



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

Energy resources and market structure¹

Apart from about 5% of its total primary energy that is obtained from renewable energy sources, Israel depends almost totally on fossil fuels for its energy supply. Around a third of its energy comes from imported coal, which is used entirely to generate electricity. About half of its energy comes from imported crude oil and products. The rest comes from natural gas which is both imported via a pipeline from Egypt and produced domestically. The gas is mainly used to generate electricity. Small amounts of natural gas are also used for water desalinisation.

Israel's consumption of natural gas is expected to triple by 2020, to 15 billion cubic meters a year. In 2004, Israel began producing natural gas from deposits in the Yam Tethys field, from which around 17 billion cubic metres have already been extracted and around 10-15 billion cubic metres remain. More recently exploration has revealed significant additional deposits. Another field (Tamar) contains 250 billion cubic metres of confirmed reserves and is expected to begin production in 2013; this field could supply all of Israel's current domestic requirements for at least 20 years. In December 2010, Tamar was dwarfed by the discovery of Leviathan — the largest deepwater gas reservoir found anywhere in the world over the past decade (it is estimated to have 450 billion cubic metres of natural gas). Therefore in total, the undersea gas fields explored to date are estimated to contain about 700 billion cubic metres of gas. The potential for further discoveries is considerable: the US Geological Survey estimates that there are 3.5 trillion cubic meters of gas in the whole Levant Basin, approximately two-thirds of which lies within Israel's jurisdiction. Geologically, it is likely that there are oil resources in the vicinity of the natural gas fields but at the time of writing there had been no significant findings.

Oil shale is another resource being explored in Israel. The World Energy Council reported in November 2010 that Israel's underground oil shale (marinite) deposits, which underlay some 15% of the country at a depth of about 300 meters, could yield the equivalent of 4 billion barrels of oil using traditional open-cast mining techniques. Most of Israel's shale resources are located in the Rotem basin region of the northern Negev desert, near the Dead Sea. According to Israel's Ministry of National Infrastructures, the total geological endowment of the country's oil shale may well exceed several hundred billion barrels, but mineable reserves form only a tiny fraction of that figure. Traditionally, mining oil-shale requires tremendous amounts of water and energy, inputs not available in Israel in abundance.

Israel's energy sector is yet to become fully competitive. Electricity production and distribution remain dominated by the state-owned Israel Electricity Corporation. Progress in reforming this sector has been slow. Private-sector production is set to expand but the "network" component is yet to be separated from other activities and distribution remains fully operated by the incumbent. Development of the offshore gas fields is being conducted by the private sector, much of it by a consortium of companies headed by a US oil company (Noble

¹ The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Energy). The transmission of natural gas, however, is carried out by the Israel Natural Gas Lines Company (INGL), a government subsidiary established in 2004 to construct and operate a national high-pressure gas transmission system. Currently, INGL operates purely as a transmission carrier, serving large customers.

Prices, taxes and support mechanisms

Over the last decade, Israel has advanced reforms to deregulate its oil sector, particularly the gasoline industry. Among other changes, a cost-plus basis system was abolished, some price controls for end users of petroleum products were eliminated and the two oil refineries have been privatised. The retail price of gasoline (excluding tax and excise) remains based on a formula linked to crude oil prices but this does not appear to result in markedly different (ex-tax) prices from elsewhere. However, relatively high excise duties mean the full price of vehicle fuels is similar to that in a number of European countries; at the beginning of 2012 the price for a litre of 95 octane fuel was approximately ILS 7.23 (about USD 2). Transport fuels are subject to both a VAT of 17% and excise taxes of ILS 2.99 (USD 0.77) per litre for gasoline and ILS 2.86 (USD 0.75) per litre for diesel. The government raised the excise tax on gasoline by ILS 0.20 (USD 0.05) per litre on 1 January 2011, but removed it a month later in the face of public protest at rising fuel prices. Plans remain to add ILS 0.20 per litre to the excise in January 2012.

In September 2009, a five-year fuel tax reform was concluded, as a result of which the excise-tax rates on diesel and gasoline were almost matched and the diesel annual car licensing fee was reduced to match the fee on gasoline engine cars. The reform intended to reduce economic distortions influencing the choice between diesel- and gasoline-powered cars. As of April 2011, the tax on diesel, at ILS 2.76 per litre, was only 5% lower than the excise tax on gasoline. However, large businesses and industries that depend on diesel fuel for income generation (including agriculture, construction, and fishing) are entitled to apply for diesel tax refunds. Buses and taxis are also included in this refund scheme.

