Crossing the Energy Management Threshold

BY MARLENE MOTYKA AND ANDREW CLINTON

Corporate energy management efforts have passed a tipping point. According to Deloitte's "Resources 2015 Study," thoughtful and deliberate energy consumption has permeated the business psyche, and companies now consider energy management to be an essential aspect of corporate strategy.

Consumers, on the other hand, generally held steady in their attitudes and behaviors in the study. Notably, however, consumers showed little desire to revert to their previous electricity consumption patterns, even as the economy improved.

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While businesses made greater strides in advancing their energy management practices than consumers did, both groups appear to have passed the point of no return. The concept of energy management has become ingrained and the commitment to reducing consumption has become entrenched.

A Strategic Commitment for Businesses

The findings of the study reinforce the notion that energy management is becoming a core business discipline. It has evolved from a cost-cutting necessity to a strategic commitment, and the impetus behind it is expanding to emphasize competitive advantage. For example, 79 percent of study respondents viewed reducing electricity costs as essential to staying competitive from an image perspective, up from 74 percent in 2014. At the same time, companies that cited cost cutting as a primary driver for their resource management programs fell to 59 percent from 67 percent in 2014.

Other key drivers remained on par with the 2014 findings, led by internal motivations (48 percent), betterment of corporation (45 percent), competitive advantage (35 percent), external incentives (35 percent), and regulatory requirements (31 percent).

As businesses see results from their energy management programs, it is helping to ingrain their commitment, but many foresee a steeper climb ahead. More than half (52 percent) of companies characterize their energy management efforts to date as "extremely/very successful," compared to 42 percent in 2014. Looking ahead, however, two-thirds believe that "cutting electricity costs/usage in the future is going to be much harder for their businesses," presumably because much of the low-hanging fruit has been picked. As in 2014, businesses see the primary barriers to success as length of payback period, difficulty in measuring impact on the bottom line, and lack of dedicated staff.

Key Capability Categories

As in 2014, the questions posed to businesses in the study were organized around eight key capability categories. (See Figure 1.) The findings in the key capability categories reinforce that businesses do not intend to back off their commitment to energy management, even as their strategic focus shifts from cost-cutting to growth.

Understanding positioning on a maturity curve enables an organization to better determine the path forward, including how to prioritize investments and where to focus resources. The multiple dimensions reflected in a maturity score illuminate organizational strengths and weaknesses, and provide insight into broader industry and category excellence.

In 2015, companies showed greater levels of maturity in nearly every category of energy management capability explored by the study—and they displayed growing confidence and self-reliance. Following are some examples of significant progress in three key categories:

Vision and strategy. Businesses see the link between energy vision and business strategy more clearly. More than half of businesses (52 percent) in the study said they have a documented corporate energy vision/mission that fully aligns with the corporate vision, up from 43 percent in 2014. In addition, 44 percent reported that energy management is a key element of corporate strategy, compared to 34 percent in 2014.

Goal setting and capital allocation. More companies are formalizing their energy management objectives and cutting energy consumption year over year. Consistent with the past three years, nine out of 10 companies have energy management goals in place. However, those with formal goals rose to 57 percent, compared to 46 percent in 2014. And their tactics appear to

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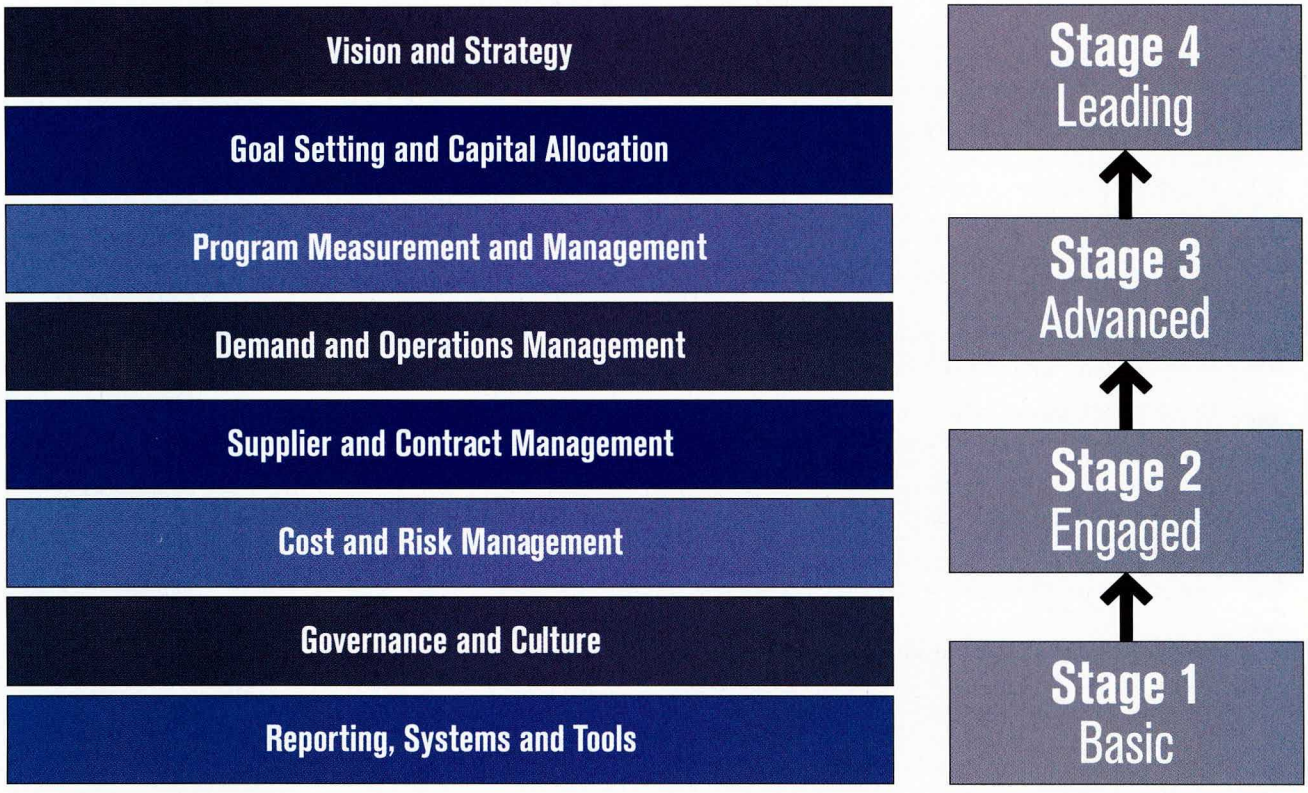
Figure 1: Deloitte Energy Management Capability Maturity Model



