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

Energy resources and market structure

Coal mining dominates Australia's energy production, with more than three-quarters of coal output going to export. Australia holds the fifth-largest coal reserve base in the world. It also produces and exports significant volumes of natural gas, the proven reserves of which have grown significantly in recent years with the discovery of large volumes of unconventional gas. The country is less well-endowed with oil resources; just under half of the country's oil is currently imported. Coal is the leading primary fuel in Australia's energy mix, accounting for 42% of total energy use; it is used mainly for power generation. Oil, with 32%, and natural gas, with 21%, meet most of the rest of the country's energy needs, while biomass, hydro-electric power and other sources of renewable energy make only a minor contribution. Well over half of the country's total energy production is exported.

Australia was a pioneer of energy market liberalisation in the 1990s. Early reforms involved the deregulation of its downstream oil sector and the coal-mining industry, the lifting of export controls on coal, the introduction of regulated third-party access to natural-gas and electricity networks, and the privatisation of some utilities owned by federal and state governments. Structural and regulatory reforms in the electricity and gas sectors have continued in recent years with the aim of creating efficient wholesale and retail markets.

Over 90% of Australian coal production is anthracite and bituminous (black) coal. The industry is located almost entirely in the states of New South Wales (NSW) and Queensland, with close to three-quarters of production coming from open-cast mines. The industry is wholly in private hands. Four major coal mining companies—Rio Tinto, BHP Billiton, Xstrata, and Anglo American—together account for well over half of total Australian black-coal production. Lignite (brown coal) is produced exclusively in the state of Victoria, almost all of it by three mines in the Latrobe Valley.

The oil industry is also entirely privately owned. The upstream sector is made up of small, medium and large companies, many of which are foreign-based. Refining is in the hands of four vertically integrated refiner-marketers: BP, Caltex, Mobil, and Shell. There are also independent fuel retailers, including supermarkets, some of which have established alliances with the refiners.

The natural-gas sector has undergone considerable change as a result of market expansion and reform. Many of the vertically integrated public gas utilities have been structurally disaggregated and the separated entities privatised. Energex, in Queensland, is the only major gas-distribution company still in state ownership. Retail competition is being progressively introduced in most jurisdictions.

The electricity sector has been unbundled into separate generating, transmission, distribution and marketing companies. There is a mixture of state-owned and private companies in power generation, transmission and distribution, while all marketers are privately owned. In South Australia (SA), state-owned assets are privately managed under long-term leases. The Snowy Mountains Hydro Electric Scheme, co-owned by the NSW and Victoria states, is the only company in which the Federal government holds a stake. Electricity transmission in Australia is open access. The Australian Energy Market Commission (AEMC) is responsible for determining rules and giving policy advice covering the national electricity market (NEM). The Australian Energy Regulator (AER) is responsible for rule enforcement for the NEM as well as economic regulation of transmission and distribution

networks. Prices for most transmission assets in the NEM are set by AER, subject to a revenue cap, but it is also possible for new assets to be unregulated and earn market rates.

Prices, taxes and support mechanisms

With the exception of electricity and natural gas, energy prices are completely deregulated in Australia. Despite the introduction of contestability in retail markets, the electricity and gas for households and for small businesses that have not chosen to switch to a new supplier continue to be regulated on a cost-of-service basis. Victoria is the only state to have abolished retail price controls, in 2008. The other states plan to eliminate retail price regulation only when competition is well-established.

Upstream taxes in Australia consist mostly of the federal Petroleum Resource Rent Tax, which now applies to both offshore and onshore petroleum production, and of the new Mineral Resource Rent Tax that applies to coal and iron-ore projects. Downstream taxes comprise mainly the general Goods and Services Tax (GST) and excise taxes on motor fuels. GST—a type of VAT charged at each stage of production and distribution, currently at a rate of 10%—is applicable to sales of nearly all final energy products. All motor fuels are subject to a flat per-litre federal excise tax, though there are some exemptions. Liquefied petroleum gas (LPG), as well as liquefied and compressed natural gas, receives a complete exemption from the excise tax. In addition, domestic producers of biofuels (both ethanol and biodiesel) receive excise-tax rebates, which are also available to imported biodiesel.

From 1 July 2012, a carbon price will be applied to certain emission sources in Australia. The price will be fixed for the first three years starting at AUD 23 per tonne in 2012-13 and rising by 2.5% in real terms in each subsequent year. Beginning in July 2015, the carbon price will transition to a flexible price under an emissions trading scheme, with the price determined by the market. Industries subject to the carbon price include the stationary energy sector, sections of the transport sector, industrial processes, new large landfill waste facilities and fugitive emissions. A range of measures will provide assistance to households and industries (including AUD 1.6 billion for the steel and coal industries) and support research and development.

There are no longer any significant support measures in the upstream sector in Australia, following the removal in 2008 of a partial exemption from an excise tax normally levied on crude oil for condensate—a low-density mixture of hydrocarbon liquids contained in gaseous form in the raw natural gas produced from some gas fields. In the downstream sector, the principal support measure at the federal level other than differential taxation is the Fuel Tax Credits for Heavy Diesel Vehicles programme, which provides businesses operating heavy trucks a partial or full rebate on the fuel excise tax depending on the type of vehicle they drive and the sector in which they operate. Eligibility for the tax credit is conditional on satisfying certain environmental criteria. The federal government also runs a grant scheme for consumers who convert their gasoline cars to LPG, though the government announced that it would cap the number of grants to be issued for three years.