Excise duties are also imposed on fuels used for stationary purposes. The tax on coal, which was increased at the beginning of 2011 from ILS 8.6 (USD 2.24) to ILS 43.3 (USD 11.28) per tonne, is now substantially higher than the excises on heavy oil and natural gas — respectively, ILS 14.84 and ILS 16.9 per tonne — and may further encourage a shift away from coal-fired electricity production.

In August 2009 Israel approved a tax reform which seeks to improve vehicle efficiency and reduce emissions. The purchase tax on private cars in Israel, at 83% plus VAT is one of the highest in developed countries. The reform set tax rebates according to the degree of reduced vehicular air pollution emissions, taking into account local pollutants (CO, HC, NO_x, and PM) as well as CO₂ emissions. Vehicles in the lowest emission category, after the refund, pay a 45% tax; hybrid-electric cars are charged only 30% and fully electric vehicles 8% (in all cases plus VAT).

The prices of electricity are regulated by the Electricity Authority, and are not directly subsidized. Israel's natural-gas market is relatively immature, and gas prices are set by long term supply contracts for large customers, dominated by the contracts between the pipeline importer, domestic producers and the IEC. Future prices for natural gas in Israel are expected to be set by what independent power producers can afford to pay, and by the fuel-substitution possibilities of the major consumers. It is expected that natural gas will become the dominant fuel used in new power plants (mainly CCGTs) and in existing steam turbines converted from heavy fuel oil. Energy security and flexibility considerations are likely to ultimately constrain expansion of gas-fired electricity production.

Israel's concession-based regime for taxing hydrocarbon production, dating from 1952, was revised in April 2011. The new law provides that royalties on hydrocarbon discoveries will remain at 12.5%, while a special profits levy (in addition to regular corporate tax) will begin after the developers have paid back investment outlays plus a return allowance. The tax will start at 20% of taxable income after a payback of 150% on the investment has been reached, and will rise in incremental steps, reaching 50% after a return of 230% on the investment. The total take by the state (including the 12.5% royalty) will therefore not exceed 62.5%. Any change in the rate of

corporate income tax will trigger a corresponding change in the profits levy. The maximum profits levy has been reduced to 45.5% due to a change in the regular corporate tax rules as of 2012. The new regime is being applied to existing development projects and in these cases transitional provisions have been made to soften the tax burden and encourage production and development. The Tamar field is notably expected to benefit from these concessions. In broad terms the new fiscal regime has raised the effective tax on resources significantly to a level that is much closer to those typical elsewhere.

Data documentation

General notes

Israel's fiscal year coincides with the calendar year.

Producer Support Estimate

The oil and gas industry in Israel is regulated by a system of fees, royalty payments and tax deductions developed in the 1950s. The fiscal provisions that are unique to the oil and gas industry are the Oil Law (1952), Oil Regulations (1953), Income Tax Ordinance (1961) and some parts of the income tax legislation, especially the Deductions from the Income of Holders of Oil Rights (1956) and the Rules for Calculating Tax for the Holding and Sale of Participation Units in an Oil Exploration Partnership (1988).

Israel started producing natural gas in 2004. As this is a relatively recent development, the issues of producer taxation and royalty payments are currently under review by the government (*Knesset*), the Ministry of Finance and participants representing the civil society. In April 2010, the Minister of Finance appointed a committee to examine the fiscal framework for the oil and gas resources in Israel, headed by Professor Eytan Sheshinski. The Sheshinski Committee submitted its final conclusions in January 2011. It recommended that the 12.5% rate of royalty payments should remain unchanged since increasing it could have a negative impact on the development of relatively less profitable gas fields. The depletion deduction, however, should be cancelled as it leads to a considerable reduction of the amount of taxable income which has no economic justification, the Committee concluded. The Committee also instituted a progressive oil and gas levy on profits. Its initial rate will be 20% and it will gradually rise to 50% according to the amount of the excess profits. The new levy-calculation formula will give incentives for increasing exploration expenditure. In addition, as per income tax calculations, costs that accumulated during the lease stage of the oil-and-gas-asset development will be awarded accelerated depreciation at a rate of 10%. Investments made by the end of 2013 will be given a maximum of amount of accelerated depreciation rate of 15%.

Reduced Royalty Payments (data for 2004-2009)

The Oil Law (1952) stipulates that the rate of royalty payments that the holder of a lease is required to pay is 12.5% of gross income.² The value of natural gas produced from the Tethys concession (operated by a consortium of Noble Energy and the Delek Group) is calculated by taking into account 70% of the expenses for the construction of the production platform, 60% of the operating expenses and 100% of

² Gross income is the market value of the oil at the wellhead. If a market price for the price of oil at the wellhead is not available at the time of royalty-payment calculation, costs of the resource transportation from the wellhead to the selling point should be deducted from the selling price. When it comes to royalty payments for natural gas based on offshore deposits, there is uncertainty as to the definition of the wellhead and the costs that should be attributed to the selling point. Hence, it is difficult to determine the exact amount of the royalty.

the expenses for the gas pipeline and other facilities not connected to the platform. For the 2004-2010 period, total royalty payments amounted to 10.6% of gross income.

