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# Assessment of climate change policies in the context of the European Semester

## Country Report: Spain



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The report provides an overview of current emission trends and progress towards targets as well as policy developments that took place over the period from February 2013 to November 2013.

Please feel free to provide any comments or suggestions to the authors through the contacts listed above.

## Short summary

**Background:** Spain has put much emphasis on the transition to a green economy. However, the Spanish climate policy was mainly based on the promotion of renewable electricity generation via a feed-in tariff scheme. This cornerstone of climate policy has effectively been abandoned with Royal Decree Law (RDL) 1/2012 by which the scheme was suspended due to its costs. However, the creation of green jobs was seen as a policy priority and currently, there are 400,000 to 500,000 green jobs in Spain, around 2.2% of total employment. Recent austerity measures put this development at risk.

**Non-ETS emission reduction target:** The Spanish target is -10 % (compared to 2005 emissions). Between 2005 and 2011 non-ETS greenhouse gas emissions already declined by 10%. However, according to the latest national projections submitted to the Commission and when existing measures are taken into account, the target is expected to be missed: -2 % in 2020 compared to 2005 (a projected gap of 8 percentage points).

### Key indicators 2011:

GHG emissions	ES	EU
ESD EU 2020 GHG target (comp. 2005)	-10%	
ESD GHG emissions in 2011 (comp.2005)	-10%	-9%
Total GHG emissions 2012 (comp.2005)	-20%	-12%
GHG emissions/capita (tCO <sub>2</sub> eq)	7.6	9.0

→ **15% lower** per capita emissions than the EU average

GHG emissions per sector	ES	EU
<b>Energy/power industry sector</b>	26%	33%
Transport	25%	20%
Industry (incl. industrial processes)	24%	20%
Agriculture (incl. forestry & fishery)	14%	12%
Residential & Commercial	7%	12%
Waste & others	4%	3%

→ **Energy/power industry sector**, Transport and Industry

Energy	ES	EU
EU 2020 RES target	+20%	
Primary energy consumption/capita (toe)	2.7	3.4
Energy intensity (kgoe/1000 €)	135	144
Energy to trade balance (% of GDP)	-4%	-3.2%

→ **20% lower** per capita consumption, **6% lower** energy intensity, contribution of energy to trade balance above EU average

Taxes	ES	EU
Share of environmental taxes (% of GDP)	1.6%	2.4%
Implicit tax rate on energy (€/toe)	115	184

→ **33% Lower** share of environmental taxes and **37% lower** implicit tax rate on energy than EU average

**Key policy development in 2013:** Significant changes in the electricity sector were introduced with Royal Decree Law 9/2013, affecting generation, transmission and distribution and aimed at tackling the persistent tariff deficit of the sector, which refers to the problem that the costs of the electricity system are not balanced by the revenues through the regulated prices. As of June 2013, owners of buildings are required to present an energy efficiency certificate to buyers or renters of flats. The PIMA SOL plan will support energy-efficient refurbishment of hotels.

**Key Challenges:** After the suspension of the feed-in tariff system in January 2012 the expansion of renewable energies in Spain was halted. The standstill in the renewable sector may have impacts on Spain's ability to reach its renewable energy target for 2020, as well as on employment levels in the sector. Therefore, the establishment of a new renewable support scheme is crucial. Moreover, the proportion of emissions from transport among Spain's total emissions has increased to 25% and thus requires further attention. Among the EU-15, Spain charges the lowest taxes on petrol, next to Luxembourg, and the lowest diesel tax rate in the entire EU; the ownership tax is not based on CO<sub>2</sub> emissions. Also, tax exemptions on aviation fuel used in domestic commercial flights create a disincentive for energy-efficiency measures.

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## I Background on climate and energy policies

Climate policy has been an important topic of debate in the past years in Spain. Policies and strategies are usually designed at central level, although regions can count on a high level of independence and may draft and implement local plans and strategies according to their specificities and needs. The overarching strategy is the Estrategia Española de Cambio Climático y Energía Limpia (Spanish strategy for climate change and clean energy), which has been in force since 2007 and will run until 2020.