Some states and territories also provide support for the production and consumption of fossil fuels. The Northern Territory (NT), NSW, SA, and Western Australia (WA) all provide programmes that encourage hydrocarbon exploration. The federal government and the states of NSW and Queensland have also funded transport infrastructure related to coal and R&D projects in relation to clean-coal technologies. Meanwhile, NSW and Queensland have financed the rehabilitation of derelict mining sites, including coal mines.

On the consumption side, most Australian states and territories provide some form of rebates to low-income households to assist them with the costs of energy. In the road-transport sector, the period between 1997 and 2011 saw all states and territories providing support in one form or another for certain uses of gasoline and diesel fuel. Prior to 1997, states used to set their own excise taxes on fuel, often in the form of business license fees. Exemptions and reductions thus varied among jurisdictions. However, in 1997, Australia's High Court found state-level excise taxes to be unconstitutional. To compensate states for the resulting loss in revenues, the federal government increased its nationwide fuel excise tax and returned the corresponding additional revenues to the states. These arrangements ceased in 2000 as part of agreed national tax reforms. However, some states and territories continued to provide fuel subsidies for several years on until all remaining state-level schemes were eventually phased out in 2011.

Data documentation

General notes

The fiscal year in Australia runs from 1 July to 30 June. Following OECD convention, data are allocated to the starting calendar year so that data covering the period July 2005 to June 2006 are allocated to 2005.

Since Australia is a federal country, the data collection exercise was also conducted for the following states and territories: the Australian Capital Territory (ACT), New South Wales (NSW), Northern Territory (NT), Queensland (QLD), South Australia (SA), Tasmania (TAS), Victoria (VIC), and Western Australia (WA).

Federal government

Producer Support Estimate

The offshore extraction of oil and natural gas in Australia is subject to a particular tax regime that combines a resource tax and the regular corporate income tax. The Petroleum Resource Rent Tax (PRRT) was introduced with the Petroleum Resource Rent Tax Assessment Act of 1987. It is project-based and applies to taxable profits at the rate of 40%.[1] PRRT rules allow for the full deduction of exploration, development, and decommissioning expenditures. Financing costs are, however, not deductible for PRRT purposes. Unclaimed deductions can be carried forward and compounded every year at varying rates. Some of these deductions can also be transferred to other projects within the same company or group.

The general corporate income-tax rate in Australia is 30% and deductions are allowed for PRRT payments, business expenses, and exploration costs related to mining (including coal) and oil and gas extraction. Some expenses related to mine rehabilitation and the removal of offshore platforms are also deductible for income-tax purposes.

The immediate write-off of both capital and exploration-and-development expenditures is normally considered under the systems in many countries to amount to a preferential tax treatment. The reason is that in calculating taxable profits in most income-tax systems, capital expenses are allocated over the period to which they contribute to earnings. Allowing the immediate writing-off these types of expenditure therefore provides companies with something akin to a zero-interest loan from the government since it delays the collection of taxes. A present-value calculation would indeed show a positive transfer from the government to the companies benefiting from such provisions.

However, when combined with an impossibility for companies to deduct interest costs and other financing charges, the immediate write-off of both capital and exploration-and-development expenditures may not be considered a preferential tax treatment. This is due to the fact that this particular combination of tax provisions may approximate what is known as a “cash-flow” tax system. Cash-flow tax systems can be theoretically equivalent to the more common imputed-income tax systems where the objective is to levy a neutral business tax (Boadway and Bruce, 1984). For that reason, provisions such as the expensing of exploration and development costs may not be preferential tax provisions in the particular case of the Australian PRRT.

The Australian government recently enacted legislation to change its resource taxation regime effective on 1 July 2012. Changes include the creation of a new Mineral Resource Rent Tax (MRRT) that will

[1] Some offshore areas like the North West Shelf were until recently still subject to the old royalty and crude-oil excise regime, or to production-sharing contracts. However, legislation newly enacted by the Australian government now provides for the extension of the PRRT regime to all onshore and offshore oil and gas projects by 1 July 2012.

apply a 30% rate on taxable profits from all new and existing iron-ore and coal projects, and extension of the PRRT regime to all onshore and offshore oil and gas projects.

Cleaner Fuels Grants Scheme (data for 2005-2009)

This programme was initially designed to support the manufacturing and importing of biodiesel only but was then extended to ultralow-sulphur diesel and premium unleaded petrol starting in FY 2005/06. A breakdown by fuel is available from the Australian Taxation Office so that only payments related to premium unleaded petrol and ultralow-sulphur diesel are being reported here. Support for premium unleaded petrol stopped on 31 December 2007.

Sources: Australian Taxation Office (various years).

Tag: AUS_dt_03

Accelerated Depreciation for Mining Buildings (data for 1994-2008)

The programme is reported as having started in 1982 and was phased out in 2001. It was, however, still giving rise to a significant positive tax expenditure in 2009 as assets acquired years ago kept on depreciating faster relative to their effective life. The concession allows companies to depreciate buildings used in the mining and quarrying sector over ten years or the life of the project, whichever is shorter.

Because this measure applies to both mining and quarrying, for this and similar measures, we deduct from the annual amounts reported in official tax-expenditure documents the estimated share associated with mining output that is not concerned with fossil fuels. This is done using data on the gross value of minerals produced from ABARES on the assumption that the tax expenditure is evenly distributed across sub-sectors according to gross output. The resulting amounts are then allocated to the various types of fossil fuels (i.e. crude oil, natural gas, and coal) using production data from ABARES and the IEA.

Sources: Australian Treasury (various years), ABARES, IEA.

