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“Schlop. Schlop. Beautiful schlop.

Beautiful schlop with a cherry on top!”

-- Dr. Seuss, Oh, The Thinks You Can Think

For many who follow alternative and distributed energy market developments, the past five years have been a roller coaster ride, with steep rises, falls, and twists of every sort. However, over the past year, the alternative and distributed energy market seems to be ripening in a real and sustainable manner, and the market could be closer to a tipping point than anytime beforehand.

Exogenous factors are driving this changed market, including: higher energy prices (by far, the most important driver), reliability and security concerns, and environmental challenges. In turn, these factors are intensifying a trend towards favorable regulatory and political treatment. Many states are now branding themselves in terms of their comparative advantages and support for particular alternative energy technologies, with an eye towards economic development and 21st century jobs.

In turn, customers are buying alternative and distributed energy technologies and solutions. Energy technology companies have restructured their marketing and sales efforts by narrowing their offerings, improving the mix of direct sales as compared with distribution partnerships or other channels, and providing a total value solution from a customer’s perspective. As a result, a majority of companies in the sector have seen improving top line results, with revenue growing at 15 percent or more on an annual basis.

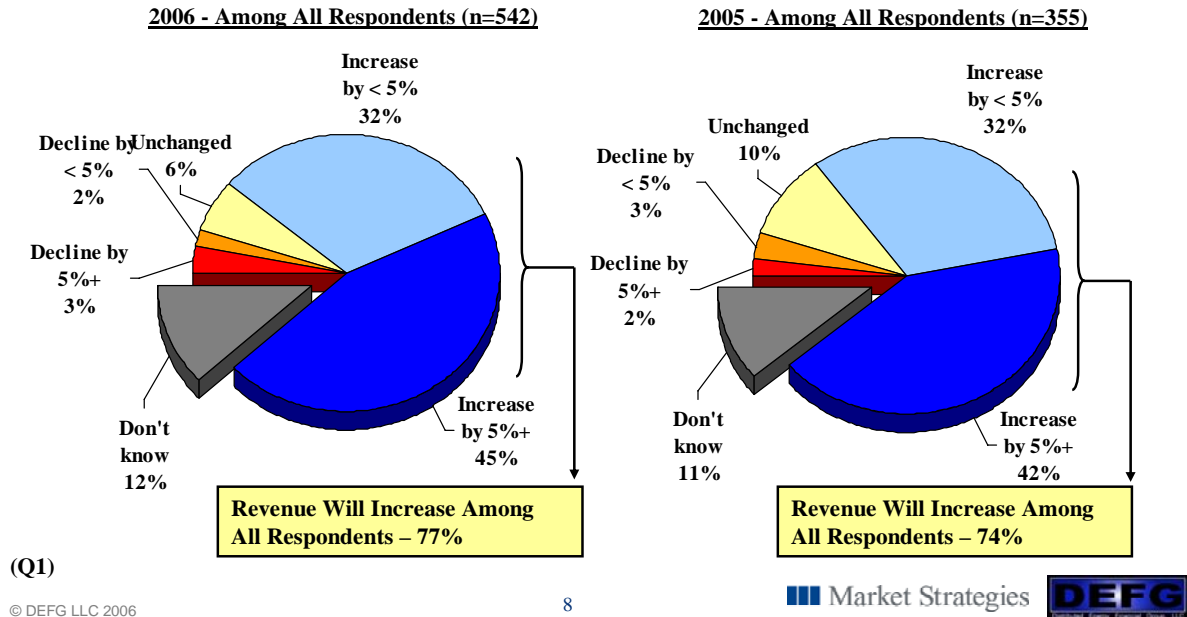
The Distributed Energy Financial Group’s recent market research is consistently showing a ripening market for alternative and distributed energy. This article offers three signs of that trend: 1) positive market trends, 2) growing investor interest and availability of capital, and 3) favorable regulatory treatment as embodied in a ratcheting up of resource portfolio standards, incentives and subsidies, and environmental policies that, directly or indirectly, support alternative and distributed energy technologies and solutions.

Market Is Bullish On Distributed Energy

The Distributed Energy Financial Group in partnership with Market Strategies Inc. (MSI), recently completed the second annual DE market survey. Approximately 550 stakeholders responded to the survey representing all facets of the industry, including utilities, vendors, regulators, developers, investors and other interested stakeholders.