Spain had put much emphasis on the transition to a green economy, mainly through the 2011 Sustainable Economy Act. The act encompasses a wide range of initiatives and measures aiming at a shift to a sustainable economy, including energy efficiency, sustainable transport or renewable energies. In 2011, the creation of green jobs was seen as a priority in Spain (OECD 2011). Currently there are 400,000 to 500,000 green jobs in Spain, around 2.2% of total employment (ILO 2012). A report by the International Labour Organisation (ILO 2012) estimates, that Spain's green economy could generate more than one million jobs by 2020, depending on the political support. The biggest potential seems to be in the construction sector due to renovation of buildings to make them more energy efficient.

However, the recent austerity measures might put this development at risk. The Spanish climate policy was mainly based on the promotion of renewable electricity generation via a feed-in tariff scheme. However, this cornerstone of climate policy has effectively been abandoned. According to Real Decreto-ley (RDL) 1/2012, the scheme has been suspended due to the excessive costs it caused to the electricity system. A preceding act (Royal Decree 6/2009) stated that the costs of the electricity system should have been fully balanced by revenues. According to current the government, the high costs of the support scheme prevented the cost coverage so that the scheme was eventually suspended. Cost coverage for the electricity system remained at the centre of the debate also in 2013. The reform of the system (with RDL 9/2013) introduced changes specifically with this aim. This reform and its points are being strongly opposed by other actors in the country and the relationships between different stakeholders on this matter are extremely tense (details on the reform are provided in Section 4 of this document).

As regards the transport sector, a few measures have been implemented with the aim of reducing emissions. Specifically, the country is attempting to renew its vehicle fleet with more efficient models and thus allow for emissions reduction.

## 2 GHG projections

### Background information

In 2011, Spain emitted 350.5 Mt CO<sub>2</sub>eq (UNFCCC inventory 2011), 24% more than in 1990. Energy use accounts for around 27% of total emissions, and emissions in this sector increased by 28% between 1990 and 2011, with a slight drop in 2011. This reflects the increasing number of dwellings, improved living standard, and growing floor area of commercial premises, which could not be outweighed by improved insulation in buildings and use of solar energy. Emissions from transport, the second most important emission source, have increased by more than 50% since 1990. Emissions from energy supply

increased steadily before the beginning of the financial crisis, which marked a sharp drop in emissions. The growing demand for electricity is increasingly met with natural gas and renewable energies, so emissions from energy supply in 2010 were 11% below 1990 levels. However, emissions from this sector increase from 2010 to 2011 again and now account for 25% of total emissions. Emissions from industrial processes and agriculture grew only slightly between 1990 and 2007. This reflects the boom in the construction industry and the use of halocarbons as substitutes for ozone-depleting substances. Since then emissions from industry dropped and were in 2011 almost back at 1990 levels (UNFCCC inventory 2011, EEA 2012, UNFCCC 2012). From 2011 to 2012 it is expected that the GHG emissions will be reduced, mainly through a reduction of emissions not stemming from energy supply and use (incl. transport) (EEA 2013c).

### **Progress on GHG target**

There are two sets of targets to evaluate: 1) the Kyoto Protocol targets for the period 2008-12 (which has just ended) and 2) the 2020 targets for emissions not covered by the EU ETS.

Under the Kyoto-Protocol the emission reduction target for Spain for the period 2008-2012 has been set to plus 15% based on 1990 for CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O and on 1995 for F-gases. An evaluation of the latest complete set of greenhouse gas data (for the year 2011; there is only preliminary data for 2012) shows that Spain's emissions have increased on average by 21% since 1990 (EEA 2013a). Therefore, Spain is not likely to meet its Kyoto target through domestic emissions reductions directly.

By 2020, Spain needs to decrease its emissions not covered by the EU ETS by 10% compared to 2005 according to the Effort Sharing Decision (ESD) <sup>(1)</sup>. The latest data for 2012 (EEA 2013b) suggests that Spain is on track at present to meet the Annual Emissions Allocation <sup>(2)</sup> for the year 2013. However, up to 2020, national projections (EEA 2013b) show that the country misses its target in scenarios with both existing and additional measures by 8 or 6 percentage points respectively (see Table 1).