Tag: AUS_te_02

Capital Expenditure Deduction for Mining, Quarrying and Petroleum Operations (data for 1994-2011)

The programme dates back to 1921 and was phased out in 2001. It was very similar to the concession for the accelerated depreciation of mining buildings (see above), the only difference being that it applied to certain other types of capital expenditure.

Since this measure applies to the mining sector as a whole, we deduct from the annual amounts reported in official tax-expenditure documents the estimated share associated with mining output that is not concerned with fossil fuels. This is done using data on the gross value of minerals produced from ABARES. The resulting amounts are then allocated to the various types of fossil fuels (i.e. crude oil, natural gas, and coal) using production data from ABARES and the IEA.

Sources: Australian Treasury (various years), ABARES, IEA.

Tag: AUS_te_03

Infrastructure Bonds Scheme – Transport (data for 1996-2008)

This programme started in 1992 under the aegis of the Development Allowance Authority. It was aimed at encouraging investment in infrastructure projects through the issuance of Develop Australia Bonds (i.e. Infrastructure Bonds) that provided lenders with tax-deductible interest payments. Although part of the concession targeted water and transport infrastructure, the rest was earmarked for gas and electricity

projects, such as co-generation plants or natural-gas pipelines. The programme was terminated in 1997 and replaced with the Infrastructure Borrowings Tax Offset Scheme. However, deductions were still being claimed as of 2008.

Data from the Development Allowance Authority annual reports were used to roughly estimate the shares of reported tax expenditures that are attributable to gas infrastructure and power plants. We treat those two components of the scheme as separate programmes since one relates to the supply of fossil fuels while the other relates to the use of fossil fuels in power generation.

The gas infrastructure part is said to represent around 16% of all projects. Since it is excludable and benefits few natural-gas producers, the programme is included in the PSE and is allocated to natural gas only.

Sources: Development Allowance Authority (various years), Australian Treasury (various years), Parliament of Australia (1997).

Tag: AUS_te_07

Infrastructure Borrowings Tax Offset Scheme – Transport (data for 1997-2007)

The Infrastructure Borrowings Tax Offset Scheme (IBTOS) is very similar to the Infrastructure Bonds Scheme it was meant to replace back in 1997. One major difference is that IBTOS features a lower cap on annual expenditures (AUD 75 million). New infrastructure projects stopped being accepted as of May 2004, however. The estimation method follows that of the Infrastructure Bonds Scheme (see above), meaning that we break IBTOS into two separate programmes using rough project-type shares from the Development Allowance Authority's annual reports.

Sources: Development Allowance Authority (various years), Australian Treasury (various years), Parliament of Australia (1997).

Tag: AUS_te_09

Exemption from Crude-Oil Excise for Condensate (data for 2001-2011)

This concession was introduced in 1977 and exempts condensate[2] from the excise tax that is normally levied on crude-oil production taking place outside the PRRT framework. Although the exemption was abolished in 2008, condensate remains subject to a lower rate than that applied to fields discovered prior to September 1975, which is the Treasury benchmark. The measure therefore continues to yield positive and significant tax expenditures.

Legislation recently enacted by the Australian government provides for the taxation of petroleum condensate under the PRRT's revised natural-resources tax benchmark starting on 1 July 2012. This change would in effect remove the tax expenditure associated with the exemption of condensate from crude-oil excise.

Estimates are not available for the years preceding 2001.

Sources: Australian Treasury (various years).

Tag: AUS_te_11

[2] Condensate is only subject to the petroleum production excise tax when marketed jointly with crude oil.

Exploration and Prospecting Deduction (data for 2006-)

This provision was introduced in 1968 and allows mining and quarrying companies to deduct exploration and prospecting expenses in full in the year in which they are incurred for income-tax purposes. The measure does not pertain to the PRRT regime.

Since this measure applies to the mining sector as a whole, we deduct from the annual amounts reported in official tax expenditure documents the estimated share associated with mining exploration that is not concerned with fossil fuels. This is done using data on exploration expenditure by type of mineral from ABS. The resulting amounts are then allocated to the various types of fossil fuels (i.e. crude oil, natural gas, and the various types of coal) using production data from ABS and the IEA.

Sources: Australian Treasury (various years), ABS, IEA.

Tag: AUS_te_13

Increased Deduction for Petroleum Exploration Expenditure (no data available)

This provision was introduced in 2004 to encourage exploration in designated, remote offshore areas. It allowed oil and gas companies to deduct as much as 150% of qualifying exploration costs incurred in a given year. The benchmark PRRT deduction for such costs is 100%. This 50% uplift expired in 2009.

No estimates of the revenue foregone due to the cost uplift for exploration expenditure are available.

Sources: Australian Treasury (various years).

Expenditure Uplift Rate (no data available)

This measure forms part of the PRRT regime. It was introduced in 1990 to provide oil and gas producers with uplifts on certain qualifying expenditures, thereby increasing the amounts they can deduct from taxable profits for PRRT purposes. Rates of uplift vary with the type of expenditure to be deducted and the time at which it was incurred.

No estimates of the revenue foregone due to the expenditure uplift are available.

Sources: Australian Treasury (various years).

Consumer Support Estimate

Diesel and Alternative Fuels Grants Scheme (data for 2000-2002)

The Diesel and Alternative Fuels Grants Scheme (DAFGS) was introduced in 2000 as part of the *A New Tax System* initiative before it became part of the EGCS (i.e. the former version of the Fuel Tax Credits) starting in 2003. For that reason, reporting stops around that time and the EGCS thereupon includes both DFRS and DAFGS payments (see also “Fuel Tax Credits” below). The DAFGS gives certain on-road users a grant aimed at cutting the fuel costs they have incurred.