Respondents are Bullish on Growth in the DE Industry

Industry Growth Expectations – Aggregate Responses

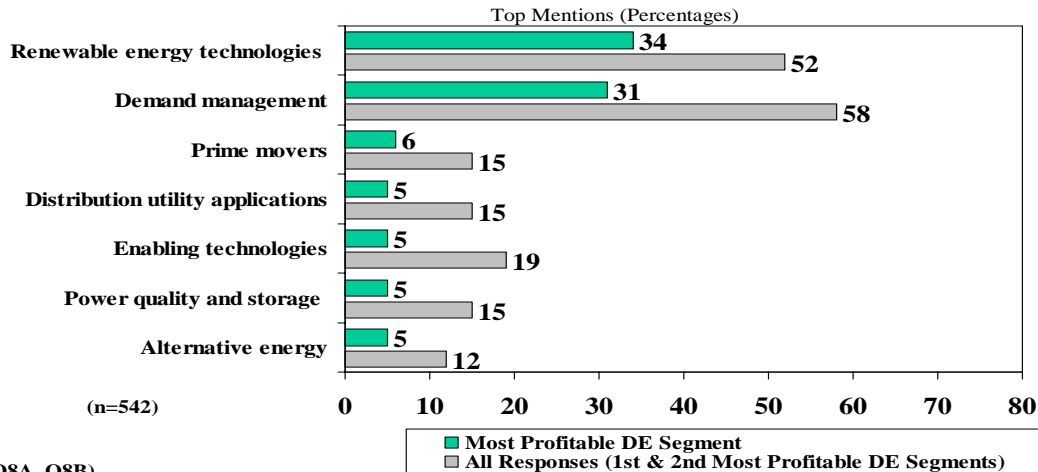


Over 75% of the respondents felt that revenue would grow in 2006. This year, slightly more respondents (45% v.s. 42% in 2005) feel that sector revenue will grow by over 5%. Investors (60%) and executives (52%) are aligned on growth potential. 42% percent of respondents rate the sector as a buy, and only 5% rate the sector as a sell.

While DEFG has a very broad definition of the distributed energy sector that includes integrated systems and controls to provide a full value proposition to customers, the market is much more focused on specific facets of the distributed energy sector, namely, renewable energy technologies and demand management. The survey, therefore, asked respondents what specific segments would be the most profitable from their perspective.

“Renewable energy” and “demand management” are seen as the most profitable DE segments over the next three years

Industry Profitability: Distributed Energy Segments - Aggregate Responses



(Q8A, Q8B)

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14

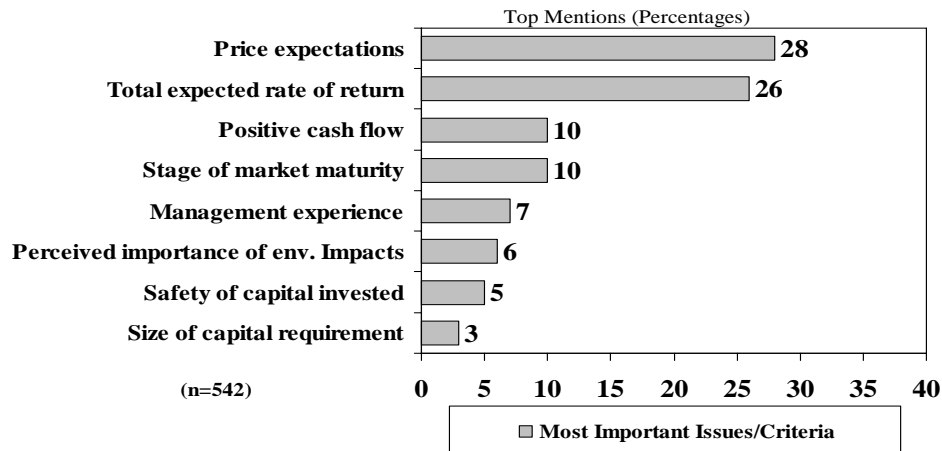
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In regard to business issues, the survey examined the business issues from the perspective of the customer, the criteria that the customer used to make an investment, and then from the vendor perspective, the top issues facing executives at companies that provide DE solutions.