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<sup>1</sup> Decision No 406/2009/EC of the European Parliament and of the Council of 23 April 2009 on the effort of Member States to reduce their greenhouse gas emissions to meet the Community's greenhouse gas emission reduction commitments up to 2020.

<sup>2</sup> Commission decision of 26 March 2013 on determining Member States' annual emission allocations for the period from 2013 to 2020 pursuant to Decision No 406/2009/EC of the European Parliament and of the Council. Online available at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:090:0106:0110:EN:PDF>

**Table I: GHG emission developments, ESD-targets and projections (in Mt CO<sub>2</sub>eq)**

	1990	2005	2010	2011	2012*	ESD target**		2020 Projections***	
						2013	2020	WEM	WAM
Total	282.8	432.8	348.6	350.5	346.1				
Non-ETS (% from 2005)		239.5	227.2	217.8	207.1 -14%	228.9 -4%	209 -10%	226 -2%	222 -4%
Energy supply (% share of total)	77.7 27%	126.1 29%	72.6 21%	86.5 25%					
Energy use (w/o transport) (% share of total)	73.4 26%	115.2 27%	98.5 28%	94.1 27%					
Transport (% share of total)	55.7 20%	100.8 23%	91.9 26%	87.4 25%					
Industrial processes (% share of total)	25.8 9%	33.6 8%	28.3 8%	26.1 7%					
Agriculture (% share of total)	37.2 13%	39.5 9%	38.7 11%	37.3 11%					

Source: UNFCCC inventories; EEA (2013b); Calculations provided by the EEA and own calculations.

\* national proxies for 2012 emissions summarised by EEA (2013b)

\*\* The ESD target for 2013 and for 2020 refer to different scopes of the ETS: the 2013 target is compared with 2012 data and is therefore consistent with the scope of the ETS from 2008-2012; the 2020 target is compared to 2020 projections and is therefore consistent with the adjusted scope of the ETS from 2013-2020. 2005 non-ETS emissions for the scope of the ETS from 2013-2020 amounted to 232 Mt CO<sub>2</sub>eq.

\*\*\* Projections with existing measures (WEM) or with additional measures (WAM).

Legend for colour coding: green = target is being (over)achieved; orange = not on track to meet the target

Total greenhouse gas emissions (GHG) and shares of GHG do not include emissions and removals from LULUCF (carbon sinks) and emissions from international aviation and international maritime transport.

National projections of GHG emissions up to 2020 need to be prepared by the Member States in accordance with the EU Monitoring Mechanism <sup>(3)</sup> every two years, and the latest submission was due in 2013. The projections need to be prepared reflecting a scenario that estimates total GHG emissions reductions in line with policies and measures that have already been implemented (with existing measures, WEM), and an additional scenario that reflects developments with measures and policies that are in the planning phase (with additional measures, WAM) may also be submitted.

In the following two tables, these measures have been summarised with a focus on national measures and those EU instruments expected to reduce emissions the most. Please note that the table includes also measures that address GHG emissions covered under the ETS such as measures reducing emissions from electricity generation (e.g. feed-in tariffs). An update on the status of the policies and measures is included in order to assess the validity of the scenarios.

<sup>3</sup> Decision No 280/2004/EC of the European Parliament and of the Council of 11 February 2004 concerning a mechanism for monitoring Community greenhouse gas emissions and for implementing the Kyoto Protocol.