be working: In the study, businesses reported reducing their electricity consumption by 15 percent on average in 2014, compared to 13 percent in 2013 and 11 percent in 2012.

Energy management goals extend well beyond electricity usage, and businesses are reaching higher. Water and transport fleet goals, which fell in 2014, have risen back to 2013 levels, and close to six in 10 businesses now report having carbon footprint goals, a bounce back to levels seen in 2012. Businesses increased their energy/resource reduction targets in all areas except their carbon footprint. They seek to reduce their electricity consumption by 25 percent on average, up from 22 percent in 2014.

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Companies are matching their more ambitious targets with longer time frames and more capital for achieving them. With the easy goals already achieved, businesses may recognize that solutions now require more time and capital. Companies report giving themselves about 4.5 years on average to accomplish goals, up from approximately 4.2 years in 2014. Ninety-three percent of companies say they have invested funds in energy management programs over the last five years, representing about 17 percent of their total capital budgets, up from 91 percent of companies investing 12 percent of their total capital budgets the prior year.

Companies are charging ahead with batteries and other more capital-intensive energy management tactics. The most popular strategies for reaching energy management goals still include timers/sensors to control when equipment is powered on (55 percent), installing motion occupancy sensors (53 percent), and installing building energy management systems (47 percent). However, this year's study revealed a significant increase in more capital-intensive measures. For instance, 39 percent of businesses reported installing site-based electricity generation (such as solar panels) on facilities, compared to 31 percent in 2014. And more than one-quarter (26 percent) installed batteries to store electricity for usage at times when electricity prices are higher, compared to 15 percent in 2014.

More than half of companies (55 percent) reported that they generate some portion of their electricity supply on site, up from 44 percent in 2014. Technology, media, and

Figure 2: Consumer actions to conserve electricity

Actions to conserve electricity	Doing now 2014	Doing now 2015	Top 5 future 2014	Top 5 future 2015
Replace old appliances with new more energy-efficient appliances	48	45	46	45
Install energy-efficient windows and doors	38	35	41	40
Better insulate your home to keep heat or cool air from escaping out of the house	42	40	47	46
Use a "smart" power strip that senses when appliances are off and cuts "phantom" energy use	14	14	35	37
Use a timer on water heaters (that turns off during sleeping hours)	8	8	24	23
Get a smart energy management application to control and reduce your energy consumption	5	5	21	23
Install solar panels that provide electricity for your home	4	5	27	28

telecommunications companies (67 percent) and health care organizations (65 percent) are the business sectors most likely to generate on site, perhaps because they require high levels of reliability.

Program measurement and management. Companies are taking a more structured approach to tracking and measuring energy performance. In fact, 41 percent of companies report maintaining a formal energy performance measurement process that gauges performance against goals and key performance indicators. This is 10 percentage points above the 2014 findings.

Consumers Stay the Course

While businesses showed signs of a significant shift in their views regarding energy management, consumers generally held steady in their attitudes and behaviors in the study. Notably, even though they are a little less worried about their electric bill/consumption, consumers are still not expecting to use more electricity in the future. Consumers also held steady in supporting renewables—not to save money or improve the economy but to "do the right thing" as a better choice for the future.

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Eighty percent of consumer respondents said their families took steps to reduce their electric bills over the past year, holding steady from 83 percent in 2013 and 81 percent in 2012. Sixty-five percent planned to use about the same amount of electricity in 2015, and 25 percent planned to use less than in 2014.