“Price expectations” and “expected rate of return” are the paramount considerations when making DE investment decisions

Investment Criteria - Aggregate Responses



(Q3A)

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17

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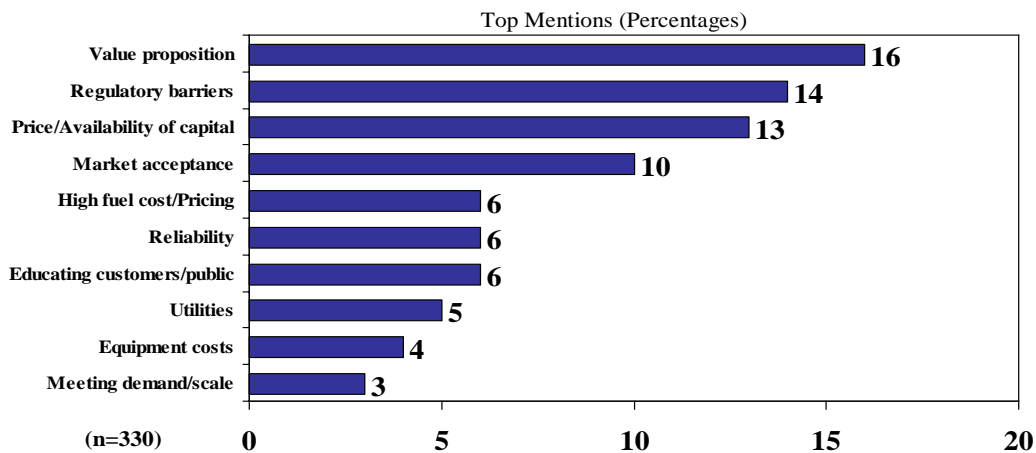
There is one obvious finding, energy prices matter a great deal and that directly leads to total expected rate of return. In the market, there is every expectation that we have entered into a new era of relatively high energy prices, including electricity prices as rate caps come off and a record wave of utility rate cases in progress or planned.

Survey respondents also indicated that vendors must continue to improve their technological advantage (23% of respondents) and reduce their cost of production (17% of respondents) in order to be successful in the future.

Admittedly, this is a tall order, with respondents basically telling vendors to spend money on R&D and operations, and on the other hand, to cut costs. No wonder then that so many DE companies have trouble finding the right mix of investment and cutting costs in order to increase operating margins.

Respondents believe that DE executives' top issues are the value proposition, regulatory barriers, and price/access to capital

Top Issues Facing Executives at Companies Providing DE Solutions



(Q7) Aggregate responses, open-ended

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18

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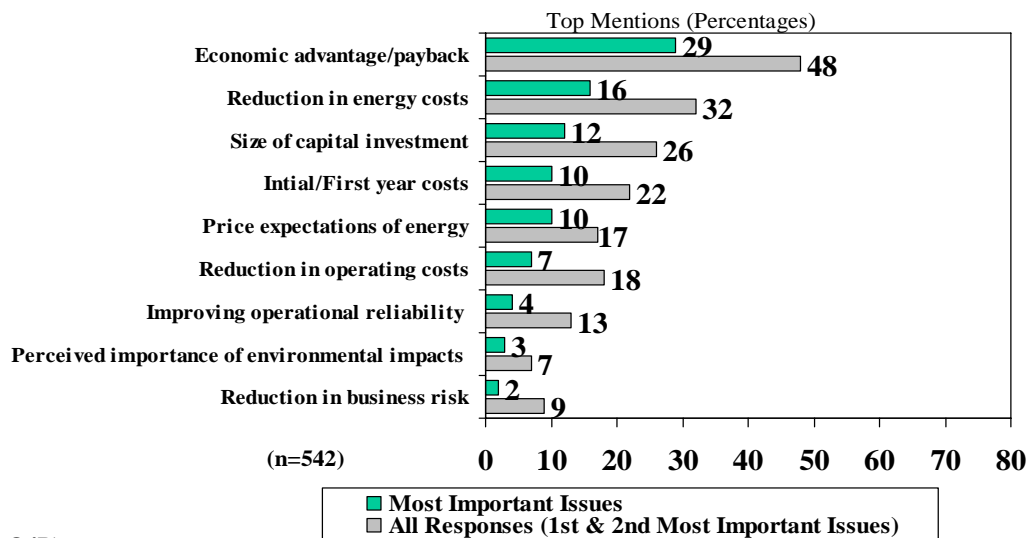


In addition to improving the technological performance and functionality of the offering, respondents highlighted the importance of the entire offering, which would include the presentation of the offering, the contracting process, implementation, and service and maintenance after the contract is signed. These are all components of the value proposition that technology vendors, eager to sign deals, have somewhat downplayed in the past.

