government has its degree of protection, financing, management, etc. Moreover, the Regional Governments which have the responsibility of the Natura 2000 management do not know how to make management tools; lack of coherence.</p> <p>(6)Lack of effectiveness of the Natura 2000 in the conservation of the biodiversity due to a lack of management.</p> <p>(7) Lack of management in Natura 2000.</p>	<p>(1)Important limitations for forest harvesting.</p> <p>(2)Lack of coherence between the authorized/allowed and forbidden operations.</p> <p>(3)Difficulty to do wider the forest roads or make tasks to maintain them.</p>	<p>(1) Complexity in the authorizations of procedures in non-urban land at regional level (Law 5/2014<sup>4</sup>).</p>			<p><i>No obstacles found</i></p>	<p>(1)All infrastructure projects within a Natura 2000 area, which are neither directly related to the Natura 2000 management nor directly or indirectly affect them, should be subject to a detailed preliminary assessment of their impact, depending on the habitats species and conservation objectives.</p> <p>(2)Lack of establishment of EU Biodiversity strategy and the EU renewable energy goals.</p>	<p><i>No obstacles found</i></p>

<sup>4</sup> Ley 5/2014, de 25 de julio, de Ordenación del Territorio, Urbanismo y Paisaje, de la Comunitat Valenciana ([https://boe.es/diario\\_boe/txt.php?id=BOE-A-2014-9625](https://boe.es/diario_boe/txt.php?id=BOE-A-2014-9625))

### Administrative barriers

	Forest management	Forest harvesting & logistics	Biofuels industry			Distribution	Thermal/electrical energy conversion	Distribution to public consumption
			Woodchip	Pellet	Firewood			
ADMINISTRATIVE	<p>(1) Excessive procedures and long time to get the approval of the implementation of forest management projects in protected areas; if the projects are not revised on time, they can be obsolete.</p> <p>(2) Accumulated delay in the declaration of the SAC (Special Area of Conservation) and in the approval of the corresponding management plans of each one of them; In the CV only the 33.33% of the SACs have been approved; accumulation and urgency for the approval.</p> <p>(3) Lack of coordination and collaboration between administrations.</p> <p>(4) The precautionary principle difficulties the authorizations to carry out a sustainable forest management.</p> <p>(5) Lack of administrative management in the protected areas; the increased of the administrative procedures linked to an excessive bureaucracy for the forest owner is complicated for the forest managers.</p> <p>(6) Lack of communication and participation in the management of areas included in Natura 2000.</p> <p>(7) Lack of involvement in the management of Natura 2000.</p> <p>(8) Lack of public participation in the assessment of forest management plans in protected areas.</p> <p>(9) Lack of synergies between Natura 2000 and the management bodies of the protected areas.</p> <p>(10) Lack of knowledge about the state of the areas to be protected.</p> <p>(11) Short term to get the objective of Natura 2000 with the EU.</p> <p>(12) Lack of technical management for each area.</p> <p>(13) Misinterpretation of the Natura 2000 objective: conservationism through passive and restrictive policies where conservation is a basic pillar for the forest management.</p>	<p>(1) The principle of precaution makes difficult the obtention of the required authorization forest harvesting, restricting land management</p> <p>(2) Uncertainty on the control of the forest use by the authority in Natura 2000 areas.</p> <p>(3) Necessary authorization for forest production due to the precautionary principle of Natural protected areas and Natura 2000.</p>	No obstacles found	No obstacles found	No obstacles found	No obstacles found	<p>(1) Complex procedures in the case of positive affection, which are translated into a set of studies and statements to be exchanged between administered people and the administration as the "Study of Affections" etc.</p> <p style="text-align: center;">No obstacles found</p>	

Technical barriers:

	Forest management	Forest harvesting & logistics	Biofuels industry			Distribution	Thermal/electrical energy conversion	Distribution to public consumption
			Woodchip	Pellet	Firewood			
T E C H N I C A L	<p>(1)Lack of indicators and guidelines for the Natura 2000 management (private and municipal ownership).</p> <p>(2)Lack of coherence in the implantation of protected areas.</p> <p>(3) Lack of coherence between different Regional Governments regarding the application of the rules to carry out a forest management in Natura 2000.</p> <p>(4)Each protection figure has its own tools to be managed.</p> <p>(5)Precipitation, urgency and scarce technical basis for approving important documents.</p> <p>(6)Difficulty in forest management projects in highly fragmented private forests.</p> <p>(7)Spain is the country with more protected surface. Nevertheless, there is a misunderstanding about the initial objectives of the Natura 2000 protection figure.</p>	<p>(1)Restrictions to use machines for forest harvesting and logistics in protected areas.</p>	<p><i>No obstacles found</i></p>	<p><i>No obstacles found</i></p>	<p><i>No obstacles found</i></p>	<p><i>No obstacles found</i></p>	<p>(1)The technical viability to implement potential facilities is complicated due to the own characteristic of the protected areas under Natura 2000.</p>	<p><i>No obstacles found</i></p>

Social barriers:

	Forest management	Forest harvesting & logistics	Biofuels industry			Distribution	Thermal/electrical energy conversion	Distribution to public consumption
			Woodchip	Pellet	Firewood			
S O C I A L	<p>(1)Reticence to use biomass in protected areas.</p> <p>(2)Lack of knowledge of the relation between sustainable forest management and the conservation of the Natura 2000 objectives which entails a lack of awareness on the contribution of forest managements to maintain the biodiversity; conservationism through passive restrictive policies; confussion between forest conservation and management.</p> <p>(3) Short-medium term public opinion regarding the forest management; low awareness.</p> <p>(4)Lack of information about the protected areas; the society does not know this protection figure.</p> <p>(5)Lack of awareness of the consequences of do not carry out forest management regarding the risk of bushfires.</p> <p>(6)The private owners have a negative vision about the benefits that Natura 2000 can provide them.</p>	<p>(1) Pressure from certain local conservation groups that hinder/prevent the execution of forest works in protected areas.</p> <p>(2)There is not a clear vision about the relevance of execute forest works in order to contribute to the conservation objectives of the protected areas.</p>				<p><i>No obstacles found</i></p>	<p>(1)Local environmentalist groups are against the facilities.</p> <p>(2)Lack of awareness about the benefits of the implantation of a district or industrial heating.</p>	<p><i>No obstacles found</i></p>

Economic barriers:

	Forest management	Forest harvesting & logistics	Biofuels industry			Distribution	Thermal/electrical energy conversion	Distribution to public consumption
			Woodchip	Pellet	Firewood			
E C O N O M I C	<p>(1)Economic restrictions.</p> <p>(2)Lack of funding and human resources for direct management measures; there is a lack of specific financing for measures which have economic costs for owners.</p> <p>(3)The economic compensation is not being guaranteed.</p> <p>(4) Lack of investment to reach the conservation objectives in protected areas.</p> <p>(5)Cost of the certification: cost overrun. The costs are increased due to the forest management in Natura 2000 areas for the necessity to make more administrative procedures.</p> <p>(6) Forest Surface included in Natura 2000 has not added real value to forest products and services.</p>	<p>(1)Lack of investment due to factors which cause insecurity in the development of the forest works.</p> <p>(2)Cost of the certification; cost overrun. The costs are increased due to the restriction of using forest machines for silvicultural treatments.</p>	<p>(1)Lack of a settled and guaranteed market; there is no balance between supply and demand</p>			<p><i>No obstacles found</i></p>	<p><i>No obstacles found</i></p>	<p>(1)Lack of bioenergy demand.</p>

#### 4. Selection of maximum 3 key barriers in national/regional/local protected areas (National Parks, Nature Parks)

The selection of the key barriers has been carried out as agreed in 6.4.3.

#### 5. Selection of maximum 6 key barriers in NATURA 2000 protected areas (SCI, SPA)

Priority	Barrier	Step of value chain (Forest management, forest harvesting & logistics, etc.)	Character (Legislative, Administrative, Technical, Social and Economic)
1 <sup>st</sup>	Excessive administrative procedures which are increased for private forest owners. Complexity in the authorizations of procedures in non-urban land at regional level (Law 5/2014). Overlapping of competences that increased the complexity of the approval procedures.	Forest management and forest harvesting & logistics, biofuels industry.	Legislative and administrative
2 <sup>nd</sup>	Atomization and fragmentation of the forest ownership. Lack of owner engagement to carry out a forest management due to a lack of knowledge, as well as of profitability in protected areas.	Forest management	Technical and social
3 <sup>rd</sup>	High number of protection and overlapping figures which difficult the forest management.	Forest management and forest harvesting & logistics	Technical
4 <sup>th</sup>	Lack of knowledge and public opinion in the short-medium term of forest exploitation; Low awareness	Forest management	Social
5 <sup>th</sup>	Lack of a settled and guaranteed market; There is no balance between supply and demand.	Distribution to public consumption	Economic and social
6 <sup>th</sup>	Pressure from local conservation groups that hinder/prevent the execution of forestry work in protected areas	Forest harvesting & logistics	Social



