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# SPAIN: INVENTORY OF ESTIMATED BUDGETARY SUPPORT AND TAX EXPENDITURES FOR FOSSIL-FUELS

#### **Energy resources and market structure**

The only fossil-fuel domestic resource of any consequence in Spain is coal, but most production is uneconomic. Almost all of the oil and gas used in Spain is imported, with less than 1% being domestically produced. Oil is by far the most important fuel, meeting 46% of the country's primary energy needs, followed by natural gas (24%), nuclear power (13%) and coal (6%). Renewable energy, mainly in the form of biomass, makes up the rest (11%). Production of wind and solar power contributes 17% to electricity generation and has been growing rapidly in recent years, thanks to large subsidies. Counting nuclear power as an indigenous resource, national production covers about a quarter of total energy use.

Spain's coal-mining industry is consolidating and production is declining. The sector is undergoing major restructuring since the early 90's with the implementation of consecutive National Plans for Strategic Coal Reserves (*Plan Nacional de Reserva Estratégica de Carbón*) in 1990-1994, 1995-1997, 1998-2005 and 2006-2012. These plans set out targeted reductions in production, staffing and subsidies, supply guarantees and economic restructuring policies for the coal-mining regions. Most companies have an annual production capacity below 500 000 tonnes, with some employing fewer than 25 miners. The largest is UMINSA (*Unión Minera del Norte* S.A.), a privately owned company that resulted from a merger of 15 independent companies. The other major operator in terms of staff is the state-owned HUNOSA (*Hulleras del Norte* S.A.). Use of Spanish coal at power plants, the principal market, is based on volume quotas set by the government. Power producers contract directly with mining companies for the volume and price of coal under their quota.

Spain's oil sector is entirely deregulated and privately owned. Of the country's ten refineries, four are fully-owned and one is partly owned by Repsol YPF, amounting to about 56% of total refining capacity; three others are owned by Cepsa (about 33%) and one by BP (11%). There are a large number of companies active in the wholesale and retail markets. The gas sector is also privately owned, with a number of players active in one or more parts of the supply chain. Gas Natural, the former monopoly gas company, still accounts for half of all gas imported into Spain and almost half of retail sales. Ibredrola is the next largest importer and retailer. Enagás is the sole operator of the transmission system operator and also holds half of the country's LNG regasification capacity. The retail market for industrial customers is fairly competitive; competition in the residential market is much more limited.

Spain was among the first EU countries to embark on power-sector liberalisation in the 1990s, resulting in a major restructuring of the sector and changes in ownership. Today, three-quarters of electricity is generated by just three companies: Iberdrola, Endesa (almost 100% owned by the Italian utility, ENEL) and Unión Fenosa (owned by Gas Natural). Iberdrola and Endesa alone account for the bulk of retail sales, though the market is fully contestable. Because of subsidised retail prices for low-voltage consumers, supplier switching has hardly developed. REE (*Red Eléctrica de España*), in which the state holds a 20% stake, operates the high-voltage transmission grid as the exclusive transmission system operator in co-ordination with the market operator; it owns almost the entire 400 kV grid and two-thirds of the 220 kV grid. Iberdrola, Endesa and Unión Fenosa are the largest distributors, although there are more than 300 small local distributors.

## Prices, taxes and support mechanisms

All energy prices in Spain are determined by free-market competition, with the exception of LPG, the prices of which are set according to a formula based on international prices and a distribution margin, and electricity and gas tariffs for the smallest customers, who are eligible for a cost-covering last-resort tariff. The government has nominated five suppliers of gas (Gas Natural, Endesa, Iberdrola, Naturgas and Unión Fenosa) and five for electricity (Endesa, Iberdrola, Unión Fenosa, Hidrocantábrico and E.ON) under this tariff. Together with tariffs for third-party access to all basic gas infrastructures (pipelines, LNG facilities, and underground storage), last-resort tariffs are proposed by National Energy Commission (*Comisión Nacional de Energía*, or CNE) and approved by the Minister of Industry, Tourism and Trade.

Spain levies excise taxes on oil products and electricity. All energy products are subject to a 21% rate of VAT. Biofuels are exempted from tax, as are fuels used in aviation, navigation and rail transport. The tax on diesel fuel used in farming is refunded. Excise taxes on gasoline and diesel were previously relatively low, but have risen in recent years as Spain's derogation of the EU timetable to raise minimum taxes on automotive diesel expired.

