

*Renewable energy sector fiche – short questionnaire for industry associations and individual companies*

*Company details and market information*

*1. What is the name of your company (or (main) companies part of your association), its size, and what market segment do you operate on? (wind, solar PV, concentrated solar power, hydropower, biomass, geothermal, other)*

EWEA (European Wind Energy Association) is the voice of the wind industry, actively promoting wind power in Europe and worldwide. It has over 700 members from almost 60 countries, including wind turbine manufacturers with a leading share of the world wind power market, component suppliers, research institutes, national wind and renewables associations, developers, contractors, electricity providers, finance and insurance companies, and consultants.

*2. Who are the key economic operators active on your market?*

- a. What is their typical size? (turnover, employees)*  
*b. Where do they come from (from within EU or outside EU)?*

The 10 largest turbine manufacturers and their respective market shares are Vestas, Denmark (14.7%)<sup>1</sup>; Sinovel, China (11.1%), GE, United States (9.5); Goldwind, China (9.4%); Enercon, Germany (7.2%); Suzlon, India (6.8%), Dongfang, China (6.6%); Gamesa, Spain (6.6%); Siemens, Germany (6.0%), Guodian United Power, China (4.2%)

EWEA estimates that the number of direct jobs in the wind industry as of the end of 2010 was 135,000. Taking into account indirect jobs, the total figure is 238 000 jobs.

The global employment figures for EU-based turbine manufacturers are the following:

- Vestas had 21,767 employees as of 30 June 2012
- Enercon: 13,000 employees
- Gamesa: 8,200 employees
- Siemens: 8,000 employees

It should also be noted that of the top 10 wind energy project developers, six are European: Iberdrola (Spain – 13.274 MW<sup>2</sup>); EDP Renovaeis (Portugal – 7.483 MW); Acciona (Spain – 6,921MW); E.ON Climate and Renewables (Germany – 4,035); Enel Green Power (Italy – 3,541 MW); GDF Suez (France – 3,440).

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<sup>1</sup> 2011 market shares as reported by Deloitte.

<sup>2</sup> Cumulative capacity by end 2011 – BTM Consult

These developers have a global footprint. For example, Iberdrola has the second largest share in the US market and Acciona is the largest developer in Mexico.

Dong, the Danish utility and Vattenfall the Swedish utility are the largest offshore wind operators with almost 40% of all offshore wind turbines. They each have more than 3,500 of offshore projects in the pipeline.

*3. What are, to your knowledge, the main potential markets for green energy worldwide in your sector for the next 10 years?*

The key non-European markets for the wind industry include Canada, Australia, Argentina, Brazil, China, Egypt, India, Japan, Mexico, New Zealand, South Korea, Turkey, Ukraine and the United States.

#### *Trade barriers for goods*

4. In order to promote EU-based green growth, the EU could foster the export of green energy goods by requesting full and immediate tariff liberalization in its bilateral negotiations. What are in your opinion the goods that should feature on such a list?

EWEA supports bilateral tariff liberalization on a comprehensive list of climate-related goods. Such an agreement should facilitate trade. Therefore, it has to be ensured that it does not impose new red tape such as new compulsory certificates or bureaucratic burdens.

A number of lists of environmental goods are used in the discussion on the liberalisation of trade in green products including a list notified to the WTO on 27 April 2007 and one developed by the World Bank. These are a good basis to start the discussion.

In the view of the wind industry it is critical that the following products be given priority:

- Wind turbines - 850231
- Towers and lattice masts for wind turbines – 730820
- Clutches and joints – 848360
- Wind turbine parts – 841290 and 850300
- Gearbox – 848340
- Nacelle/electric generating sets – 850231
- Converters – 850440
- Generators – 850164
- Ground control – 853710
- Meteorological equipment - 901580
- Main shaft – 848310
- Converters: 850490, 854129)
- LV motors < 375 kW

*5. Are you facing any specific trade barriers in third countries which may hinder trade in green energy related goods, because your access to raw materials and/or semi-finished products has been limited due to government intervention/measures?*

Rare earths are a key raw material for the industry. EWEA supports the efforts of the European Commission towards ending the Chinese exports restriction on these products. The industry encourages the Commission to engage in discussions with trade partners to phase out export restrictions. Dispute settlement under the WTO should be used when no solution based on dialogue is possible. EWEA will closely follow the outcome of the ongoing WTO case as this will set an important precedent on the trade in raw materials.

Access to semi-processed raw materials such as glass-fibre and glass fibre fabrics is important as well. The EU should maintain an open trade policy with regards to these products. Access to such products at a reasonable price is essential to the competitiveness of the industry. It contributes to an effective production process thus helping to maintain industrial employment in Europe.

*6. Are you facing any specific trade barriers in third countries which may hinder trade in green energy related goods?*

a. in terms of local content requirements imposed,

Local content requirements have surged as a worldwide phenomenon in recent years. It is one of the main challenges of the development of the industry.

As a result of local content requirements, turbine manufacturers have an obligation to invest in production facilities which are not economically viable over the long term. Overall this contributes to higher costs for the end-consumers and hinders the potential of wind power to become competitive vis-à-vis conventional technologies. In order to be competitive the industry needs to draw on a lean and efficient global supply chain.

Decisions creating local content requirements at national level are short-sighted. They may contribute to creating domestic employment in the short term but these jobs will not be sustainable in the long run because the markets in which they are created do not have the necessary critical mass.

