## **Negawatt Market-making**

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Market-makers, as the term suggests, create markets. But what does this mean exactly? In the financial world the term applies to investment bankers and stock brokers who link buyers and sellers of financial instruments where their activities would otherwise be blocked by barriers such as lack of knowledge of the opportunity, lack of liquidity, or insufficient scale for transaction efficiency. Market-makers can also create new instruments which address specific needs—thus we have the expanding universe of derivatives where things like interest rates, currencies, and futures (of just about anything) are swapped.

When an ESCO develops an efficiency project, it acts as a market-maker. It identifies the opportunity, provides expertise in the transaction, links the buyer and seller, and perhaps arranges the liquidity (project finance). The host site becomes the seller of some portion of its future energy stream (part of the part that is to be saved). When the utility provides an incentive, such as a rebate or a "standard offer," it becomes a buyer of negawatts. This role may at first seem strange. We are accustomed to thinking of the utility as the producer and seller of watts. But with integrated resource planning and the break-up of vertical integration, local distribution companies have become buyers of watts. Even generators may become spot market buyers to meet contract commitments. So the role of purchaser of negawatts is less radical a leap than it might at first seem.

The financial resources of a major utility enable the aggregation of a portfolio of projects. Modern finance theory tells us that a portfolio reduces risk. With scale achieved and stable revenue assured, the stream of payments against future energy can be securitized —shares sold in a market, replenishing the utility's invested project capital. The model for this transaction is the aggregation of home mortgages into "real estate investment trusts" (REITs), a now common type of publicly traded security. But the energy efficiency (negawatt) market has generally not yet evolved to the level of securitization. Invested funds, typically from independent financiers or large corporate equipment manufacturers, receive returns through scheduled payments, much like equipment leasing, without being re-capitalized through a secondary market.

This next step in market evolution will be driven by new trading schemes. The nascent market in carbon is created by climatechange agreements to reduce carbon dioxide emissions. But unlike accounting for energy, no direct dollar value can be attributed to a carbon reduction. Value comes *only* from trading certified emission reductions. This new market is still experimental and limited, the transaction highly specialized and uncertain. Although any energy-saving project has an associated carbon reduction, only the very largest can be efficiently brought to the market. Which is where the aggregating and market-making power of a utility comes in to play. The utility becomes the mechanism, the transmission for linking localized activity to global market. It brings documented negawatts to carbon-credit purchasers while passing efficiency benefits back to customers.

And isn't just such a specialized transaction the kind of niche that every competitive business seeks?

## ABOUT THE AUTHOR

Michael Bobker manages infrastructure upgrading programs and projects at the consulting engineering firm of Goldman Copeland Associates in New York City. Prior to joining GCA, Mr. Bobker worked in energy services for more than 15 years, including management of an energy services company. He holds degrees in sociology, energy management, and international business. Mr. Bobker can be reached at GCA 212-929-0480 or via e-mail, mbobker@juno.com.