## 6. Involvement of regional stakeholders, proposal of possible solutions and definition of operational recommendations

Definitive Priority	Barrier	Stakeholders involved in the region	Proposal of possible solutions	Operational recommendations
1 <sup>st</sup>	<p><b>Excessive administrative procedures which are increased for private forest owners. Complexity in the authorizations of procedures in non-urban land at regional level (Law 5/2014). Overlapping of competences that increased the complexity of the approval procedures.</b></p>	<p>(1) Local/regional public authorities                      (2) Private forest owners                      (3) Municipal forest owners                      (4) Private and public companies                      (5) Professional associations and technicians (forest engineers)                      (6) Management bodies of the protected areas                      (7) end-users</p>	<p>(1)The administration has to promote the sustainable forest management in protected areas.</p> <p>(2)The simplification of the authorization procedures is needed in order to carry out forest management and harvesting operations; raising awareness of the advantages to simplify the procedures.</p> <p>(3)Take into account key actors who are directly involved in the forest management in order to act in the procedure of the simplification normative.</p> <p>(4) Improvement system for coordinating normative in all Regional Governments in Spain.</p>	<p>(1)The competent administration has to support and facilitate the realization of forest management projects in protected areas.</p> <p>(2) Definition of policies and standardized procedures for administrative streamlining.</p> <p>(3)Provide more administrative staff and technical expertise to carry out sustainable forest management with bioenergy purposes in the protected areas for bushfires prevention.</p> <p>(4)Simplification of the procedures to redact and approve sustainable forest projects in order to promote the use of forest biomass with bioenergy objectives.</p> <p>(5) To promote the implementation of a quality control system for the traceability of the results and solutions in the simplifying administrative process.</p>

Definitive Priority	Barrier	Stakeholders involved in the region	Proposal of possible solutions	Operational recommendations
2 <sup>nd</sup>	<p>Atomization and fragmentation of the forest ownership. Lack of owner engagement to carry out a forest management due to a lack of knowledge, as well as of profitability in protected areas.</p>	<p>(1) Private forest owners                      (2) Municipal forest owners                      (3) Private and public forest companies: harvesting and logistics                      (4) Local/regional public authorities</p>	<p>(1) Inform about the Natura 2000 opportunities and the importance of this protection figure against bushfires risks and for maintaining the biodiversity                      (2) Have a close cooperation between competent Authorities of forest and nature protections with owners and management bodies.                      (3) The State Members have to support the owners and forest managers in order to carry out forest management projects linked with the rural development.</p>	<p>(1) Compensation or economic incentives (payment for environmental services) when a forest management and intervention is doing correctly (active management) under Natura 2000 objectives, as well as when the forest activity is restricted.                      (2) Provide to the owner technical assistance.                      (3) Encouragement of agroforest cooperatives and associative management formulas                      (4) Boosting forest ownership associations and the cooperations between owners, as well as with the key actors involved in the forest bioenergy value chain.                      (5) Promote a public-private cooperation which is linked with forest owners, local enterprise and municipal administration to develop all the steps in the forest bioenergy value chain.                      (6) Define territorial management plans (forest administration of the Regional Governments) and promote projects development (regional public administration), specially in those areas where there is an important municipal propriety in order to ensure the future of residual forests biomass in a bioenergy plant.</p>

