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Sustainable Energy for All: The Business Opportunity

A comprehensive analysis of priority actions across 19 industry sectors



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Foreword



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Energy is central to nearly every major challenge and opportunity the world faces today. Energy enables social and economic development, from basic needs to advanced industrial activity. However, energy sourcing and usage also have a significant impact on the environment, and companies are under more scrutiny than ever about producing and consuming energy in a more sustainable manner.

To mobilize action and partnerships focused on sustainably meeting the increasing energy requirements of businesses and society, United Nations Secretary-General Ban Ki-moon has launched a global initiative. Called *Sustainable Energy for All*, the initiative has set three primary objectives, to be met by 2030: ensuring universal access to modern energy services; doubling the global rate of improvement in energy efficiency; and doubling the share of renewable energy in the global energy mix. *Sustainable Energy for All* strives to leverage the global convening power of the United Nations to mobilize people, organizations and countries on a broad scale and to facilitate a rapidly expanding, cross-sector knowledge and action network.

Industry leaders are currently taking action to deliver energy access, improve energy efficiency, and drive renewable energy deployment, however barriers and challenges persist, limiting their impact. *Sustainable Energy for All* has been launched to act as a catalyst for action and to help accelerate the achievement of scale and the pace of implementation. Businesses will play a leadership role as innovators, solution designers, and drivers of investment, but they cannot accomplish their sustainable energy and business goals alone. *Sustainable Energy for All* is therefore meant to build and accelerate public-private partnerships that can reduce risks, facilitate research and development, and solve policy and financing challenges.

The UN Global Compact and Accenture are pleased to deliver this analysis of the most important actions the private sector can take across nineteen different industries to advance the objectives of *Sustainable Energy for All* while simultaneously driving business value. Our goal is to provide guidance and inspire action and collaboration across all industries, from energy producers to energy consumers.

The challenge of sustainable energy will not be met overnight. We must all continue to work together to engage the economy's most powerful force, the private sector, to build the foundations of a new era of sustainable energy. We hope these reports will help set the stage for private-sector contributions to the three objectives of *Sustainable Energy for All*, from now through 2030.

Introduction

The findings presented in this report, and in the 19 related industry-specific reports, are the result of research, interviews, and focus groups conducted in support of *Sustainable Energy for All* by the United Nations Global Compact and Accenture. This collaboration with the private sector helped to identify emerging trends, best practices, and opportunity areas related to sustainable energy development. More than 70 companies across 19 industries—primarily Global Compact LEAD companies and Caring for Climate signatories—contributed to these findings.

This introductory report, "*Sustainable Energy for All: The Business Opportunity*," provides an overview of the relevance of *Sustainable Energy for All* for business. This overview discusses the opportunities companies have to generate business value through their actions in support of *Sustainable Energy for All*; the priority actions that are common across industries; the key enablers of success (such as finance and policy); and the value that the *Sustainable Energy for All* platform can bring to the private sector. Accompanying this overview are nineteen "Industry Opportunity" reports that detail priority actions for specific sectors. Executive summaries of these nineteen reports are included at the back of this document. The priority industry actions identified do not necessarily represent every relevant action an industry can take in the area of sustainable energy; rather, they are intended to embody high-impact areas under which a company can act to advance the *Sustainable Energy for All* objectives while simultaneously realizing increased business value.

The business community is uniquely positioned to make a significant and essential contribution to advancing the objectives of *Sustainable Energy for All*, and to benefit from the opportunities the initiative presents. Industry as a whole will be the innovation and technology engine needed to make progress toward these objectives—providing access to

capital, developing efficient and innovative product and services, supporting continued research and development investments, and enabling knowledge-sharing and learning across industries and governments around the world. But businesses can only make a lasting impact if there is alignment between *Sustainable Energy for All* and their core strategies for growth, innovation, and value creation. Among other things, this report attempts to shed light on this strategic alignment.

Although industries will share certain perspectives and emphases, each industry's contribution to the initiative's three objectives will be different based on attributes specific to that industry and the companies that comprise it—such as energy consumption, asset lifetime, product portfolio, level of regulation, and relationship to consumers. Combined, internal factors (business model, corporate strategy, consumer base) and external factors (extent of regulation, economic context) will influence how companies can advance *Sustainable Energy for All*—for example, by changing operations, creating new products and services, providing social investment and philanthropy, or promoting advocacy and public engagement. These factors will also determine which specific actions a company undertakes to increase business value.

The world's energy landscape is shifting radically. Massive global business opportunities and risks will increasingly be driven by this shift. It is critical that business leaders understand the inextricable tie between this shifting energy landscape and their own growth and market expansion strategies.