**Table 2: Existing and additional measures as stated in the 2013 GHG projections**

Existing Measures (only important national measures)		Status of policy in Nov 2013
Cross-cutting	Act 2/2011, Sustainable Economy Act [Ley de Economía Sostenible]: Improve the competitiveness of the Spanish economy by promoting environmental sustainability in many activities	In force
	Spanish Strategy for Climate Change and Clean Energy [Estrategia Española de Cambio Climático y Energía Limpia (EECCCEL)] and the related Plan of Urgent Measures [Plan de Medidas Urgentes]	In place until 2020
Energy	Promotion of biomass for heat in the industrial sector	Phased out.
	Promotion of renewable electricity via Royal Decree 661/2007, which regulates the activity of electric energy generation under the special regime	Phased out
	Phasing out of aid to national coal: National Plan for Coal Strategic Reserve 2006-2012 and New Model for Integrated and Sustainable Development in Mining Regions	A new draft for a coal plan has been presented in March 2013 (Diario de Teruel 2013) and after negotiations the draft was finalised in Sep 2013. The new Plan is in place until 2018 (El Mundo 2013). Financial aid for coal mines will be phased out and Spain allows 7.5% of electricity generation from domestic coal.
Energy Efficiency	Royal Decree 47/2007, which approves the basic procedure for certifying energy efficiency in new buildings	A new regulation, substituting RD 47/2007, is in force (Real Decreto 235/2013).
	Spanish Energy Saving and Efficiency Strategy and its related plans (2005-2007 and 2008-2012)	The strategy is in place until 2020
	Promotion of Energy Services Contracting Plan [Plan de Impulso a la contratación de Servicios Energéticos]	In force
	Royal Decree 314/2006, which approves the Technical Building Code	In force
	Royal Decree 1027/2007, which approves the Regulation of Thermal Installations in Buildings (promotion of renewable heat)	In force
Transport	Regulation for limiting CO <sub>2</sub> emissions from new passenger cars - Regulation 443/2009, which sets emission performance standards for new passenger cars: limitation of CO <sub>2</sub> emissions in new cars of max. 130 gCO <sub>2</sub> /km to the average emissions by 2015	European regulation in force and adopted by Spain.

	Voluntary agreements for control and restrictions on the production and use of fluorinated compounds	Several agreements in force
	Promoting the use of biofuels in road traffic: based on the National Action Plan for Renewable Energies 2011-2020	Quota system in place with lower quotas from 2014 onwards (4.1% instead of 6.5%).
Other non-ETS sectors	Expansion of forest surface - Afforestation and reforestation of land with little or no tree crown cover (Spanish Forestry Plan 2002-2032)	Still in place.
	National Strategic Plan for Rural Development 2007-2013	Still in place.

Source: Reporting of MS in accordance with Decision No 280/2004/EC about their GHG emission projections up to 2020, May 2013.

Additional Measures (only important national measures)		Status of policy in Nov 2013
Other non-ETS sectors	Review of the reduction of organic matter sent to landfills: Draft Law on Waste and Contaminated Soils	Law 22/2011 on waste and contaminated soils came into force in July 2011. This law aims at regulating waste management by establishing measures that avoid their production and that limit their impacts. Furthermore, the law regulates juridical aspects of contaminated soil.

Source: Reporting of MS in accordance with Decision No 280/2004/EC about their GHG emission projections up to 2020, May 2013.

In Spain, most of the measures from the WEM scenario have been implemented and are still in place, except for the support of renewable energy generation, which has been phased out <sup>(4)</sup>. The WAM scenario lists only one additional measure which has already been implemented. However, Spain is expected to fail to meet its 2020 ESD target under both scenarios.

### 3 Evaluation of National Reform Programme 2013 (NRP)

In April of each year, Member States are required to prepare their National Reform Programmes (NRPs), which outline the country's progress regarding the targets of the EU 2020 Strategy. The NRPs describe the country's national targets under the Strategy and contain a description of how the country intends to meet these targets. For climate

<sup>4</sup> It must be noted that this mainly affects the emissions covered under the ETS.

change and energy, three headline targets exist: 1) the reduction of GHG emissions, 2) the increase of renewable energy generation, and 3) an increase in energy efficiency <sup>(5)</sup>.

The NRP in Spain focuses mainly on measures for the transport sector and corresponding emissions reductions. Measures for energy efficiency and for the waste sector are also mentioned.

In the following table, the main policies and measures as outlined in the NRP of April 2013 <sup>(6)</sup> have been summarised, and their current status (implemented, amended, abolished, or expired) is given, with specifics on latest developments.