Definitive Priority	Barrier	Stakeholders involved in the region	Proposal of possible solutions	Operational recommendations
3 <sup>rd</sup>	High number of protection and overlapping figures which difficult the forest management	(1) Private and municipal forest owners (2) Sectorial agencies (3) Private and public forest companies: harvesting and logistics (4) Relevant regional and municipal departments and companies. (5) Local/regional public authorities (6) Management bodies of the protected areas	(1) Raise awareness that, at least in the MED area, many habitats and ecosystems to be protected under Natura 2000 figure is due to the human activity; an active and sustainable forest management is needed in Natura 2000 areas in order to reach objectives of conservation.  (2) Review and update, by the forest administration, the management projects expired to be implemented.  (3) To develop a multidisciplinary and cooperative approach integrating the public participation during the planning and preparation of the specific objectives and conservation measures in Natura 2000 areas.	(1) Promote the use of forest products not only as sustainable energy source but also as the tool to rural development with local forest resources, carrying out an integral and multifunctional forest management.  (2) Promote the establishment of new policies which really contribute to carry out an active management for improving biodiversity.  (3) The contribution of Natura 2000 in the quality and stability of rural livelihoods; increasing employment and agroforest incomes.  (4) Establishment of unified normative for Spanish Regional Governments.  (5) Boosting the cooperation between management bodies of protected areas and forest owners.  (6) To implement correctly the European Commission guidelines established for the Natura 2000.

Definitive Priority	Barrier	Stakeholders involved in the region	Proposal of possible solutions	Operational recommendations
4 <sup>th</sup>	Lack of knowledge and public opinion in the short-medium term of forest exploitation; Low awareness	(1) Private forest owners (2) Municipal forest owners (3) Local/regional public authorities (4) Management bodies of the protected areas (5) Higher education and research (6) Professional education and technicians (forest engineers) (7) Sectorial agencies	(1) To disseminate in the public opinion the basic principle of sustainable forestry concepts: - Binomial and balance between forest conservation and management.  (2) To promote sustainable forest management measures appropriate for local climate and environmental climate conditions in the Mediterranean areas.  (3) Arise awareness of the local communities on the benefits of sustainable forest management oriented to the biomass use for energy purposes, improving environmental services of the ecosystems and resilience against bushfires and climate change effects (Natura 2000 status is compatible with multifunctional forest management).	(1) Identification of pilot/project areas representative for good practices in sustainable and multifunctional and subsidiary forest management to be disseminated. Creation of a Demonstration Center.  (2) Quantitative studies to objectively know the possible positive and negative impacts of a biomass extraction, especially in aspects such as biodiversity, quality of soil and water, landscape, carbon balanced and bushfires prevention).  (3) Awareness campaigns aimed at politicians/population focused on environmental benefits due to the energy production for short biomass chain.  (4) Adoption by public administrations of the use of biomass for energy purposes, to promote private initiative and serve as an example.

Definitive Priority	Barrier	Stakeholders involved in the region	Proposal of possible solutions	Operational recommendations
5 <sup>th</sup>	<b>Lack of a settled and guaranteed market; There is no balance between supply and demand.</b>	(1)Sectorial agency (2)Local/regional public authorities Forest owners (3)Forest harvesting and logistic companies and associations (4)End-users bioenergy (5)Trade intermediate companies	(1) Define and establish local forest biomass markets in protected areas that guarantee quality, price and supply.  (2) To promote the local demand for biofuels in protected areas.	(1) Development and implementation of quality labels and traceability schemes of forest biomass and biofuels.  (2)Promoting the use of biofuels at local level, especially in industries and public buildings/facilities with a high demand for thermal energy.  (3)Creation of incentives for the use of biomass, with funds from the European Rural Development Plan. Grants for installation of biomass boilers.  (4)Support to private initiatives to improve logistics and payment for environmental services to forest owners who carry out active management, at the same time that the conservation of Natura 2000 is being favorable.  (5) The Public Administration should support the private owner to carry out forest works in its forest land in order to create a stable market.

Definitive Priority	Barrier	Stakeholders involved in the region	Proposal of possible solutions	Operational recommendations
6 <sup>th</sup>	<b>Pressure from local conservation groups that hinder / prevent the execution of forestry work in protected areas</b>	(1) Local/regional public authorities (2) Management bodies of the protected areas (3) Professional education and technicians (forest engineers)	(1)Information and communication about strenghs and opportunities of sustainable forest management oriented to biomass and active bushfire prevention.  (2)Creation of interdisciplinary working groups, to consensue and objectify the creation of opinion on scientific bases.	(1)Participation of opinion leaders in the awareness and knowledge of the concepts of sustainable forest management (strategies and plans) in protected areas

