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# Designing an incentive-compatible efficient Renewable Electricity Support Scheme

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**David Newbery**

**Abstract** Most existing renewables support schemes distort location and dispatch decisions. Many impose unnecessary risk on developers, increasing support costs. Efficient policy sets the right carbon price, supports capacity not output, and ensures efficient dispatch and location. The EU bans priority dispatch and requires market-based bidding, but does not address the underlying problem that payment is conditional on generation, amplifying incentives to locate in wind/sunny sites. This article identifies the various distortions and proposes an auctioned contract to address location and dispatch distortions: a financial Premium Contract for Difference (PCfD) with hourly contracted volume proportional to local renewable output/MW, with a life specified in MWh/MW, reflecting regional differences in correlation with wholesale prices. This yardstick PCfD delivers efficient dispatch, assures but limits the total subsidy while not over-rewarding windy/sunny sites. The revenue assurance allows high debt: equity, dramatically lowering the subsidy cost.

**Keywords** renewables support schemes, distortions, auctions, yardstick contracts

**JEL Classification** D44, D62, D86, H23; H25, L94; Q28; Q42; Q48

Contact dmgn@cam.ac.uk
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