**Table 3: Main policies and measures as outlined in the NRP, April 2013**

<b>Reform of the electricity system</b>	
Status as stated in the NRP	Planned
Status as per Nov 2013	Implemented
Description of policy or measure	An extensive reform of the electricity system has been implemented via Royal decree-law 9/2013 of July 12 <sup>th</sup> . Details on the contents of the reform are provided in Section 4 of this document.
<b>Climate Project Programme (contributing to the acquisition of verified CO<sub>2</sub> equivalent emission reductions from projects in Spain)</b>	
Status as stated in the NRP	Launched
Status as per Nov 2013	The 2013 call has been closed in March 2013. No further call is foreseen for this year.
Description of policy or measure	This programme aims at providing grants to environmental projects to be implemented in Spain with CO <sub>2</sub> emission reduction effects before 2015. (Magrama 2013b)
<b>PIMA Aire (to help reducing polluting emissions through a renewal of the commercial vehicle fleet)</b>	
Status as stated in the NRP	Launched
Status as per Nov 2013	In place
Description of policy or measure	This plan aims at providing incentives to acquire a more efficient vehicle to SMEs and citizens that own a van or similar vehicles, older than 7 years and used for business reasons (thus counting on extensive use). The overall aim is to renew this segment of the vehicle fleet with more efficient and less polluting vehicles. (RD 831/2013).

<sup>5</sup> There are specific targets for all MS by 2020 for non-ETS GHG emission reductions (see section 2) as well as for the renewable energy share in the energy mix by 2020 (see section 4, renewable energies). Specific energy efficiency targets will be defined (or revised) by the MS until the end of April 2013 in line with the methodology laid out in Article 3 (3) of the Energy Efficiency Directive (Directive 2012/27/EU).

<sup>6</sup> All NRPs are available at: [http://ec.europa.eu/europe2020/making-it-happen/country-specific-recommendations/index\\_en.htm](http://ec.europa.eu/europe2020/making-it-happen/country-specific-recommendations/index_en.htm)

**Direct aid for the acquisition of highly energy-efficient vehicles, supported by new technologies (electric vehicle, LPG and NG)**

Status as stated in the NRP	Launched
Status as per Nov 2013	The fourth call of the programme is open until funds are exhausted.
Description of policy or measure	The programme (Plan Pive) aims to substitute the existing vehicle fleet with highly efficient vehicles has been extended to a fourth call with an overall budget of € 70 million. (RD 830/2013)

**Improved energy efficiency in buildings based on energy efficiency certification**

Status as stated in the NRP	currently being developed
Status as per Nov 2013	In place
Description of policy or measure	A new piece of legislation (Real Decreto 235/2013) is in place as regards the procedure for obtaining an energy efficiency certificate in buildings. Starting 1 June 2013, all new buildings will be obliged to comply with the provisions contained in this piece of legislation. The legislation transposes Directive 2009/91/EC into national law. As of June 2013, owners of buildings are required to present an energy efficiency certificate to buyers or renters of flats. The certificate evaluates the efficiency level of the building in terms of energy consumption and CO2 emissions, and classifies the building through on a scale from A to G. The certificate is valid for 10 years.

**National Framework Waste Plan**

Status as stated in the NRP	currently being developed
Status as per Nov 2013	Undergoing public consultation (deadline: 30 September 2013)
Description of policy or measure	This is an overarching plan for the waste sector, aiming at reducing the production of waste, increasing recycling and treatment and reducing the amount of polluting material and impacts on health deriving from waste (Magrama 2013).

**Creation of new taxes for improved energy efficiency**

Status as stated in the NRP	Implemented
Status as per Nov 2013	Implemented
Description of policy or measure	In December 2012, the Government introduced (Law 15/2012 of 27 December 2012) additional taxes on electricity production (7% of total revenues for all plants and an additional 22% of the value of produced electricity for hydropower plants), nuclear fuel production, and nuclear fuel storage. Furthermore, the same law modified tax rates for natural gas and coal, eliminating the tax for fuel used for electricity and heat generation.