Data are available for the 2004-2009 period from the Sheshinski Report. They comprise calculations of the amounts of total tax breaks (the sum of the reduction in royalty payments and the depletion deduction) and the total royalty payments. In order to estimate both the reduction in royalty payments and the depletion deduction, we compute the amounts of royalties that should be paid according to the Oil Law. We then calculate the amounts that constitute the reduction in royalty payments as the difference between the royalty payments that ought to have been paid and those that were actually paid. The difference between the total tax breaks and the reduction in royalty payments is the depletion deduction.

We use production data from the IEA to allocate the annual amounts reported in the Sheshinski report to oil and natural gas extraction.

Sources: Sheshinski Report (2011), IEA.

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Depletion Deduction (data for 2004-2009)

Tax arrangements for the oil and gas industry are detailed in the Deductions from the Income of Holders of Oil Rights Regulations of 1956 which allow for special deductions that reduce the taxable income of companies operating in the sector. In 1988, the benefits were expanded and the state allowed for the transfer of the tax breaks listed in the abovementioned document to the outside investors through the trading of securities. Eligible tax benefits include the following items: depletion deduction, recognition of exploration and development expenses as operating expenses, deductions due to the abandonment of an oil asset, depreciation in respect of the acquisition of land, and exemption from the payment of customs duty and other import taxes.

The Deductions from the Income of Holders of Oil Rights Regulations grants the holder of oil rights an annual imputed deduction that amounts to 27.5% of gross income³ in a given tax year but no more than 50% of net income.⁴ The Sheshinski Report states that the rationale behind the depletion deduction is that its amount should reflect the depletion of the resource in the deposit and, as such, the impairment in the value of an asset. Since no payment has been made for the resource in the deposit in first place and the depleted asset is owned by the state, this depletion deduction constitutes a producer-support measure, Report concludes. Based on the Sheshinski Report, the Knesset abolished the depletion deduction in May 2011.

³ Gross income is defined as the amount received from the sale at the wellhead of the crude oil produced and utilised from the benefit or income less royalties. The *Sheshinski Report* states that there is another method of calculating the depletion deduction but since this method is only applicable if an acquisition of an asset had been affected, we do not discuss it here.

⁴ Net income is defined as gross income less the deductions that may be attributed to the production of oil and gas, with the exception of the depletion allowance.

Data are available for the 2004-2009 period. See “Reduced Royalty Payments” for explanation of the calculation method. We use production data from the IEA to allocate the annual amounts reported in the Sheshinski report to oil and natural gas extraction.

Sources: Sheshinski Report (2011), IEA.

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Consumer Support Estimate

Excise Tax Exemptions on Diesel (data for 2007-)

The *Excise Tax on Fuel Order of 2005* provides for tax rebates on diesel fuel if used for income-generation purposes in the following commercial vehicles: buses, taxis, fishing boats, and working vehicles such as tractors. The tax rebate for commercial vehicles varies between 45% and 50% on a capped amount of diesel equivalent to the “average consumption” for a given use.

In September 2009, the excise tax on diesel was set to match the excise tax on gasoline as a result of a five-year government reform aiming at reducing economic distortions influencing the choice between diesel- and gasoline-powered cars. During the reform process in May 2009, the government raised the tax rate on gasoline by ILS 0.3, which created a further discrepancy between the tax rates on gasoline and diesel. However, large businesses and industries that depend on diesel fuel for income generation, can still apply for diesel tax rebates.

Data are available for the period 2007-2010.

Sources: Customs Authority, Ministry of Environment, Ministry of Finance (2005), Ministry of National Infrastructures.

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General Services Support Estimate

National Coal Ash Board Funding (no data available)

The National Coal Ash Board (NCAB) is a governmental agency was established in 1993 by the Ministry of Energy and Infrastructures (now the Ministry of National Infrastructures), in co-operation with the Ministry of the Environment, the Interior Ministry, the Israel Electric Company (IEC), and the National Coal Supply Company (NCSC). Its aim is to promote more economic uses for coal ash accumulating at Israel’s coal-fired power stations through investing state resources in research and development related to economic and environmental issues concerning coal-fired power stations, through co-operative initiatives with potential users.

No estimates are available for this programme.

Sources: NCAB (2011).

Sources

Policies or transfers

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Energy statistics

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