## 7. References

### Legislative texts:

- Ley 6/2014, de 25 de julio, de la generalitat, de Prevención y Control Ambiental de Actividades en la Comunitat Valenciana (deroga a la Ley 2/2006).
- Ley 5/2014, de 25 de julio, de Ordenación del Territorio, Urbanismo y Paisaje de la Comunitat Valenciana.
- Ley 21/2013, de 9 de diciembre, de evaluación ambiental.
- Ley 41/2010, de 29 de diciembre, de protección del medio marino.
- Ley 42/2007, de 13 de diciembre, del Patrimonio Natural y de la Biodiversidad
- Ley 45/2007, de 13 de diciembre, para el desarrollo sostenible del medio rural establece que las áreas rurales integradas en la Red Natura 2000 tienen la consideración de zonas rurales prioritarias a efectos de la aplicación del Programa de Desarrollo Rural Sostenible.
- Ley 11/1994, de 27 de diciembre, de Espacios Naturales Protegidos de la Comunitat Valenciana.
- Ley 3/1993, de 9 de diciembre, Forestal de la Comunitat Valenciana.
- Ley 2/1989, de 3 de marzo, de la Generalitat, de Impacto Ambiental.
- El Real Decreto Legislativo 1/2001, de 20 de julio, por el que se aprueba el texto refundido de la Ley de Aguas (modificado por la Ley 62/2003, de 30 de diciembre, de medidas fiscales, administrativas y del orden social), por el que se transpone al ordenamiento jurídico español la Directiva Marco del Agua.
- El Real Decreto Legislativo 2/2008, de 20 de junio, por el que se aprueba el Texto Refundido de la Ley de Suelo.
- Real Decreto Legislativo 1/2008, de 11 de enero, por el que se aprueba el texto refundido de la Ley de Evaluación de Impacto Ambiental de proyecto
- DECRETO 15/2016, de 19 de febrero, del Consell, de regulación de los parajes naturales municipales de la Comunitat Valenciana. [2016/1175].
- DECRETO 58/2013, de 3 de mayo, del Consell, por el que se aprueba el Plan de Acción Territorial Forestal de la Comunitat Valenciana. [2013/4617] (Diari Oficial núm. 7019 de 08.05.2013) Ref. Base Datos 004345/2013.
- DECRETO 60/2012, de 5 de abril, del Consell, por el que regula el régimen especial de evaluación y de aprobación, autorización o conformidad de planes, programas y proyectos que puedan afectar a la Red Natura 2000.[2012/3481].
- Decreto 162/1990, de 15 de octubre, del Consell por el que se aprueba el Reglamento para la ejecución de la Ley 2/1989, de 3 de marzo, de Impacto Ambiental.

- ORDEN 10/2015, de 8 de abril, de la Consellería de Infraestructuras, Territorio y Medio Ambiente, por la que se regulan los aprovechamientos forestales en la Comunitat Valenciana. [2015/3407] (Diari Oficial núm. 7508 de 20.04.2015) Ref. Base Datos 003429/2015.
- ORDEN 1/2013, de 14 de enero, de la Conselleria de Infraestructuras, Territorio y Medio Ambiente, por la que se aprueban las bases reguladoras de un régimen de primas para la puesta en valor de la biomasa forestal en terrenos forestales de la Comunitat Valenciana. [2013/478].
- Orden de 3 de enero de 2005, de la Conselleria de Territorio y Vivienda por la que se estableció el contenido mínimo de los estudios de impacto ambiental que se hayan de tramitar ante esta Conselleria.
- COMMISSION STAFF WORKING DOCUMENT FITNESS CHECK of the EU Nature Legislation (Birds and Habitats Directives) Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds and Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora. Brussels, 16.12.2016 SWD(2016) 472 final.

