Environment

IMPROVING THE EFFECTIVENESS OF ENVIRONMENTAL TAXATION

- Taxes can be effective instruments for pursuing environmental objectives in a cost-effective way, but to do so they must be geared to reflect environmental impacts.
- Despite a relatively good performance on several points compared to other countries, there is still scope for improving the effectiveness of Israel's taxation policy from an environmental perspective.
- Increasing taxation on coal, diesel and natural gas for electricity generation, increasing taxation of diesel fuel for road use, taxing local air pollutants from stationary sources and new water taxes are priorities for Israel.

What's the issue?

Compared to other OECD countries, Israel raises above average revenues from environmentally related taxes as a percentage of GDP. In 2013, revenues from environmentally related taxes amounted to 2.8% of GDP, compared with a weighted OECD average of 1.6%. In particular, taxes on motor vehicles and transport are relatively high in Israel compared to other OECD countries. This is important, because environmentally related taxation is a cost-effective but generally underutilised tool to achieve environmental objectives across countries.

There are several aspects of the structure of environmental taxation in Israel that are positive from an environmental point of view. For example, the average tax rates on fuels used for heating and process purposes are the highest across all OECD and a number of partner countries, due to significant taxes on oil products. In contrast to many other OECD countries, Israel is also addressing emissions of local air pollutants in its tax on motor vehicle purchases, in addition to GHG emissions. This has contributed to keeping the share of diesel cars in the vehicle fleet relatively low, which is positive because the environmental damages caused by the combustion of a litre of diesel are much higher than those caused by a litre of petrol.

However, there is scope to better gear Israel’s taxation...
policy to ensure it is coherent from an environmental perspective. The tax rates on fuels used for electricity generation are low compared to many other countries. Coal, which accounts for the majority of electricity generation and CO₂ emissions in Israel, is taxed well below most estimates of social costs. Natural gas is not taxed at all when used for electricity generation. The same applies to its use for heating and process use, despite the high overall average tax rate on fuels for these purposes.

In terms of taxes on motor fuels, Israel affords a tax preference for diesel compared to petrol, despite its greater negative environmental and social impacts. Professional users of diesel benefit from a 50% refund mechanism, which reduces the effective tax rate they face. Diesel used in the commercial, industrial and agricultural sectors is taxed at a lower rate than residential consumption. There is also a reduced rate applied to diesel in electricity generation. While emissions of local air pollutants have been addressed in the taxation of motor vehicles, it could also be useful to levy taxes on emissions of nitrogen oxides (NOₓ), fine particulate matter (PM₁₀) and sulphur dioxide (SO₂) from sources that already are obliged to measure such emissions.

Effective environmentally related taxation goes beyond energy taxation. The preferential tax treatment of company cars in Israel means that the marginal cost of driving a company car for private purposes is close to zero. Such treatment creates implicit incentives that favour certain modes of transport over others and influence how much employees travel, with important impacts on the environment and other social costs (e.g. traffic congestion, accidents, noise). Israel has implemented some reform, but more adjustments are needed, for example the potential introduction of a cap on corporate tax deductibility for fuel expenses.

In addition, water is a very scarce resource in Israel. Even if desalination of seawater is being increasingly used to limit the shortages, such an approach also causes negative environmental impacts, e.g. because desalination is very energy-intensive. When the shortages were exceptionally serious in 2010, a special Drought levy, with very high tax rates, was applied. In order to help prevent very serious shortages in the future, other taxes on water supply – to all sectors of the economy – could be considered.

Why is this important for Israel?

Taxes influence the price and use of energy and other resources and can help shift producer and consumer behaviour towards more environmentally beneficial practices and products in a cost-effective way. Inconsistencies in the way Israel is taxing different forms, uses and users of energy when assessed against environmental costs suggest untapped, low-cost opportunity for reform remains. For example, the relatively low tax rates on fuels used for electricity generation contribute to a high carbon intensity of electricity generation: ninety-nine percent of Israel's electricity generation is from fossil fuels, making Israel's carbon intensity one of the highest in OECD countries. In 2012, Israel produced 767 gCO₂ per kWh of electricity generated, compared with an OECD average of 427 gCO₂ per kWh (see Figure). Addressing such inconsistencies in taxation would help harness the full power of energy taxes to reduce environmental harm cost-effectively, provide important environmental and health benefits and raise significant additional revenue.

What should policy makers do?

- Introduce a tax on natural gas used for electricity generation and increase the tax rates on coal and diesel used for the same purpose.
- Increase the tax rate on diesel to be at least on par with the tax rate on petrol, phase-out the refund mechanism for professional users and consider if the road fuel taxes in general are sufficiently high to address all relevant externalities.
- Phase-out gradually other tax expenditures in energy taxes.
- Introduce a tax on local air pollutants from stationary sources.
- Prune tax breaks on company cars.
- Consider the introduction of new taxes on water use in all sectors of the economy.

Further reading