Although the EGCS is a tax expenditure, only its former DFRS component used to specifically offset fuel excise taxes. The DAFGS is therefore reported as a budgetary transfer.

Sources: Australian Taxation Office (various years), Australian Treasury (2001), Webb (2000, 2001).

Tag: AUS_dt_01

Fuel Sales Grants Scheme (data for 2000-2007)

This programme was introduced in 2000 as part of the *A New Tax System* initiative to compensate certain areas of the country for the introduction of a federal, harmonised Goods and Services Tax (the so-called GST). The measure targeted fuel retailers in remote and regional areas before being subsequently phased-out in 2006. As a rough approximation, we allocate 90% of the payments to diesel

and 10% to gasoline given that the scheme overwhelmingly benefitted producers of primary commodities.

Sources: Australian Taxation Office (various years), Australian Treasury (2001), Webb (2000, 2001).

Tag: AUS_dt_02

Petroleum Products Freight Subsidy Scheme (data for 2001-2005)

This programme was put in place in 1965 and granted assistance to fuel distributors selling eligible petroleum products in remote areas of the country. It was phased out in 2006. Few details are now available, but it seems that the programme used to provide fixed annual payments totalling AUD 3.5 million (at least in the last years). For that reason, we report the same value for every missing year starting with the first observation available (2001).

Eligible fuels include gasoline, diesel, and kerosene-type jet fuel. Accordingly, we allocate the annual amounts reported to gasoline, diesel fuel, and kerosene-type jet fuel on the basis of the IEA's Energy Balances for the transport sector (excluding maritime and international air transport).

Sources: Australian Treasury (2001), IEA.

Tag: AUS_dt_12

Fuel Tax Credits (data for 1994-)

This programme dates from 1982 when the Commonwealth Government decided to replace the old exemption certificate scheme — prone to abuse — with a new Diesel Fuel Rebate Scheme. The scheme subsequently went through several changes in terms of coverage and rates, being first renamed the Energy Grants Credit Scheme in 2003, before it was given its current name in 2006. It provides eligible users with a partial or full rebate on the fuel excise tax, depending on the type of vehicle they drive and the sector in which they operate.

The mining sector is eligible for the Fuel Tax Credits programme, which results in this measure supporting both the extraction and the consumption of fossil fuels. However, given the relative importance of those two components, only the consumption side is here considered. The measure thus forms part of the CSE.

The annual amounts reported under the Fuel Tax Credits also include those reported under the Diesel and Alternative Fuels Grants Scheme starting in 2003, and those reported under the Energy Grants Credits Scheme (on-road) starting in 2006.

Sources: Australian Taxation Office (various years), Australian Treasury (2001), Webb (2000, 2001).

Tag: AUS_te_01

Reduced Excise Rate on Aviation Fuel (data for 1996-)

Consumers of aviation gasoline and aviation turbine fuel have benefitted from a reduced rate of excise tax since March 1956. The Australian Treasury includes this concession in its annual Tax Expenditures Statement where only the part that relates to domestic flights is reported. The planned introduction of a carbon-pricing mechanism in Australia on 1 July 2012 will result in an increase in the rate of excise tax levied on aviation fuels.

Although this measure relates to both aviation gasoline and kerosene-type jet fuel, consumption of the latter dwarfs the use of the former according to IEA data on Energy Balances for the domestic air transport sector. For that reason, we allocate the measure entirely to kerosene-type jet fuel.

Sources: Australian Treasury (various years), IEA.

Tag: AUS_te_04

Exemption from Excise for 'Alternative Fuels' (data for 1994-)

This concession was introduced in 1985 and exempts liquefied petroleum gas, liquefied natural gas, and compressed natural gas from the federal excise tax normally levied on sales of petroleum products in Australia.

We allocate annual amounts from the Australian Treasury to all three different fuels on the basis of the IEA's Energy Balances for the road transport sector.

Sources: Australian Treasury (various years), IEA.

Tag: AUS_te_05

Reduced Excise Rate on Heating Oil, Fuel Oil and Kerosene (data for 1996-2006)

The Australian Government began levying an excise tax on heating oil, fuel oil and kerosene in 1983. However, these fuels remained subject to a much lower rate when used other than in an internal combustion engine. This lasted until 2006, when tax rates were then set high enough to match those applying to regular petroleum products. This rise was, however, paralleled by the introduction of an equivalent rebate that in effect nullifies the incidence of excise. Starting in 2006, annual estimates for this rebate are being reported as part of the Fuel Tax Credits (see above).

We allocate annual amounts from the Australian Treasury to all three different fuels on the basis of the IEA's Energy Balances for the residential sector and the commercial services sector.

Sources: Australian Treasury (various years), IEA.

Tag: AUS_te_06

Infrastructure Bonds Scheme – Power Generation (data for 1996-2008)

Like the Infrastructure Bonds Scheme for transport (see above), this programme started in 1992 under the aegis of the Development Allowance Authority. It was aimed at encouraging investment in infrastructure projects through the issuance of Develop Australia Bonds (i.e. Infrastructure Bonds) that provided lenders with tax-deductible interest payments. Although part of the concession targeted water and transport infrastructure, the rest was earmarked for natural-gas and electricity projects such as co-generation plants or gas pipelines. The programme was terminated in 1997 and replaced with the Infrastructure Borrowings Tax Offset Scheme. However, deductions were still being claimed as of 2008.