#### Technical references:

- Programa de Desarrollo Rural de la Comunitat valenciana. PDR CV 2014-2020. Generalitat Valenciana. Conselleria d'agricultura, Medi Ambient, Canvi Climàtic i Desenvolupament Rural. Agència Valenciana de Foment i Garantia Agrària. Unió Europea. Fondo Europeo Agrícola de Desarrollo Rural -Europa invierte en las zonas rurales. Última modificación: Febrero 2017.
- Análisis de los precios de los biocombustibles domésticos -pellet, astilla y hueso de aceituna, en el mercado español durante el primer trimestre de 2016. AVEBIOM.
- The bioenergy potential of Natura 2000 – a synergy between climate change mitigation and biodiversity protection. Van Meerbeek K., Ottoy S., de Andrés M. et al., Front Ecol Environ 2016. 14(9): 473-478, doi: 10.1002/fee.1425.
- SOLID BIOMASS BAROMETER. EurObserv'ER. December 2016.
- Hidalgo R. (SG Medio Natural, MAGRAMA), Vallejo N. (DG ENVI, Comisión Europea); Ezquerro J. (Junta de Castilla y León), San Miguel A. (Universidad Politécnica de Madrid), López N. (Junta de Comunidades de Castilla La-Macha), Gómez P. (Gerente de COSE) y SG de Silvicultura y Montes. Jornada „Red Natura 2000 y gestión forestal: medidas contenidas en los PDR“. Madrid, octubre 2016.
- Plan integral de fomento de la biomasa residual agrícola y forestal para uso térmico. diagnóstico (versión preliminar) Noviembre 2016. VAERSA.
- D6.2 „Online expert interview database policies, finance tools, legal regulations, public support and good governance“15.07.2016. greenGain project. <https://greengain.eu/project/>.

- Lerma Arce, V. (2015). Planificación, logística y valorización de biomasa forestal residual en la provincia de Valencia.
- Natura 2000 y los bosques. Parte I-II. Reporte técnico – 2015 – 088. Comisión Europea, 2015.
- Natura 2000 and Forests. Part III. – Case studies. European Union, 2015.
- Resolución de la Dirección General del medio natural por la que se aprueba el Plan Técnico de Gestión y Mejora para la ordenación del monte „Montemayor“ en el Término Municipal Segorbe (Castellón). Ref.: 1287/2013/OGF. Expte.: Plan Técnico de Gestión y Mejora para la ordenación del Montemayor en la Sierra Calderona (TM Segorbe). Valencia, mayo 2015. Generalitat Valenciana. Conselleria d'Infraestructures, Territori i Medi Ambiente.
- Estévez M., Olmeda C., et al. Noviembre 2015. FSC España. Certificación FSC, productos forestales y Red Natura 2000 en España.
- Valoración preliminar de repercusiones sobre la Red Natura 2000. Ref. 267/VS14 RD. Evaluación de efectos sobre la Red Natura 2000. Programa de Desarrollo Rural de la Comunitat Valenciana 2014-2020. Agència Valenciana de Foment i Garantia Agrària. Generalitat Valenciana. Conselleria d'Infraestructures, Territori i Medi Ambient. Resolución Valencia Mayo 2014.
- ESCUELA DE INGENIERÍAS INDUSTRIALES PROYECTO FIN DE MASTER EN LOGÍSTICA Estudio de la logística de una planta de biomasa para abastecer de energía térmica a la Universidad de Valladolid Autor: Ana González Iturralde Tutor: Ángel Manuel Gento Municio. Valladolid 2014.
- Bases para una estrategia provincial de biomasa. Uso térmico de la Biomasa. Diputación Provincial de Castellón. VAERSA. 2014
- Alcoinnova, proyecto industrial y tecnológico. Alcoi (Alicante). Afección a la Red Natura 2000. (Documentación adaptada a la memoria ambiental del proyecto industrial y tecnológico Alcoinnova, emitida por la Comisión de Evaluación Ambiental, en sesión celebrada el 29 de Abril de 2014).
- Marco de Acción Prioritaria para la Red Natura 2000 en España. Para el periodo de financiación 2014-2020. Julio 2014 (Version 2.1). Ministerio de Agricultura, Alimentación y Medio Ambiente. Fundación Biodiversidad. Life.
- ST-7 “¿Qué ofrece la bioenergía a España? OPTIMIZACIÓN LOGÍSTICA DE LA CADENA DE SUMINISTRO DE BIOMASA. CETEMAS. Sandra Sánchez García. CONAMA 14. 26 de Noviembre 2014, Madrid.
- PATFOR (2013). Plan de Acción Territorial de la Comunitat Valenciana. Conselleria de Agricultura, Medio Ambiente, Desarrollo Rural y Cambio Climático. Generalitat Valenciana.
- Sanitjas A. (Servicio de Medio Ambiente de la Diputación de Gerona). Argemí J. et al. Servicio de Parques Naturales de la Diputación de Barcelona. 2013. Estudio y promoción de la biomasa forestal para usos energéticos en la RB del Montseny.