This study provides a knowledge base for companies looking to take action throughout the enterprise, from the boardroom to the facility level, to advance the objectives of *Sustainable Energy for All*: benefiting the world while advancing their own sustainable business value.

What Is *Sustainable Energy for All*?

Under the leadership of Secretary-General Ban Ki-moon, the United Nations is mobilizing key constituencies from the private sector, public sector, and civil society in a major global initiative, *Sustainable Energy for All*. The goal of the initiative is to catalyze action around 3 clear objectives to be achieved by 2030 (see Figure A):

- Energy access: Ensuring universal access to modern energy services.
- Energy efficiency: Doubling the global rate of improvement in energy efficiency
- Renewables: Doubling the share of renewable energy in the global energy mix.

Achieving the three objectives of sustainable energy for all...

...makes many development goals possible

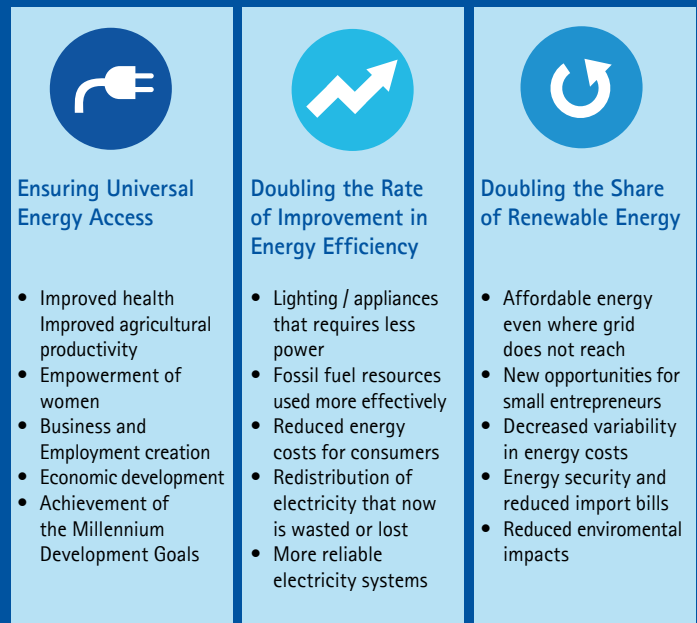


Figure 1: The Three Objectives of *Sustainable Energy for All*

Sustainable Energy for All: Its Value to Global Business

Across the private sector, many businesses have already embarked on sustainable energy plans. This raises the question: how can *Sustainable Energy for All* help them advance their strategic goals?

The *Sustainable Energy for All* initiative endeavors to achieve three objectives by 2030: ensuring universal access to modern energy services; doubling the global rate of improvement in energy efficiency; and doubling the share of renewable energy in the global energy mix. While the initiative will require commitment and vigorous action from the private sector, many barriers—financial, political, and technical—will persist as the world works toward achieving these objectives. *Sustainable Energy for All* is meant to remove some of these barriers—through its voice, convening power, and focus on mobilizing action and facilitating new public-private partnerships.

A global vision with clear objectives

The *Sustainable Energy for All* initiative provides a clearly articulated, global, and shared vision for sustainable energy. It can leverage the unparalleled convening power and reach of the United Nations to build consensus and drive a common agenda.

A significant challenge businesses face in advancing their strategic goals while pursuing a sustainable energy agenda is the complex ecosystem of players involved—internal company stakeholders, suppliers, customers, communities, governments, and more. Successfully driving value from action to advance access to energy, energy efficiency, and renewable energy, will require not only business innovation and investment, but also alignment and cooperation with relevant stakeholders. The UN Secretary

General's vision for *Sustainable Energy for All*, and the three objectives endorsed by governments and stakeholders from around the world, provide a common language and shared targets that companies can align with as they set strategic priorities, address the expectations of various stakeholders, and seek foundations to increase cross-sector collaboration.

A platform for collaboration and public-private partnerships

Providing a platform for public-private partnerships is one of the core value propositions of *Sustainable Energy for All*. The initiative has the potential to drive new public-private partnerships and enhance existing ones by building on synergies across relevant sectors of the economy and stimulating constructive dialogue on policy, investment, and market development by governments, businesses, and civil society. In addition, *Sustainable Energy for All* can coordinate, support, and contribute to the actions of relevant international and regional organizations, civil society, and existing networks (such as the UN Global Compact Local Networks, the UN Resident Coordinators, and the World Bank), helping all stakeholders work toward shared and mutually beneficial goals.