When asked what are the most important issues for customers purchasing DE solutions, respondents clearly stated “economic advantage/ payback” and a “reduction in energy costs” were the most important.

“Economic advantage/payback” is seen as the key issue for consumers, when purchasing a DE solution

Most Important Issues for Consumers Purchasing DE Solutions - Aggregate Responses



(Q4A, Q4B)

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21

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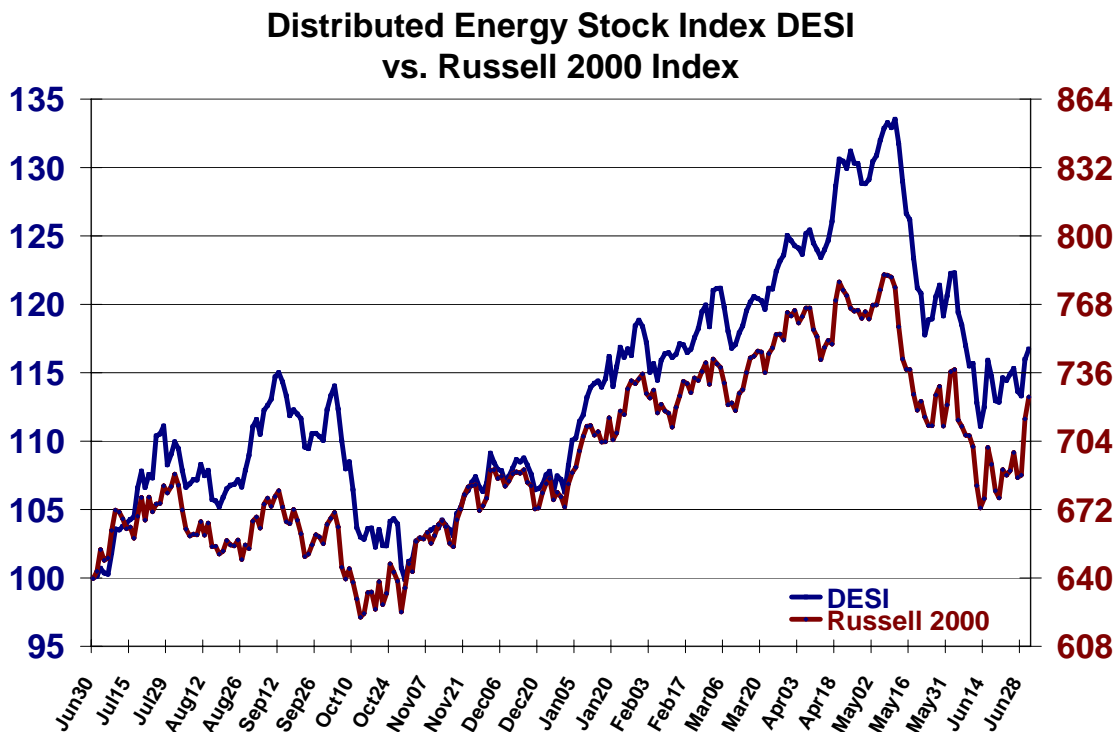


This finding has many important implications that are further reflected in survey responses, including:

- ❖ Branding of products and the vendor offering should reflect the value proposition from the customer perspective (“Power Save” was chosen by close to 60 percent of the respondents from a list of hypothetical brand names);
- ❖ For DE vendors discussing cost savings as part of the offering is very important, with approximately half the respondents indicating that the cost savings offered must be 15 percent or higher as compared with current energy expenditures for the customer to be very interested;
- ❖ Large commercial was the customer segment that respondents indicated would represent the most growth for the DE sector, and to be effective with C&I customers, a short payback (50% of respondents) and “reliable” technology (15% of respondents but 46% when factoring in for top two responses) are paramount.
- ❖ For residential customers, “simple and easy to use” was more significant, with 32% of respondents indicating this response.

Investor Interest In The Sector Is High

The Distributed Energy Stock Index (DESI, pronounced Deh-Zee) performed strongly with a 17 percent gain over its first year (Q3 2005 through Q2 2006), outperforming all the major benchmark indices by a wide margin over the same period. For Q2 2006, the DESI lost 6 percent for the quarter, even after reaching a record high in May.