- Sistema de Evaluación del potencial de extracción de biomasa forestal residual a partir de parámetros de estación definidos en la provincia de Valencia. Claudia Monllor. Septiembre 2012.
- Evaluación del potencial de la energía de la biomasa. Estudio Técnico PER 2011-2020. Madrid 2011.
- Guidelines for Sustainable Forest Management Holmen Skog. 2011.
- Mas J. Biomass Forestal de la Comunidad Valenciana. Estado Actual y Futuro.. Noviembre 2011. Situación de la Biomasa Energética en la Comunitat Valenciana: aspectos legales, retributivos y ayudas a la inversión. Generalitat Valenciana. Proforbiomed. Programa MED.
- Observatorio Industrial del Sector de Fabricantes de Bienes de Equipo: „Biomasa. Oportunidades para el sector de fabricantes de Bienes de Equipo“ FECHA: Diciembre 2011.
- Estrategia Española para el desarrollo del uso energético de la biomasa forestal residual (Aprobada por la Comisión Estatal para el Patrimonio Natural y la Biodiversidad en su reunión del 22 de marzo de 2010) Madrid Marzo 2010.
- Visión de WWF sobre el uso de la biomasa forestal. Félix Romero. WWF. Organizada por Ence Jueves, 25 de noviembre de 2010. 10º Congreso Nacional del Medio Ambiente (Conama 10)SD-35. Biomasa y gestión forestal.
- Guía técnica Instalaciones de biomasa térmica en edificios, IDAE Instituto para la Diversificación y Ahorro de la Energía. Madrid 2009.
- Gestión de la red Natura 2000. WWF. Criterios de WWF para la gestión de la red europea de espacios protegidos en España. Octubre 2009.
- Guil F. Y Moreno-Opo R. (Coords.). 2008. Guía práctica para la elaboración de planes de gestión Natura 2000 en fincas y montes. Obra Social Caja Madrid-Fundación CBD-Hábitat. Madrid.

**Web links:**

- ¿Para qué queremos la Red Natura 2000? Enero 2017. Sanz I.  
<http://www.forest-monitor.com/es/para-que-queremos-la-red-natura-2000/>
- Productos de pellets reclaman un IVA reducido y bajar el IBI a los usuarios. Noviembre 2016.  
<http://www.lavanguardia.com/vida/20161110/411760964458/productores-de-pellets-reclaman-un-iva-reducido-y-bajar-el-ibi-a-los-usuarios.html>
- European Biomass Industry Association. What is biomass?  
<http://www.eubia.org/cms/wiki-biomass>

- La biomasa forestal: retos y oportunidades. Ignacio Macicior Tellechea Institución: Asociación Nacional de Empresas Forestales (ASEMFO) (Conama 10). <http://www.conama10.conama.org/conama10/download/files/CT%202010/40873.pdf>
- Espacios naturales protegidos. Comunitat Valenciana. Conselleria d'Infraestructures, Territori i Medi Ambient. [http://www.argos.gva.es/bdmun/pls/argos\\_mun/DMEDB\\_COMUDATOSESPATURALES.DibujaPagina?aNComuld=17&aVLengua=c](http://www.argos.gva.es/bdmun/pls/argos_mun/DMEDB_COMUDATOSESPATURALES.DibujaPagina?aNComuld=17&aVLengua=c)
- Presentación de „Directrices para la elaboración de la documentación ambiental necesaria para la evaluación de impacto ambiental de proyectos con potencial afección a la Red Natura 2000. Ministerio de Agricultura, Alimentación y Medio Ambiente. Dirección General de calidad y evaluación ambiental y medio natural. Subdirección General de Evaluación Ambiental. [http://www.mapama.gob.es/es/calidad-y-evaluacion-ambiental/temas/evaluacion-ambiental/PRESENTACION\\_Y\\_DIRECTRICES\\_RED\\_NATURA\\_2000\\_tcm7-218029.pdf](http://www.mapama.gob.es/es/calidad-y-evaluacion-ambiental/temas/evaluacion-ambiental/PRESENTACION_Y_DIRECTRICES_RED_NATURA_2000_tcm7-218029.pdf)
- Las trabas burocráticas en España para nuevas instalaciones de bioenergía son las más altas de Europa. Febrero 2009. <http://www.energias-renovables.com/biomasa/las-trabas-burocraticas-en-espana-para-nuevas>