Data from the Development Allowance Authority annual reports were used to roughly estimate the shares of reported tax expenditures that are attributable to gas infrastructure and power plants. We treat those two components of the scheme as separate programmes since one relates to the supply of fossil fuels while the other relates to the use of fossil fuels in power generation.

The power generation part is said to represent around 23% of all projects. Though it appears under the "Electricity" heading, virtually all examples of power generation projects financed through the scheme are gas-fired cogeneration plants. Taxpayer privacy arrangements make access to a full listing of the projects and the associated costs impossible, hence the entire value of the scheme was allocated to natural gas as a rough approximation.

Sources: Development Allowance Authority (various years), Australian Treasury (various years), Parliament of Australia (1997).

Tag: AUS_te_08

Infrastructure Borrowings Tax Offset Scheme – Power Generation (data for 1997-2007)

The Infrastructure Borrowings Tax Offset Scheme (IBTOS) is very similar to the Infrastructure Bonds Scheme it was meant to replace back in 1997. One major difference is that IBTOS features a lower cap on annual expenditures (AUD 75 million). New infrastructure projects stopped being accepted as of May 2004, however. The estimation method follows that of the Infrastructure Bonds Scheme (see above), meaning we break IBTOS into two separate programmes using rough project-type shares from the Development Allowance Authority's annual reports.

Sources: Development Allowance Authority (various years), Australian Treasury (various years), Parliament of Australia (1997).

Tag: AUS_te_10

General Services Support Estimate

Clean Coal Fund (data for 2007-)

In 2008 the Australian government established a AUD 500 million National Clean Coal Fund to support research, technology development, demonstration projects, CO2 storage sites, and associated infrastructure in relation to clean coal. The fund will operate until 30 June 2012.

This programme is allocated to the GSSE since it benefits Australia's coal sector as a whole and does not increase current production or consumption of fossil fuels. We allocate annual budgetary transfers to the different types of coal on the basis of production data from the IEA's Energy Balances.

Sources: Australian Government (various years), IEA.

Tag: AUS_dt_29

Australian Capital Territory

Consumer Support Estimate

[Australian Capital Territory] ACT Energy Concession (data for 2004-2007 and 2011)

The FY2004/05 budget for the Australian Capital Territory introduced a new energy concession to replace the state's former electricity concession and combine it with a new one for natural gas. This new concession is provided through electricity and gas retailers.

Data are not available for the years 2008 to 2010. We estimate the share of payments that is attributable to natural gas on the basis of the IEA's Energy Balances for the residential sector.

Sources: Australian Capital Territory Government (various years), IEA.

Tag: AUS_dt_25

New South Wales

Consumer Support Estimate

[New South Wales] Petroleum Products Subsidy Scheme (data for 1999-2008)

The state of New South Wales imposed petroleum license fees on both wholesalers and retailers until 1997, at which time state-level excise taxes on fuel were found to be unconstitutional and banned by Australia's High Court. Because the off-road use of diesel fuel had not been subject to NSW's license fees prior to 1997, and to compensate users for the introduction of a higher federal excise tax on fuel, the state of NSW started providing subsidies for off-road users of diesel. These subsidies were, however, abolished in July 2000 as part of a nationwide tax reform.

The NSW government also provided fuel subsidies to five geographic zones along the Queensland border to ensure that NSW retailers could compete with Queensland's (see Queensland Fuel Subsidy Scheme). The amount of the subsidy ranged from AUD 0.0167 per litre to AUD 0.0835 per litre, with the subsidy being highest in zones closer to the Queensland border. In the rest of NSW, including Sydney, no subsidy was payable. NSW's Petroleum Products Subsidy Scheme was abolished in July 2009 following the termination of the Queensland scheme.

We use state-level data from DRET on annual sales of petroleum products in New South Wales to allocate the annual amounts reported in budget documents to gasoline and diesel fuel.

Sources: New South Wales Government (various years), Office of State Revenue (2009), DRET.

Tag: AUS_dt_18

[New South Wales] Energy Accounts Payment Assistance Scheme (data for 2003-2007)

The Energy Accounts Payment Assistance (EAPA) Scheme helps low-income households pay their electricity and natural-gas bills in cases of crises or emergency situations. The scheme operates through a voucher system, where each voucher is worth AUD 30. The number of vouchers available each year is capped at 16 vouchers (AUD 480) per recipient. Bottled LPG is not covered under this scheme.

From FY2008/09 onwards, NSW budget documents only report a single number under "energy concessions." Estimates are therefore only available up to FY2007/08. We estimate the share of payments that is attributable to natural gas on the basis of the IEA's Energy Balances for the residential sector.

Sources: New South Wales Government (various years), IEA.

Tag: AUS_dt_26

General Services Support Estimate

[New South Wales] NSW Clean Coal Fund (data for 2009-)

In FY2008/09 the state of New South Wales allocated AUD 100 million to a Clean Coal Fund to research, develop, and demonstrate clean-coal technologies, and conduct advocacy in relation to these technologies.

This programme is allocated to the GSSE since it benefits NSW's coal sector as a whole and does not increase current production or consumption of fossil fuels.

Sources: New South Wales Government (various years).

Tag: AUS_dt_30

[New South Wales] NSW Derelict Mines Program (data for 2000-)

The state of New South Wales provides annual funding to Industry and Investment NSW (a government agency) to undertake rehabilitation works through the Derelict Mines Program. Derelict mines are former mining sites that require rehabilitation given the risk they pose in terms of land subsidence, and for which no individual or company can be held liable. The programme was initially started in 1974 and is still ongoing.