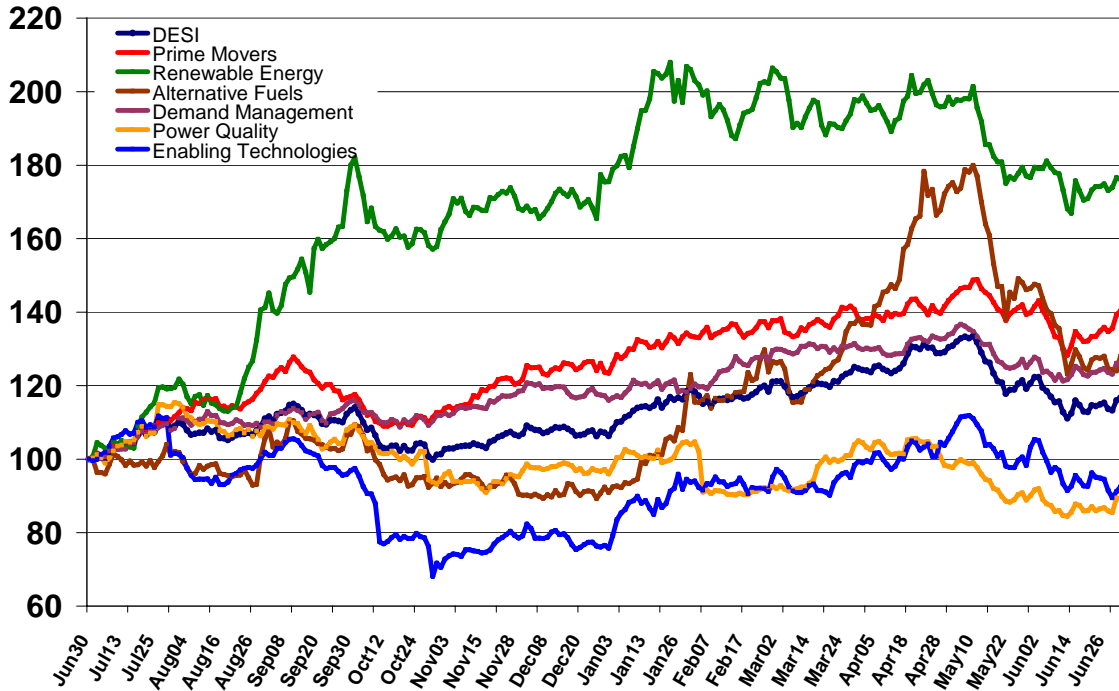


The DESI is comprised of six segments and a total of 42 companies divided up between the six segments. A few of the segments accounted for most of the gain, especially the renewable energy segment with a 76 percent gain for the year, and the steady upward progress exhibited by the prime movers and project developers segment.

But as indicated by the Q2 results, a roller coaster ride of volatility is expected over the next year. The alternative fuels segment, for example, gained 60 percent in the early part of Q2, and then had loss almost all the gains by the end of the quarter.

Even so, with the prospect of double digit returns and with many companies beginning to approach profitability after many years of development, investor interest is expected to remain high over the coming years. With new products and funds, such as Exchange Traded Funds (ETFs) and a growing number of private equity funds, institutional investors are beginning to also place money in the sector. Look for this trend to intensify.

Distributed Energy Stock Index (DESI) Segments

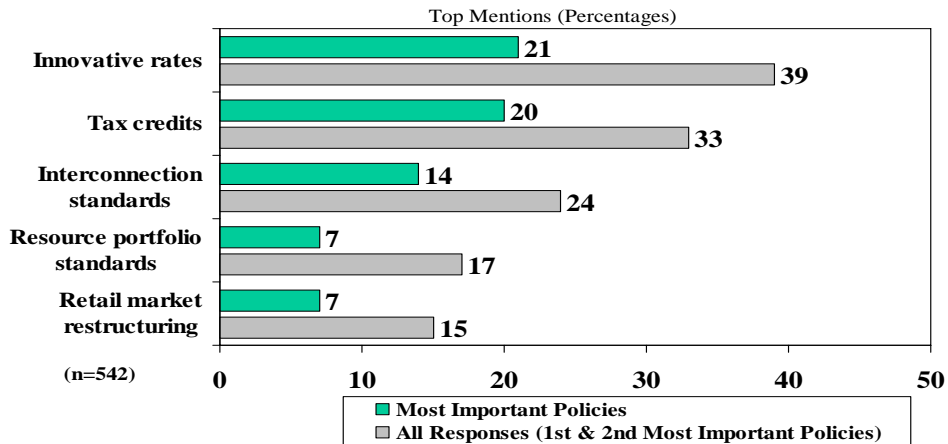


Favorable Regulatory and Political Trends

The third sign of a ripening market is that there is an intensifying trend for favorable regulatory and political treatment of alternative and distributed energy.