## 4 Policy development

This section covers significant developments made in key policy areas between February 2013 and November 2013. It does not attempt to describe every instrument in the given thematic area.

### **Environmental Taxation**

In Spain, the share of environmental tax revenues in overall tax revenues amounted to 5% in 2011, which is the 3rd lowest value in the EU. Compared to its GDP these revenues were with 1.57% the lowest in the EU. Spain has no explicit carbon tax in place. The implicit tax rate on energy amounted to approximately 116 € per tonne of oil equivalent (toe) in 2011. In 2010, Spain's economy was the 6th least energy intense economy in the EU. Thus, the share of energy tax revenues in total tax revenues is also comparatively low (Eurostat 2013a). Since the adoption of Law 15/2012 of 27 December 2012 on tax measures for energy sustainability, no additional measures on environmental taxation have been taken in Spain.

### **Energy Efficiency**

The energy intensity of the Spanish economy was the 6<sup>th</sup> lowest in the EU in 2010 and declined considerably since 2005 by 17% until 2011. Energy consumption had increased in the years preceding the global economic crisis but fell between 2005 and 2011 in total by 11%. Industrial energy consumption had decreased before the crisis hit, leaving the transportation, residential, and service sectors responsible for the increasing energy use after 2005, which then leveled off due to the crisis. However, between 2010 and 2011 the reduction rate of the energy consumption slowed down to 3% and remains under the EU average of 4% (Eurostat 2013a).

Although some industrial branches of the Spanish economy such as the chemical and the steel sector were able to improve energy efficiency, performance weakened in the non-metallic industrial branches due to the crisis and led to a general efficiency decline of the Spanish economy. The energy consumption of Spanish households has generally been lower compared to the EU average, due to the country's milder climate and the lower equipment rate. Although the latter increased in recent years, energy efficiency improved due to the installation of progressive equipment and stricter legislation in the building sector. However, the economic crises has also slightly affected the household sector and has, compared to the EU average, slowed down further progress since 2009 (Odyssee 2012).

One important change in policy took place with Real Decreto 235/2013, which transposed Directive 2009/91/EC into national law. The decree introduced a modification of the procedure for obtaining an energy efficiency certificate in buildings. As of June 2013, owners of buildings are required to present an energy efficiency certificate to buyers or renters of flats. The certificate evaluates the efficiency level of the building in terms of energy consumption and CO<sub>2</sub> emissions, and classifies the building through on a scale from A to G. The certificate is valid for 10 years. (Energias Renovables 2013, IDAE 2013, IDAE 2013b, RDL 235/2013)

Furthermore, the Government has approved the PIMA SOL plan, whose aim is to reduce emissions of CO<sub>2</sub> from hotels of 40 to 70%. Financing will be of about € 400 million, 50% of which coming from the European Investment Bank. The plan will cover around 500

hotels and is estimated to contribute to the creation of about 8000 jobs (ABC 2013, Mercados de las Energias 2013, RDL 635/2013)

### **Renewable Energy**

Between 2005 and 2011 Spain's consumption of renewable energy as a percentage of total energy consumption increased steadily from 8.4% to 15.1%. This represents good progress towards the 2020 goal of 20%. The electricity sector accounts for the main part of this development with an increase of the renewable share in gross final electricity consumption of approximately 67% between 2005 and 2011 (Eurostat 2013b).

In 2013, Spain introduced a number of important legislative changes with respect to the support schemes for renewable energy and the wider electricity sector. It is worth pointing out that the stakes of the discussion in Spain keep on being raised and the relationship between the Government and the sector is extremely tense.

RDL 2/2013 modified the actualisation method for feed-in tariffs for RES-E sources (*régimen especial*). Following this decree, the actualisation method of tariffs is not anymore linked to the "typical" consumer price index but instead to another one with a different calculation methodology (*Índice de precios de consume a impuestos constantes sin alimentos no elaborados ni productos energeticos*). In practice, this means that the investment plan of installers that had based their calculations on specific amounts of incentives for the whole lifetime of the project has had its underlying conditions (the planned degression of tariffs) changed during the process (RDL 2/2013, RES LEGAL Europe 2013), severely affecting the economics of existing projects, which are even risking default in some cases.