This measure is allocated to the GSSE as it does not increase current production or consumption of hard coal. Because it applies to NSW's mining sector as a whole, we deduct from the annual amounts reported in official budgetary documents the estimated share associated with mining production that is not concerned with coal. This is done using state-level data on mining output by type of mineral from ABS.

Sources: New South Wales Government (various years), ABS.

Tag: AUS_dt_31

[New South Wales] Exploration NSW (data for 2000-2006)

The Exploration NSW programme was launched in July 2000 as a seven-year AUD 30 million initiative to promote mineral and petroleum exploration in the state of New South Wales. The programme funded geophysical surveys, data compilation, mapping, data interpretation, and data delivery.

This programme is allocated to the GSSE since it benefits NSW's mining sector as a whole and does not increase current production or consumption of fossil fuels. Because two thirds (17) of the total 23 projects fall under the petroleum programme, we allocate 66% of all spending to oil and natural gas. We use data on state-level exploration expenditure from the Australian Bureau of Statistics to separate the remaining 33% between coal and non-energy minerals.

Sources: New South Wales Government (various years), ABS, IEA.

Tag: AUS_dt_13

[New South Wales] New Frontiers (data for 2006-2011)

The New Frontiers programme enhances the earlier Exploration NSW initiative by providing additional funding until FY2011/12 to encourage further exploration of New South Wales's mineral and hydrocarbon resources. As with Exploration NSW, this programme does not fund exploration directly but contribute to providing geophysical data and mapping, which are then used by mining companies.

This programme is allocated to the GSSE since it benefits NSW's mining sector as a whole and does not increase current production or consumption of fossil fuels. Personal communications with staff at NSW's Department of Industry and Investment suggest that between AUD 1 million and AUD 1.5 million of the programme's total funding are dedicated each year to projects directly related to petroleum. We therefore choose to report a conservative estimate of AUD 1 million per year for

petroleum. We use data on state-level exploration expenditure from the Australian Bureau of Statistics to separate the remaining amounts between coal and non-energy minerals.

Sources: New South Wales Government (various years), ABS, IEA.

Tag: AUS_dt_14

Northern Territory

Consumer Support Estimate

[Northern Territory] NT Off-Road Diesel Subsidy Scheme (data for 1998-1999)

Prior to 1997, the off-road use of diesel fuel in the Northern Territory attracted a rebate worth AUD 0.02 per litre. Following the 1997 High Court decision banning state-level excise taxes on fuel, the NT government started to grant a subsidy for the off-road use of diesel. It was at the time estimated that this subsidy cost AUD 11.3 million annually in 1998-99 terms. The scheme was subsequently phased out in 2000 as part of a nationwide tax reform.

Sources: Reed (1998).

Tag: AUS_dt_21

[Northern Territory] NT Fuel Subsidy Scheme (data for 2002-2008)

Between July 2000 and May 2009, the NT government provided a subsidy worth AUD 0.011 per litre to on-road users of gasoline and diesel fuel. Payments were made at the point of first sale in the Territory.

Data prior to 2002 are not available. Starting in 2002, a single budget line is provided that contains both the fuel subsidy and a federal home-owner grant. An estimate for the fuel subsidy was obtained by deducting from the budget line transfers from the federal government to the NT government for the home-owner grant using estimates from the federal government's budget.

We use state-level data from DRET on annual sales of petroleum products in the Northern Territory to allocate the annual amounts reported in budget documents to gasoline and diesel fuel.

Sources: Australian Government (various years), Northern Territory Government (various years), Reed (1998), DRET.

Tag: AUS_dt_22

General Services Support Estimate

[Northern Territory] Building the Territory's Resource Base (data for 2003-2006)

This programme was introduced in 2003 as a four-year, AUD 15.2 million initiative aimed to promote investment in mineral and petroleum exploration in Australia's Northern Territory. Funding was provided for sub-programmes concerned with geophysical data (the bulk of total funding), mapping, and application processes and permits for mining companies.

This programme is allocated to the GSSE since it benefits the NT's mining sector as a whole and does not increase current production or consumption of fossil fuels. We use data on state-level exploration expenditure from the Australian Bureau of Statistics to allocate annual budgetary appropriations to hydrocarbons and non-energy minerals, while only reporting here the estimates that pertain to fossil fuels.

Sources: Northern Territory Government (various years), ABS, IEA.

Tag: AUS_dt_16

[Northern Territory] Bringing Forward Discovery (data for 2007-)

The Bringing Forward Discovery programme is a four-year, AUD 12 million initiative that was introduced as part of the FY2007/08 budget for Australia's Northern Territory. It aims to extend the "Building the Territory's Resource Base" programme (see above) by providing additional funding for geophysical data, mapping, and application processes and permits for mining companies. Budgets for FY2008/09 and FY2011/12 subsequently increased funding by AUD 2.4 million and AUD 11.4 million respectively.

This programme is allocated to the GSSE since it benefits the NT's mining sector as a whole and does not increase current production or consumption of fossil fuels. The allocation of annual funding to fossil fuels and non-energy minerals was done based on personal communications with staff at NT's Department of Resources.

Sources: Northern Territory Government (various years), IEA.

Tag: AUS_dt_17

Queensland

Consumer Support Estimate

[Queensland] Queensland Fuel Subsidy Scheme (data for 1999-2009)

This measure started in 1997 and gave rise to significant annual transfers until it was phased out in July 2009. It was meant to compensate Queensland fuel users for the introduction of a federal excise tax on petroleum products, following the 1997 High Court decision banning state-level excise taxes (the state of Queensland did not levy any fuel excise tax at the time). Beneficiaries included bulk end users, some off-road diesel users, and fuel retailers who were thence expected to pass on the benefit to final consumers.