The main source of support to energy production in Spain is the financial assistance to hard-coal mining. This assistance is subject to EU rules on state aid and approval by the European Commission. The principal form of aid is transfer payments by the government to private coal companies to compensate them for the difference between their operating costs and the prices at which they sell their output to local power plants (which are negotiated directly). As part of the austerity measures arising from the current economic crisis, the Spanish government seeks to cut 63% of the subsidies to coal mining companies, stating that all support measures to the industry will be terminated by 2018. Under the National Plan for Strategic Coal Reserves 2006-2012, operating aid is to be reduced by 1.25% per year for underground mines and 3.25% per year for opencast mines. Production is due to fall from 12.1 million tonnes in 2005 to 9.2 Mt in 2012, and employment from 8 310 to 5 302. Inherited liabilities aid can be used to pay benefits to former miners and cover the costs of mine closures. Aid is also available to finance mine closures, for industrialisation projects and for developing infrastructure in the affected mining regions. Another government measure provides funding to power plants for purchases of domestic coal for stockpiling. The government is also spending on R&D to develop clean-coal technology, including carbon capture and storage.

### **Data documentation**

#### General notes

The fiscal year in Spain coincides with the calendar year. Following OECD convention, amounts prior to 1999 are expressed as 'euro-fixed series', meaning that we applied the fixed EMU conversion rate (1 EUR = 166.386 ESP) to data initially expressed in the Spanish Peseta (ESP).

# **Producer Support Estimate**

Operating Aid to HUNOSA (data for 2002-)

The Spanish government has been providing financial assistance to the coal industry for several decades. Support is usually granted as part of a series of overarching, pluri-annual plans that aim at progressively rationalising and downsizing the Spanish coal industry. A dedicated agency — the Institute for the Restructuring of Coal Mining and the Alternative Development of Mining Areas (Instituto para la Reestructuración de la Minería del Carbón y Desarrollo Alternativo de las Comarcas Mineras) — was created in 1998 alongside the 1998-2005 National Plan for Strategic Coal Reserves to manage state aid and promote the development of mining regions. More recently, the Ministry of

Industry, Tourism, and Trade negotiated a new National Coal Plan covering the 2006-2012 period with CARBUNIÓN (the Spanish coal producer association) and trade unions.

The estimates included in the database under this heading pertain to the amount of support granted to HUNOSA to cover its operating costs. HUNOSA is a major state-owned producer of hard coal in the central Asturian basin. Accordingly, we allocate the entire programme to hard coal. Data prior to 2002 are not available at the present level of detail.

Sources: Ministerio de Economía y Hacienda (various years).

Tag: ESP\_dt\_01

Operating Aid to Coal Producers (data for 1998-)

This item corresponds to the amounts of price support granted by the Spanish government to domestic coal producers (see also "Operating Aid to HUNOSA" above). Transfer payments are being made to private coal companies to compensate them for the difference between their operating costs and the prices at which they sell their output to local power plants. Those prices are negotiated directly between coal producers and energy utilities.

We use production data from the IEA's Energy Balances to allocate the annual amounts reported in budget documents to the various types of coal concerned (bituminous and sub-bituminous coal, lignite, and coking coal). Data are not available for the years 2000 and 2001, and prior to 1998.

Sources: Ministerio de Economía y Hacienda (various years), IEA.

Tag: ESP\_dt\_02

Subsidy for the Inter-basin Transport of Coal (data for 1998-)

This programme benefits electricity companies through budgetary transfers that support the transport of coal across basins. The maximum amount of aid that may be granted is set to 76 886.76 t and up to 443.800 t, depending on the year, calorific value and where the basin is located.

We use production data from the IEA's Energy Balances to allocate the annual amounts reported in budget documents to the various types of coal concerned (bituminous and sub-bituminous coal, lignite, and coking coal). Data are not available for the years 2000 and 2001, and prior to 1998.

Sources: Ministerio de Economía y Hacienda (various years), IEA.

Tag: ESP\_dt\_04

Adjustment Aid to Coal Producers (data for 1998-)

This item comprises transfers made by the Spanish government to private coal producers to cover social costs and contractual obligations arising from the restructuring of the coal-mining sector.