More consumers said they have received "several good tips" on saving energy, increasing from 24 percent in 2014 to 31 percent in 2015. Among those who reported receiving several or a few good tips, 67 percent said they got some of them from their electricity provider. These tips and other messages are reaching consumers via a number of channels:

- The use of social media jumped substantially, from 19 percent in 2014 to 28 percent in 2015.
- Participation in online energy-savings contests doubled from 6 percent in 2014 to 12 percent in 2015.
- Information included with monthly electricity bills is seen as "extremely/very trustworthy" by 30 percent of consumers, up from 24 percent in 2014.

Consistent with the 2014 study, consumers are using the same basic tactics to trim electricity bills: 70 percent in the study said they shut down electronics when not in use; 69 percent set their thermostats a few degrees lower in the winter and higher in the summer; and 63 percent replace older incandescent bulbs

with compact fluorescents and other more efficient lighting technologies.

While consumers signaled their intentions in 2014 to go beyond the basics and invest in more capital-intensive strategies, it appears that many did not follow through. For instance, 47 percent of respondents in the 2014 study considered better insulating their homes; 46 percent considered replacing old appliances with energy-efficient ones; and 41 percent considered installing energy-efficient windows and doors as being among the top five most important things they could see themselves doing to save even more electricity in the future. Nonetheless, the proportion of respondents who said they are currently doing those things dropped in this year's survey, indicating that consumers by and large have not acted on their intentions. (See Figure 2.)

In addition, many consumers have yet to embrace "smart" technologies. Only 4 percent reported having a programmable thermostat they can access and change via smartphone, and only 3 percent said they have a home automation system that can be accessed by a mobile device.

The desire to increase the use of renewables continues to rise among consumers: 64 percent rank "increasing the use of solar power" among the top three energy-related issues most important to them, up from 58 percent in 2014 and 50 percent in 2013. Similarly, 50 percent cite "increasing use of wind power" among their top three energy-related issues, up from 45 percent in 2014 and 41 percent in 2013.

Yet, so far, few consumers have followed through on these sentiments in their own homes. Consistent with the 2014 study, more than one-fourth (28 percent) named installing solar panels as among the top five actions they could take to trim future electric bills, yet only about 3 percent have solar panels on their primary residences now. Top drivers of interest in solar panels were saving on electricity bills (79 percent), which was consistent with 2014, and "solar power is clean and does not contribute to climate change," cited by 66 percent of respondents, up six percentage points from 2014. Perceptions of being expensive (40 percent) and fears of the panels not working as promised (25 percent) remain the main barriers holding consumers back.

Consumers signaled a far greater interest in sourcing other services from their electricity providers in the study. Internet service (51 percent) and cable TV service (38 percent) remain the most natural extensions in consumers' minds. These figures are up from 36 percent and 27 percent, respectively, in 2014.

Final Thoughts

Businesses and consumers are changing their mindset toward energy management and the steps they might take to accomplish their objectives. In the study, both groups appear to have adopted the view that reverting to previous behaviors is no longer practical or safe.

On the business side, energy management is now recognized and integrated as a core aspect of competitive advantage. Businesses by and large have been able to bring more structure to their energy management processes, procedures, and goals. They are feeling very good about their successes and are eager to test the boundaries of what they can accomplish. Energy and resource reduction targets are trending higher, tempered by the recognition that more time and greater capital expenditures will be required to reach them. This emerging confidence is accompanied by growing self-reliance, with an increasing percentage of businesses building their own energy ecosystems by generating electricity onsite, installing battery storage solutions, and designing custom software solutions, among other tactics.

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On the consumer side, while they are starting to feel better about the economy and the growing supply of domestic energy resources, they remain wary that a big surprise, such as a financial collapse, could wipe out recent gains. This partially explains why they generally do not intend to use more electricity or to revert to more liberal spending patterns. Nonetheless, consumers who had put their discretionary purchases on hold over the last few years are beginning to ease up on the brakes. However, even though they remain intrigued by advances such as smart technologies and solar panels, they appear to be waiting either to become more confident that these products will work as promised or to receive the right offer.

Most electricity providers market to both consumers and businesses. Consumers note they are receiving several good tips from their electricity providers, and they feel that the information is reliable. However, consumers largely remain in a holding pattern, and they are not acting upon all of the energy management options available to them. Social media and online campaigns may be key to motivating them to take action, particularly among members of Generation Y. That said, electricity providers may have an even bigger opportunity to better serve their business customers through customized energy management programs or targeted incentives. This would require electricity providers to rethink how they classify their customers, perhaps segmenting them across industry sectors and/or differing levels of maturity. It might also require them to rethink their business models. For example, do they have the ability to offer smart energy management technologies or self-generation solutions to companies?

To explore the full results of the "Resources 2015 Study," visit www.deloitte.com/us/resources or email Deloitteresourcesstudy@deloitte.com to take a deeper dive into the study data. EP