Values for the years 2000 and 2001 were linearly interpolated since the corresponding amounts could not be found in Queensland's budget documents. We use state-level data from DRET on annual sales of petroleum products in Queensland to allocate the annual amounts reported in budget documents to gasoline and diesel fuel.

Sources: Queensland Government (various years), DRET.

Tag: AUS_dt_04

[Queensland] Home Energy Emergency Assistance Scheme (data for 2007-)

This measure provides low-income households with emergency assistance in case they prove unable to pay their electricity and natural-gas bills. It does not, however, give rise to direct transfers to consumers since payments are made to energy companies.

We estimate the share of payments that is attributable to natural gas (about 37%) on the basis of the IEA's Energy Balances for the residential sector.

Sources: Queensland Government (various years), IEA.

Tag: AUS_dt_10

[Queensland] Reticulated Natural Gas Rebate (data for 2008-)

This programme, which was initially called the Gas Pensioner Rebate Scheme, was renamed the Reticulated Natural Gas Rebate in 2007. It provides the elderly in need with annual rebates on their natural-gas bills worth about AUD 55. Contrary to the Home Energy Emergency Assistance Scheme, payments are made directly to households and target natural gas specifically.

Sources: Queensland Government (various years).

Tag: AUS_dt_09

General Services Support Estimate

[Queensland] Collingwood Park Mine Subsidence Package (data for 2008-)

In April 2008 houses located on the site of a former coal mine in the state of Queensland were damaged when the ground subsided. Funding of AUD 10 million was allocated in the FY2008/09 state budget to repair homes, or purchase homes considered not economically repairable. In FY2009/10, a further AUD 5.6 million were allocated to cover the costs of additional home purchases and repairs. The FY2011/12 budget extended funding with AUD 3.2 million set aside to investigate the feasibility of a mine-filling programme in Collingwood Park. Normally, the mining industry would be held liable for damages associated with land subsidence.

This measure is allocated to the GSSE as it does not increase current production or consumption of coal. Estimates prior to 2008 could not be found. We allocate this measure entirely to hard coal.

Sources: DEEDI (2008).

Tag: AUS_dt_11

[Queensland] Queensland Rail's Coal and Freight Services (data for 2003)

The Queensland state budget for FY2003/04 directed AUD 94 million to Queensland Rail's Coal and Freight Services to upgrade and acquire rolling stock such as diesel locomotives. This funding supplemented capital expenditure by state-owned Queensland Rail of about AUD 615 million in FY2003/04.

This programme is allocated to the GSSE since it benefits QLD's hard-coal sector as a whole.

Sources: Queensland Government (various years).

Tag: AUS_dt_28

South Australia

Consumer Support Estimate

[South Australia] SA Fuel Subsidy Scheme (data for 1999-2010)

Early versions of this scheme date back to the 1980s when the state of South Australia introduced differential excise-tax rates on fuel that varied with the distance between fuel retailers and the Adelaide area. This was meant to reduce price disparities between urban and regional areas. This changed in 1997 when the state of SA introduced fuel subsidies in response to the High Court decision banning state-level excise tax on fuels. Eligibility was limited to on-road users of diesel and unleaded gasoline purchased in regional areas. The subsidy scheme was later abolished starting on 1 January 2011.

We use state-level data from DRET on annual sales of petroleum products in South Australia to allocate the annual amounts reported in budget documents to gasoline and diesel fuel.

Sources: Government of South Australia (various years), DRET.

Tag: AUS_dt_19

Tasmania

Consumer Support Estimate

[Tasmania] Tasmanian Off-Road Diesel Fuel Subsidy (data for 1998-2000)

In 1998 the Tasmanian government started providing a subsidy worth AUD 0.03 per litre to off-road users of diesel fuel. This subsidy was paid on top of another AUD 0.03 per litre subsidy arising from the 1997 nationwide reform of excise taxes on fuel. The Tasmanian off-road diesel subsidy ceased on 1 July 2000 as part of a broader federal tax reform.

Sources: Tasmanian Government (various years).

Tag: AUS_dt_23

[Tasmania] Tasmanian Fuel Subsidy Scheme (data for 2003-2007)

Following the 1997 High Court decision banning state-level excise taxes on fuel, the Tasmanian government started providing subsidies for the on-road use of diesel and gasoline. These subsidies were discontinued in September 2007 and replaced by tax reliefs provided through reductions in the state's motor taxes and vehicle-registration transfer duties.

Data are not available before 2003. We use state-level data from DRET on annual sales of petroleum products in Tasmania to allocate the annual amounts reported in budget documents to gasoline and diesel fuel.

Sources: Tasmanian Government (various years), DRET.

Tag: AUS_dt_24

[Tasmania] Tasmanian Heating Allowance (data for 2007)

The state of Tasmania provides a means-tested allowance to eligible households to assist them with the costs of heating, irrespective of whether households use wood, fuel oil, natural gas or electricity.

A separate budget line is not provided for this particular programme, but the FY2007/08 Tasmanian state budget indicated that AUD 506 000 had been allocated to the heating allowance for that particular year. We estimate the share of payments that is attributable to fuel oil and natural gas on the basis of the IEA's Energy Balances for the residential sector.

Sources: Tasmanian Government (various years), IEA.