EWEA has come out against the local content requirement included in the Ontario Green Act. This is currently the object of a WTO dispute. EWEA hopes that upon the resolution of this complex case the European Commission can address local content requirements via all the avenues available including bilateral trade discussions or, when necessary, WTO cases.

The phenomenon of local content requirement has emerged in countries including:

- Ukraine: Law no.8231 makes the feed-in tariff conditional on a local content requirement increasing to 50% by 2014.
- Brazil: financing by the Brazilian Development Bank (BENDS) depends on a 60% local content requirement. The criteria are still unclear for the moment but the tendency has been towards increasingly stringent rules.
- Turkey: In order to get the full feed-in tariff the entire turbine needs to have been produced in Turkey - different components of the feed-in tariff are associated with different turbine parts.
- South Africa: recent calls for tender include a domestic content requirement of 25% which is due to increase to 35% and 40% in subsequent windows.

These are just the most worrying instances but other such requirements are being implemented in other countries including Croatia. These measures are being taken in spite of the fact that, as an EU-membership candidate, Croatia should already be abiding by internal market rules.

b. in terms of public procurement, intellectual property rules in these countries?  
*tenders?*

China was among the first countries which imposed local content requirement for the wind industry. Although the 70% local content requirement (started from 40%) was abandoned in 2010 at the national level, in practice local provincial governments strongly urge developers to use locally produced turbines and/or even components manufactured from their own provinces. This has resulted in massive production capacity building hence sharp drop in WTG margin and put Chinese turbine quality at a risk.

With the industry becoming more competitive, the ability for international companies to compete has been hindered through regulations and policies that unfairly tilt the playing field in domestic companies' favour. This can be reflected in unequal access to government R&D funding, unequal access to bank financing and a non-transparent bidding system which has an overwhelming high weighting on initial turbine price, instead of life time cost of energy.

Chinese standards on wind industry are still shaping. Many parts are not harmonized with international norms. There is a need to increase transparency and overall participation in the drafting and enforcement of technical industry standards and certification. Specifically more pronounced participation from international companies in the standard initiation and development process should be encouraged and system established to routine the wide consultation and participation process.

According to recent regulations, wind turbine grid compliance testing certification is required for a number of technical parameters. The national Energy Administration has stated clearly that China will only recognize government mandated testing body. China Electric Power Research Institute is the only testing body mandated to date. This implies that tests done outside China by internationally recognized certification bodies such as

GL are not recognized and in many cases foreign turbine manufactures need to redo these tests in China. Requiring such local certification adds costs and time-consuming effort for previously certified foreign WTG manufacturers while risking company IPR.

#### *Trade barriers for services*

Restrictions to the movement of services providers who are necessary to install, maintain, repair wind installations are a real impediment for trade in renewable energy technologies. For example, engineers specialized in fixing wind turbine tech problems would need to wait months in India to get a visa to be authorized to enter the country and fix urgent problems there.

7. What is the scope of green energy services in your sector that could be subject to full liberalization in bilateral negotiations?

#### *Other trade barriers*

8. Are you facing any competitive pressure because your competitors obtain certain subsidies (tax rebates, grants, credit lines, export financing)?

1 if possible described in terms of tariff codes according to EU Combined Nomenclature (<http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:282:FULL:EN:PDF>)<sup>2</sup>

9. How important are in your opinion standard setting, harmonisation of technical regulations and common conformity assessments for your sector? How can the EU book progress in this area?

Trade agreements should address non-tariff barriers, such as standards, technical rules and procurement practices, for example in a specific annex to the agreement. Regulatory cooperation and standards convergence should be a core objective with the goal of avoiding any national conflicts on product and trade standards. In order to help achieve this, we recommend utilizing standards development organizations which enable global markets and adhere to the World Trade Organization's "Principles for the Development of International Standards," such as the International Organization for Standardization (ISO), the International Electrotechnical Commission (IEC) or the International Telecommunication Union (ITU). Testing and certification should be performed according to international IEC/ISO standards. For example, the IEC has a technical committee dedicated to preparing international standards for wind turbines addressing design requirements, engineering integrity, measurement techniques and test procedures.

This could help to reduce non-tariff trade barriers that are experienced by European manufacturers when exporting to non-EU markets. The harmonisation of turbine certification would be a priority in this area.

The industry welcomes such initiatives and encourages the Commission to support standardisation efforts.

10. Are there any EU policies which hamper a successful liberalisation of green energy goods and services?

11. What is in your opinion the single most relevant action the EU could undertake to foster the exports of green goods and services to third countries?

The single most important issue is a concerted effort to phase out local content requirements. This hampers the competitiveness of the industry and stifles the development of emerging markets. The EU turbine manufacturers still rank among the global leaders. As the European market matures, it is critical for the European industry to conquer new markets. Local content requirements are the main barrier to this development.

Once the WTO panel has ruled on the Ontario local content requirements it is critical for the European Commission to draw on this example and aggressively pursue a strategy targeting local content requirements in the key markets mentioned above.

On the multilateral front, APEC countries (Asia-Pacific Economic Cooperation Forum) have recently agreed to reduce tariffs on a number of environmental goods to 5% or less by 2015. This is very positive signal and the industry hopes that the EU can build on such initiatives by like-minded partners to re-launch a multilateral effort towards liberalising trade in green goods and services. The Sustainable Energy Trade Initiative would be a useful blueprint for this exercise.