More extensive changes were introduced in the electricity sector in July 2013, with respect to generation, transmission and distribution of electricity and affecting renewable generation (Royal decree-law 9/2013). The reasons for this reform are mainly a financial matter: in the past years, the revenues of the electric system have been insufficient to cover the expenses and for this reason action was deemed necessary (RDL 9/2013). Among the various modifications in the sector, it is worth underlining the following points:

- Introduction of a registry for plants that support self-consumption (i.e. whose produced energy can either be consumed by the household or fed into the grid);
- Change of the calculation method for revenues deriving from transmission and distribution of electricity
- Introduction of a tax on these revenues from transmission and distribution
- Introduction of an incentive of 10.000 €/MW/year for investments in large plants
- Royal decrees 661/2007 and 1578/2008, which ended the previous incentive scheme (*régimen especial*) for renewable electricity generation. Access to the scheme had already been blocked since January 2012 due to the fact that the incentive scheme was considered to be one of the main reasons for the failing cost coverage in the electricity system.

This reform was strongly opposed by renewable energy associations. They argued that such changes would severely cut returns on investment and could lead to a block in investments in grid-connected systems supporting self-consumption as well as to difficulties of reaching Spain's renewable energy target for 2020 (Energias Renovables 2013c). An even stronger statement was taken when the main renewable energy associations presented a petition to the European Parliament to intervene and request



Spain to revise its legislation in the electricity sector. The associations stated that the recent developments in the national electricity legislation constitute a violation of directives 2009/28/EC and 2009/72/EC and are having major effects on employment in the sector (UNEF 2013).

On 26<sup>th</sup> of December 2013 Law 24/2013 of the Electric sector (Ley 24/2013 del Sector Eléctrico) was published<sup>7</sup>, repealing Law 54/1997, which was previously regulating the sector. According to the preamble of the law, the main driver for the law's contents has been to reduce the unsustainable tariff deficit of the electricity sector.

As regards renewable energies, a new support scheme has been envisioned. This system will be based on the direct participation of renewable energy sources in the market, forcing them to compete evenly with traditional sources. More specifically, the scheme will allow renewable energies to recover costs that could not be recovered by selling energy on the market. The evaluation of such costs will be based on a theoretical renewable plant and on the average costs incurred by a well-managed company running said installation. Law 24/2013 further specifies that for such calculation, only administrative costs that are uniform at national level will be considered, in other words, administrative costs at regional level are not considered in the framework of the law. The law allows also for additional support schemes, but solely in case these would be absolutely necessary for achieving European goals. With respect to grid access and grid use, renewables are granted priority connection and priority dispatch – provided that these do not constitute a danger to the grid itself.

Lastly, Law 24/2013 regulates the economic framework for self-production-and-consumption of electricity, a topic that had been in debate for months between different stakeholders. The final provision states that entities that consume the energy they produce would still need to contribute to the financing of costs and services of the grid in the same amount as consumers that take the electricity directly from the grid. This point had been at the centre of the debate and was strongly opposed by renewable energy associations as in their opinion it would have created strong barriers for consumers to install their own renewable generating system. Furthermore, should a producer access the self-consumption scheme incorrectly (e.g. failing to declare the installation in the relevant gistry), he or she would be fined between EUR 6 million and EUR 60 million as indicated by articles 64.43 and 67 of Law 24/2013.

## **Transport**

Emissions from transport have increased between 1990 and 2011 but show a clear downward trend since 2005. However, their proportion among Spain's total emissions has increased to 25%. Thus, although declining, the emissions of this sector are still important and will need further attention in the future (see Table 1 above).