Tag: AUS_dt_27

Victoria

Consumer Support Estimate

[Victoria] Diesel-Fuel Exemption Certificate Scheme (data for 1995-1999)

This programme provided off-road users of diesel fuel in the state of Victoria with an exemption from the state's regular fuel excise tax. As was the case with the Western Australian Diesel Subsidy (see

above), the introduction of several federal rebates for the off-road use of diesel fuel resulted in the programme being phased-out in 2000.

Sources: Victorian State Government (various years).

Tag: AUS_te_12

[Victoria] Victorian Government Fuel Subsidy Scheme (data for 1999-2006)

Between 1999 and 2007, the state of Victoria provided subsidies for both gasoline and diesel fuel sold for use in the state. The subsidy amount ranged from AUD 0.00429 per litre for gasoline to AUD 0.00751 per litre for diesel used on roads. Payments were made to wholesalers operating within the state of Victoria on the understanding that they would pass on the subsidy to final consumers. The 2007 Victoria State Budget provided for the abolition of the scheme and the recycling of the associated funding towards reductions in motor-vehicle duty rates.

We use state-level data from DRET on annual sales of petroleum products in Victoria to allocate the annual amounts reported in budget documents to gasoline and diesel fuel.

Sources: Victorian State Government (various years), DRET.

Tag: AUS_dt_20

[Victoria] Winter Energy Concession (no data available)

The state of Victoria's Winter Energy Concession provides eligible low-income households with a 17.5% discount on natural-gas bills between 1 May and 31 October each year. The concession is paid through gas retailers.

No data are available for this particular scheme.

Sources: Victorian State Government (various years).

Western Australia

Producer Support Estimate

[Western Australia] North West Shelf Gas Financial Assistance (data for 1997-2000)

The North West Shelf project is one of Australia's major resource-extraction projects. Because the Government of Western Australia has in the past devoted considerable resources to ensure that the project proceeds forward, an arrangement with the Commonwealth excludes the North West Shelf from the federal PRRT (see introductory remarks). Instead, the state of Western Australia retains part of the royalties and excise revenues collected on oil and natural-gas extraction. This would, however, change under new legislation recently introduced by the Australian government, and which would extend the PRRT regime to all onshore and offshore oil and gas projects starting on 1 July 2012.

Western Australia's budget papers suggest that the state has provided additional financial assistance between the years FY1997/98 and FY2000/01 to further encourage the exploitation of the North West Shelf resources, though not much information is available regarding this particular item. It appears several times in Western Australia's State Budget under the Grants, Subsidies and other Transfer Payments heading, but the specifics of the scheme are not described. North West Shelf Gas is, however, a major gas marketing agency in Western Australia.

The FY 2000/01 budget reports annual amounts up to FY 2003/04 while that for FY 2001/02 seems to suggest that payments stopped around FY 2000/01. Assuming that recent reporting tends to be more reliable, the measure is deemed phased-out following FY 2000/01.

Sources: Government of Western Australia (2011), Government of Western Australia (various years).

Tag: AUS_dt_05

Consumer Support Estimate

[Western Australia] Western Australian Diesel Subsidy (data for 1997-2009)

This programme dates back to 1997 when Australia's High Court ruled that state-level excise taxes on fuels should be banned. Because the state of Western Australia had an excise tax on diesel at the time, the transfers involved are relatively smaller than those under the corresponding scheme for the state of Queensland (see the "Queensland Fuel Subsidy Scheme" above). Although the measure initially targeted both off-road and on-road users, the introduction of several federal grants in July 2000 resulted in the programme being restricted to on-road users from that date forward. The subsidy was then entirely phased out in December 2009.

Sources: Government of Western Australia (various years).

Tag: AUS_dt_06

General Services Support Estimate

[Western Australia] Coal Industry Development (data for 2006-)

This measure aims at expanding coal companies' market opportunities overseas and domestically, improving coal-related infrastructure, and promoting R&D activities related to coal gasification and geosequestration. It forms part of Western Australia's Coal Futures Strategy, which is meant to encourage the production of coal in that state.

Lack of further details prevents us from allocating this measure to the PSE so we put it under the GSSE. We allocate this measure entirely to hard coal.

Sources: Government of Western Australia (various years).

Tag: AUS_dt_07

[Western Australia] Exploration Incentive Scheme (data for 2008-)

The Exploration Incentive Scheme (EIS) is a AUD 80 million initiative that aims to promote mineral and hydrocarbon exploration in the state of Western Australia. It started in 2008 and comprises six different sub-programmes concerned with geophysical data and mapping, application processes for mining companies, technology diffusion, and innovative drilling.

This programme is allocated to the GSSE since it benefits WA's mining sector as a whole and does not increase current production or consumption of fossil fuels. A financial breakdown by project was only available for the innovative drilling sub-programme. A total of eight fossil-fuel drilling projects were approved between 2008 and 2012, each of which received grants totalling about AUD 200 000. Personal communications with staff at WA's Department of Mines and Petroleum suggest that roughly 30% of EIS funding in relation to the other five sub-programmes can be considered to benefit the petroleum industry.

Sources: Government of Western Australia (various years), IEA.

Tag: AUS_dt_15

[Western Australia] Regional Alternative Energy Mobilisation Project (no data available)

This programme is a AUD 3.6 million initiative that was introduced as part of WA's budget for FY2011/12 to expand the Exploration Incentive Scheme and promote the exploration and development

of onshore unconventional energy sources in the state. Eligible sources of energy mainly include shale gas and geothermal energy.

No information on the specific share of funding going to shale gas is available.

Sources: Government of Western Australia (various years).

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