

Feed-in Tariffs (FITs) have come under fire of late, being criticized variously as “subsidies,” and “unfunded liabilities.” This Analytical Brief dispels a few common misconceptions of what is now widely recognized as the most successful renewable energy (RE) policy, and suggests that analysts and economists take a closer look. The majority of shots fired thus far have been wide of the mark.

Nineteenth century French economist Frédéric Bastiat once remarked that “*the worse thing that can happen to a good cause is not to be skillfully attacked, but to be ineptly defended.*” This first analytical brief seeks to address a few recent criticisms of feed-in tariffs (FITs) in the popular press and in the peer-reviewed literature, criticisms that reveal a number of lingering misunderstandings concerning the policy’s actual design and intent.

Prominent examples found in publications such as the Economist (e.g. October 17th 2009; December 5th 2009) have suggested that FITs constitute a form of “subsidy” to renewable energy producers. Such criticisms misrepresent what the policy actually does and, what is perhaps worse, they constitute a misuse of economic terminology.

In 2001, the European Court ruled that feed-in

tariffs were not a form of subsidy, partly on the grounds that they explicitly integrate any added costs that result from the increasing share of RE sources directly into electricity rates, rather than being funded through government revenues. Subsidies, on the other hand, are defined as a direct allocation of government revenues to a particular business or industry.

The incremental costs of new electrical capacity, whether from new nuclear reactors or from large coal-fired plants, have always been passed on, directly or indirectly, to ratepayers; feed-in tariffs are no exception.

### **What FITs do**

FITs provide stable prices and long-term purchase agreements for electricity generated from RE sources. The prices are typically designed to be high enough to attract investment, and to offer investors a reasonable rate of return. This enables a jurisdiction to mobilize private and institutional capital toward RE deployment.

In light of the sheer magnitude of investments that will be required in the decades ahead in renewable energy infrastructure, funding RE development out of tax revenues is bound either to break the bank, or fall embarrassingly short of the required scale of investment. This is why most analysts advise integrating any costs resulting from renewable energy development directly into electricity rates.

### Fool me once...

Another prominent criticism of the policy has been voiced by New Energy Finance, a leading energy analysis firm based in London (NEF, Sept. 2 2009).

This criticism is related to the first, in that it holds that FITs represent an “unfunded liability,” foisted on future generations by over-zealous governments.

Given that significant portions of our existing electricity infrastructure will have to be replaced in the coming decades to meet energy security and climate-related challenges, and since any new investments in electrical capacity must be funded one way or another, FITs are no more a liability than nuclear or coal investments (some would argue less), and they are no less “funded.”

Like the first, this criticism relies on the assumption that the added marginal costs of FITs will be recovered from treasury, rather than from rates.

A survey of FIT policies around the world reveals that the most successful jurisdictions, including Germany, Denmark, and France, and more recently the Canadian Province of Ontario, fund their FITs through electricity rates. Like

any new investments to electrical generating capacity, RE technologies are then incorporated into the rate base, and shared by all electricity consumers.

### For the record

Contrary to being “subsidies,” or constituting “unfunded liabilities,” **effective FIT policies simply ensure that the market purchases electricity generated from RE sources according to the actual costs of production.**

An example of this is found in the prices currently offered to wind power producers in jurisdictions

nologies, project sizes, vintages, and sometimes for projects located in different areas. As technology costs come down, the payment levels are ratcheted down accordingly in order to ensure reasonable, risk-adjusted rates of return in RE investments.

### Conclusion

The cost-based payment structure offered by feed-in tariffs enables jurisdictions to attract the investments they need to efficiently harness domestically available RE potential. The result is a fleet of renewable energy plants largely owned and operated by the private sector, and financed through stable, long-term contracts.

Any additional incremental costs are passed on to ratepayers and society obtains the benefits of stably-priced, clean energy supply.

And by being available

to all interested investors at fair prices, they can play an important role in opening our energy system up to a greater number of participants, giving ordinary citizens a chance to invest in clean energy technologies.

As Bastiat knew well, the best criticisms are both well-formulated and well-directed: the two examined here are unfortunately neither.

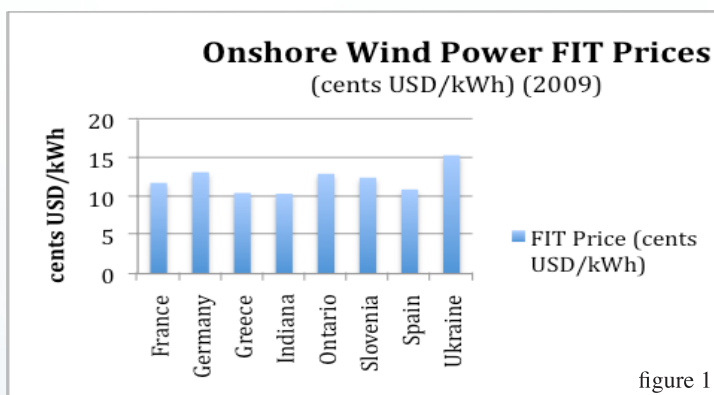


figure 1

employing FITs (see Figure 1).

The variation in payment levels seen here is attributable to a number of different factors including different modeling assumptions, resource qualities, estimated project costs, and overall investment risks.

In order to ensure profitability in a wide variety of project types, the most advanced FIT policies offer different prices for different tech-