In 2006, overall, “innovative rates” and “tax credits,” are seen as the most important policies for the short-term growth of the DE sector

Stakeholder Issues: Regulatory/Government Policies - Aggregate Responses



(Q12A, Q12B)

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38

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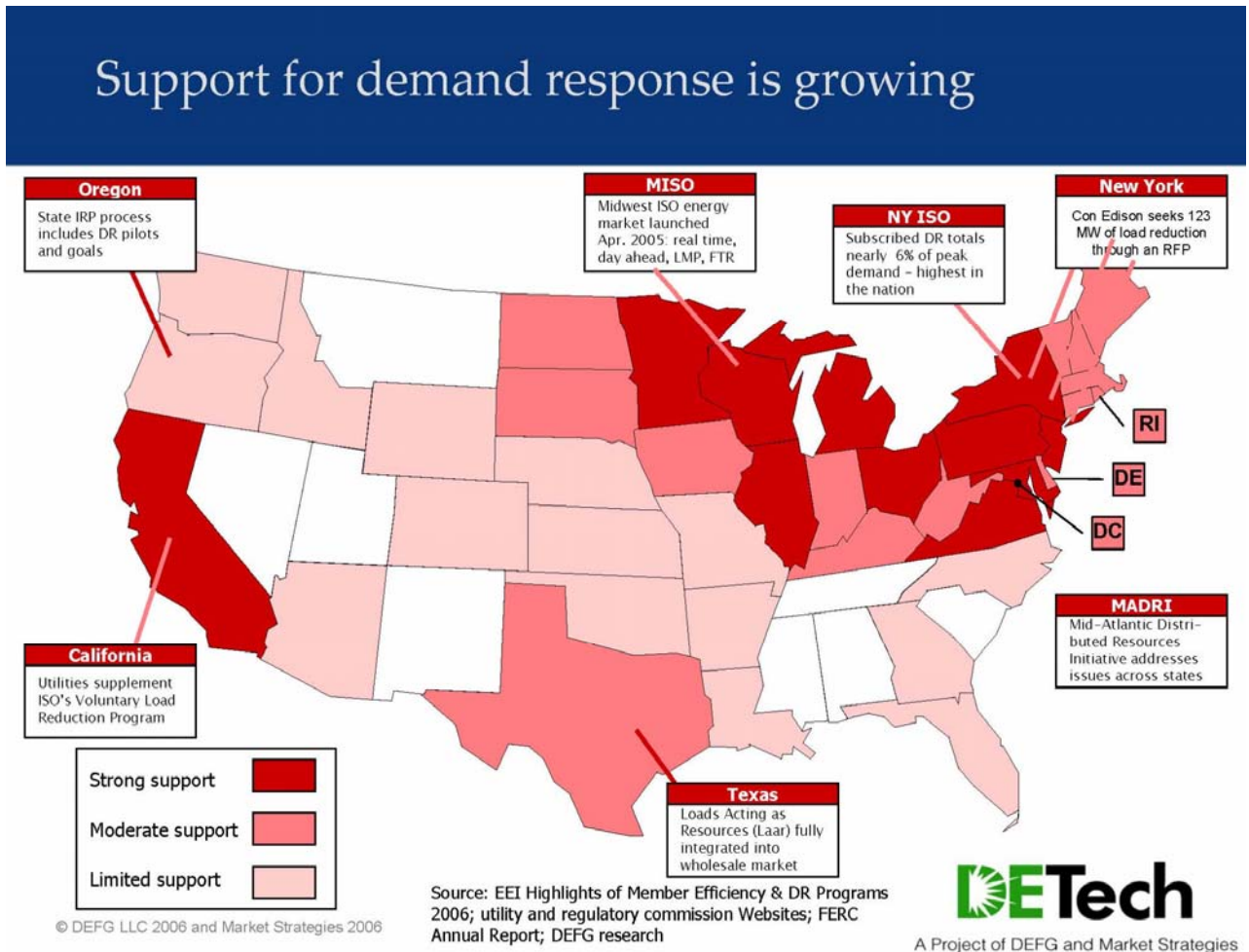


Various states have enacted resource portfolio standards (RPS) which will require an increasing amount of renewable and other alternative energy resources to be added to their energy portfolio over fairly short periods of time. Wind, ethanol and other sources of alternative energy are boosted by an increasing amount of tax credits and subsidies.