We use production data from the IEA's Energy Balances to allocate the annual amounts reported in budget documents to the various types of coal concerned (bituminous and sub-bituminous coal, lignite, and coking coal). Data are not available for the years 2000 and 2001, and prior to 1998.

Sources: Ministerio de Economía y Hacienda (various years), IEA.

Tag: ESP\_dt\_05

### Consumer Support Estimate

Funding for Coal Stockpiles (data for 1998-)

This measure provides funding to power plants to support their constitution of coal stockpiles. Those stockpiles are meant to guarantee over 720 hours of power generation. Plants are, however, specifically required to accumulate domestic coal.

We use production data from the IEA's Energy Balances to allocate the annual amounts reported in budget documents to the various types of coal concerned (bituminous and sub-bituminous coal, lignite, and coking coal). Data are not available for the years 2000 and 2001, and prior to 1998.

Sources: Ministerio de Economía y Hacienda (various years), IEA.

Tag: ESP\_dt\_03

Fuel-Tax Exemptions (data for 1996-)

The Spanish Tax Code exempts certain users from the fuel tax that is normally levied on sales of petroleum products. Major eligible activities include aviation, navigation, and railway transport.

We use data from the IEA's *Oil Information* publication on consumption volumes in the domestic-aviation sector to estimate the share of the total amount of revenue foregone that can be ascribed to kerosene-type jet fuel. A benchmark rate of EUR 0.08 per litre is used for that purpose. Deducting this estimated share from the total tax expenditure leaves us with an amount that is mainly attributable (and that we attribute) to diesel fuel. Although this approach yields plausible estimates of the revenue foregone due to the exemption for aviation, it may overlook the small amounts of heavy fuel used in navigation and LPG used in certain activities (e.g. chemical reductions for the steel industry).

Sources: Ministerio de Economía y Hacienda (various years), IEA.

Tag: ESP\_te\_01

Fuel-Tax Reductions (data for 1996-)

This tax provision provides both the farming and mining sectors with a reduced rate of excise tax on petroleum products.

We allocate the annual amounts reported in official budget documents to diesel fuel, heavy fuel, and LPG on the basis of the IEA's Energy Balances for the agriculture and non-energy mining sectors.

Sources: Ministerio de Economía y Hacienda (various years), IEA.

Tag: ESP te 02

Fuel-Tax Partial Refund (data for 2011-)

This tax provision was introduced in 2006 and provides eligible taxpayers with a partial refund of the special tax on hydrocarbons (*Impuesto Especial sobre Hidrocarburos*) provided diesel fuel is used for commercial activities like farming and livestock. The amount of the refund shall be equal to the rate of EUR 78.71 per thousand litres. This measure was implemented in order to offset the increase in costs of agricultural production due to rising oil prices.

Data are only available for FY2011. We allocate this measure entirely to diesel fuel.

Sources: Ministerio de Economía y Hacienda (2011).

Tag: ESP\_te\_03

# General Services Support Estimate

Inherited Liabilities Due to Coal Mining (data for 2002-)

This programme provides certain non-profit organizations — along with coal miners and their families — with budgetary transfers to help address the social and technical costs that stem from the decline of the coal-mining sector.

This measure is allocated to the GSSE since it does not increase current production or consumption of coal. We use production data from the IEA's Energy Balances to allocate the annual amounts reported in budget documents to the various types of coal concerned (bituminous and sub-bituminous coal, lignite, and coking coal). Data are not available prior to 2002 at the present level of detail.

Sources: Ministerio de Economía y Hacienda (various years), IEA.

Tag: ESP\_dt\_06

#### **Sources**

#### Policies or transfers

Ministerio de Economía y Hacienda (various years) Presupuestos Generales del Estado, Secretaría de Estado de Hacienda y Presupuestos, Available at: <a href="https://www.sepg.pap.minhap.gob.es/sitios/sepg/es-ES/Presupuestos/PresupuestosEjerciciosAnteriores/Paginas/PresupuestosEjerciciosAnteriores.aspx">www.sepg.pap.minhap.gob.es/sitios/sepg/es-ES/Presupuestos/PresupuestosEjerciciosAnteriores/Paginas/PresupuestosEjerciciosAnteriores.aspx</a>.

# Energy statistics

IEA (2011), Energy Balances of OECD Countries, International Energy Agency, Paris.