Many collaborations and public-private partnerships focused on advancing the objectives of *Sustainable Energy for All* are underway. A group of global public and private financial institutions are currently working together to develop de-risking proposals with the goal of improving the financing environment for sustainable energy investments. A global automobile manufacturer is exploring opportunities to work with the Clean Energy Ministerial (the preeminent forum for international collaboration to accelerate the transition to a global clean energy economy) to align

strategies for the development and future deployment of electric vehicles. Twenty companies and eighteen countries have partnered with the World Bank and others under the Global Gas Flaring Reduction Partnership to, “reduce wasteful and undesirable practices of gas flaring and venting through policy change, stakeholder facilitation and project implementation”.

Sustainable Energy for All also provides opportunities for peer companies within an industry to collaborate, when they are often justifiably reluctant to work together. The global objectives of the initiative can provide a shared target for companies who may typically compete with each other to focus the best of their resources in partnership—in a fair, neutral, and respectful environment where each stakeholder is viewed as an equal partner driving towards a common interest. By leveraging *Sustainable Energy for All* as a platform for new, “pre-competitive and safe” partnerships, businesses can work together to identify cost saving energy efficiency measures or develop innovative products and services.

Improving the enabling environment and coordinating action

The *Sustainable Energy for All* initiative strives to mobilize bold actions and large-scale investments by fostering the enabling conditions necessary for success, supporting coordinated actions across sectors, and tapping into a broad array of businesses and financiers. Improving the enabling environment centers on addressing shortfalls, specifically related to financing and policy. An improved financing environment would encompass a greater availability of capital, at lower costs, over longer terms for companies looking to invest in sustainable energy. It would mean systemic risk concerns have been addressed as well as challenges related to the time-horizon by which return on investment is measured. An improved policy environment would include regulatory schemes that are supportive of innovation, that provide certainty and stability, and that treat all energy investments and technologies with equal importance and equal support (with mechanisms like tax-breaks, subsidies, and incentives).

One approach to improving the enabling environment under *Sustainable Energy for All* includes country level actions. Country level action is focused on supporting developing country governments with the creation of environments and

institutional frameworks – based on clear vision, transparency, predictability, national targets, policies, regulations, and incentives – that enable growth, link energy to overall development, strengthen national utilities, and attract private investment to advance the three objectives of the initiative. *Sustainable Energy for All* also has the potential to assist governments, in partnership with global and local businesses, with the development of new, or enhancement of existing national plans to advance energy access, promote energy efficiency, and increase renewable energy in alignment with national circumstances and priorities. In developed countries, country level actions have the potential to increase the deployment of domestic renewable energy and improve energy efficiency from production of primary energy through the use of energy services, increase the provision of public capital for technical assistance, drive support for pilot projects and demonstrations, or spur the creation of funding instruments that reduce private-sector risk.

By improving the enabling environment and coordinating public and private sector action at the global, regional, and local levels *Sustainable Energy for All* has the potential to increase the size of existing markets, and lead the creation of new ones.

Taking Action to Create New Business Value

Creating business opportunities across markets

The dynamics of the energy market are rapidly changing. Ensuring universal access to modern energy services, doubling the global rate of improvement in energy efficiency, and doubling the share of renewable energy in the global mix in less than two decades will require an "energy revolution" akin to the industrial and information revolutions. This energy revolution will depend on an unprecedented level of systems planning and coordination, and a shared vision addressing energy infrastructure, technology, policy, finance, and market considerations.

Over the next 18 years, the global energy landscape will shift radically as energy markets will increasingly be determined by non-Organization for Economic Cooperation and Development (Non-OECD)

countries. In their World Energy Outlook 2011, the International Energy Agency states that, in the period from 2010 to 2035, non-OECD countries will account for 90 percent of population growth and 90 percent of energy demand growth. China, India, Indonesia, Brazil, and the Middle East are predicted to have the highest rate of growth in energy consumption.

This shift aligns closely with the growth and market expansion strategies of many of the largest private sector businesses. As economies gain access to energy, capital, and economic growth, populations start to demand products and services that require even more energy. If the world is able to provide energy to its growing population, it will open large markets for the private sector across all industries. However, energy access must be provided in a sustainable way in order to minimize impacts to the environment and maximize the long-term value of investments.

In terms of OECD countries, these large, energy-consuming economies also represent considerable market potential despite the slower growth in their energy use. This is particularly true in sectors where asset lifetimes are shorter (e.g., household appliances), or where a significant amount of equipment is nearing the end of its lifetime, as is currently the case in the power sector and with buildings. Because buildings can last for several decades, the construction of inefficient ones locks in wasteful energy use for decades.