The top regulatory driver, however, was “innovative rates.” The market is beginning to recognize that we have entered into a historic period of utility rate cases. Three major factors are driving these rate cases: 1) many utilities have not gone in for a general rate case for many years, especially for T&D; 2) under the “back to basics” strategy, utilities have cut costs and have delayed investments but this strategy has run its course, and utilities are now looking to shore up their operations and for revenue growth opportunities; and 3) rate caps are coming off in restructured states which lead to rate cases.

Each rate case presents an opportunity to push for more programs and/ or subsidies, incentives or other means to support alternative and distributed energy. As importantly, utilities are beginning to look at alternative and distributed energy differently than even a few years ago, less as a threat and more as an opportunity to defer capital expenditures or increase top line revenue.

An interesting finding from the 2006 DEFG MSI DE market survey was that demand response, demand management and energy efficiency have gained a great deal of traction over the past year.



The Distributed Energy Market Index (DEMI) is a tool that we use with clients to refine their commercialization strategies and to undertake strategic planning. As the DEMI map above shows, there is growing regulatory and political support for demand response and demand management in California, the Midwest and the Northeast. The recently passed Energy Policy Act Of 2005 also has strong language in the law supporting demand response across the nation.

Given that demand management and energy efficiency technologies are proven technologies, are supported by regulatory and political trends, including meeting environmental goals, and with these projects and programs being oftentimes quickest to implement, the demand management, metering and energy efficiency segment should experience strong growth over the next three to five years.

Conclusions

Contrary to what many observers believe, a majority of the publicly-traded companies in the distributed and alternative energy sector -- such as those in the DESI -- are not even close to being profitable. "Ripening" of the sector does not mean that the distributed and alternative energy sector is mature, or even close to it. If anything, the market may be even more turbulent and volatile in the future, and many of the companies that exist today may be acquired or cease to exist in the future.

While the intention is not to oversell the sector, our market research is pointing to growing evidence that this time is different, and that current trends could be more sustainable and supported by fundamentals than before.

Specific conclusions include:

- Market conditions, e.g., high energy prices and reliability concerns, are ripening the market opportunity.
- Market awareness is growing of the value proposition offered by alternative and distributed energy technologies, slowly translating into actual sales, and ultimately, the expectation of profitability.
- The value proposition is being continuously improved even while vendors work to improve operating margins. Focusing on commercial and industrial customers and refocusing the offering on fewer products, more R&D focused on that narrow offering, resulting in lower costs but improved customer service, are key reasons for this improvement.
- Investor interest in the sector is very high. Billions of dollars of capital are expected to enter the market over the next three to five years. Institutional investors are becoming much more active. The alternative and distributed energy sector has outperformed other sectors and benchmark indices in the stock market, and even with increased volatility expected, should continue to perform strongly.
- Resource portfolio standards, incentives and subsidies, especially for renewable energy and alternative fuels, will be increasing substantially, and therefore will have a major impact on the development of the market as it evolves over the short term.
- A unique opportunity exists to bolster the value proposition through innovative rate design and tariff structures because regulators, customers and utilities are aligned on the

solutions that provide the most value. Environmental regulations could also bolster this opportunity.

The sector is not a pretty one to analyze sometimes. Because of the need to bring together different areas of expertise – business/ financial, technical/ engineering and regulatory – in order to fully understand trends and market opportunities, the alternative and distributed energy sector can be maddeningly difficult to predict. The past has been littered with broken promises and experiments. To use a favorite word from Dr. Seuss, it is like watching “schlop.” But it could very well turn out to be “beautiful schlop with a cherry on top.”

Jamie Wimberly is the CEO of the Distributed Energy Financial Group (DEFG) LLC, a specialized consulting and financial services firm focused on alternative and distributed energy. For more information on the DEFG MSI market survey, the Distributed Energy Stock Index (DESI) or the Distributed Energy Market Index (DEMI), please visit DEFG’s web site: www.defgllc.com