Average emissions for newly registered cars are low in Spain with a level of 128.6 CO<sub>2</sub>/km. The level is the 10th lowest in the EU but has decreased at a lower rate than the EU average between 2005 and 2012 (Eurostat 2013a). A registration tax is applied in Spain, based on the value of a car and its CO<sub>2</sub> emissions. An ownership tax is also

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<sup>7</sup> This report covers events until November 2013. The latest development was included exceptionally, because of its importance for the development of the renewables sector in Spain.

applied, but differs according to vehicle use and class. While for passenger cars it is based on engine rating, commercial vehicles are charged for payload. Buses and coaches however pay according to their number of seats. While the tax rates in the different Spanish regions are in general very low, the rates applied in Madrid are high (ACEA 2012). A high priced distance-based road use charge is applied on specific parts of the road network (CE Delft 2012). Among the EU-15, Spain charges the lowest taxes on petrol, next to Luxembourg, and the lowest diesel tax rate in the entire EU, showing a difference to petrol taxes of around €100/1000 litres (European Commission 2013).

Some efforts are being directed at reducing emissions from this sector, via incentives for renewing the vehicle fleet. With a Resolution of 12 April 2013<sup>8</sup> the regulatory basis of the second call for the PIVE 2 was modified, which aims at removing between 145.000 and 150.000 older vehicles by substituting them with newer ones by means of an incentive. The latest modifications indicate that vehicles belonging to certain categories should be at least 7 or 10 years old, depending on the category. Proof of property and age of the vehicles should be provided when requesting the incentive. The programme was further extended with a third call (PIVE 3) at the end of July 2013 and with a fourth call (PIVE4) in October 2013, both with a budget of € 70 million (IDAE 2013c, IDAE 2013d, RD 830/2013).

Furthermore, the National Energy Commission has introduced two updates in the overall biofuel regulation: a temporary suspension of the obligation to comply with sustainability criteria and an extension of the assignation of biodiesel quotas to non-EU producers, which were previously excluded (CNE 2013).

### **Land Use, Land Use Change and Forestry**

At national level, no changes have taken place in this policy area. At regional level, the Regional Council of Valencia approved a new forest plan in May 2013, with the specific aim of providing new impulse to the forestry sector of the region, providing it with a role as regards supply of biomass for energy production (Gva 2013).

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<sup>8</sup> “Resolución de 12 de abril de 2013, de la Secretaría de Estado de Energía, por la que se publica la de 20 de marzo de 2013, del Consejo de Administración del Instituto para la Diversificación y Ahorro de la Energía, por la que se modifican las bases reguladoras de la segunda convocatoria de ayudas del Programa de Incentivos al Vehículo Eficiente (PIVE-2), aprobadas por Resolución de 30 de enero de 2013.”



## 5 Policy progress on past CSRs

As part of the European Semester, Country Specific Recommendations (CSRs) for each MS are provided by the EU Commission in June of each year for consideration and endorsement by the European Council). The recommendations are designed to address the major challenges facing each country in relation to the targets outlined in the EU 2020 Strategy. In the following table, those CSRs that are relevant for climate change and energy that were adopted in 2013 are listed, and their progress towards their implementation is assessed.

Existing Country Specific Recommendations	Progress
<p>Conduct a systematic review of the tax system by March 2014. Consider further limiting tax expenditure in direct taxation, explore the scope to further limit the application of the reduced VAT rates and [...] take additional steps in environmental taxation, notably as regards fuel taxes.</p>	<p>No progress has been detected with respect to environmental taxation, or fuel taxation, in Spain in 2013.</p>
<p>Tackle the electricity tariff deficit by adopting and implementing a structural reform of the electricity sector by the end of 2013.</p>	<p>Significant changes in the electricity sector were introduced with Royal Decree-law 9/2013.<sup>9</sup> For example, a tax on these revenues from transmission and distribution was introduced, and the regulations regarding self-consumption were modified.</p>
<p>Intensify efforts to complete the electricity and gas interconnections with neighbouring countries.</p>	<p>Spain is working on the Interconnection with Portugal, and viability studies for the interconnection with France are being performed.</p>

<sup>9</sup> Please refer to Section 4 of this document for details on the contents of Royal Decree-law 9/2013.

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