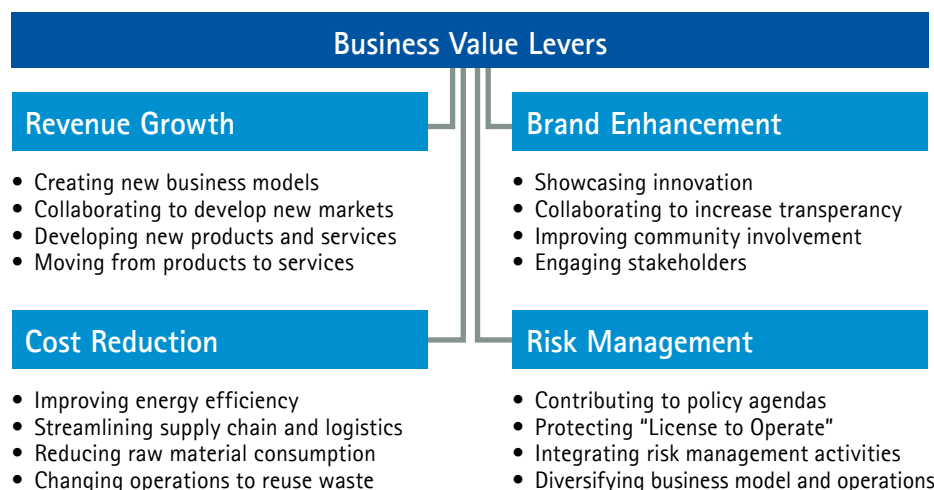


Figure 2: Four Levers for Driving Business Value through Sustainable Energy Actions

Business Value Levers for Sustainable Energy for All

There are four ways the private sector can drive business value from sustainable energy actions: revenue growth, cost reduction, brand enhancement, and risk management. (See Figure 2) Each of the actions described in this report, and in the subsequent nineteen industry opportunity reports, is aligned to one or more of these four value levers.

1 Revenue Growth

Taking action to advance the three objectives of *Sustainable Energy for All* presents numerous opportunities to innovate and create new sources of revenue through the provision of access to modern energy services (electricity and clean cooking facilities), and the development of energy-efficient products and renewable energy technologies. Businesses can develop and adapt products for current and new sets of customers, expand into new geographical markets for existing or new products, and establish and improve relations with government and policy makers.

The growth and business value of these new products and markets is already evident. For example, total investment in renewable energy reached \$211 billion in 2010, up from \$160 billion in 2009.¹ In addition, the US market for more energy-efficient buildings is approximately \$236 billion annually, a number that is expected to triple by 2030, with much of the revenue going to the information, communications and technology industry which is helping to lead the transformation with new products and services.² Although smaller in value, the Indian energy efficiency sector has been sized at approximately \$12 billion with \$2 billion linked to energy efficient buildings.³ In addition, revenue growth is also available

to companies that install combined heat and power or distributed renewable generation and then sell excess generation back to the utility. Finally, providing energy access to the 1.3 billion people without electricity and the 2.7 billion people without clean cooking facilities represents an opportunity to develop massive new markets⁴ for fuel and electricity services, in addition to products and services such as appliances (e.g. stoves and refrigerators) and consumer electronics (e.g. radios and televisions)

Other innovation opportunities—developments that can create new revenue streams for financial services companies—will come from creative financing mechanisms such as Climate Investment Funds, Green Bonds, Clean Development Mechanisms, public-private investment fund models, pension funds focused on sustainable energy themes, and renewable energy tax credits with a focus on ways to minimize the risk in sustainable energy investments and thus encourage stakeholders to invest.

2 Cost Reduction

Energy has been a relatively inexpensive and abundant commodity for years, comprising only a small portion of the overall cost structure of companies. However, with dynamic geopolitical situations and rising energy costs, energy is now a mission-critical commodity for many organizations—and not simply for energy-intensive industries such as mining or chemicals. According to the recent United Nations Global Compact-Accenture CEO Study, 91 percent of CEOs will employ energy efficiency measures to address sustainability issues over the next five years.⁵ The potential energy savings for industry could equal the total annual electricity consumption of the US and China combined.⁶

To mitigate energy costs, companies from a range of industries can take basic actions, such as implementing enterprise energy management processes to better understand and manage energy use, which have the potential to drive 10 percent to 35 percent reductions in energy usage. Although results vary according to each industry, enterprise energy management can drive significant benefits to many sectors⁷:

- **Mining sector:** 10 percent to 15 percent reductions in annual energy spending
- **Chemical sector:** 10 percent to 15 percent reductions in annual energy usage
- **Retail sector:** 15 percent to 20 percent reductions in annual energy spending
- **Utilities sector:** 20 percent to 25 percent reductions in annual energy usage
- **Business / public building portfolios:** 25 percent to 35 percent reductions of energy and building maintenance costs

Companies can also improve operational efficiency and reduce costs through actions such as heating, ventilation, and air conditioning retrofits or lighting upgrades. Lighting accounts for 25 percent of energy use in commercial buildings in countries such as the US, but as high as 60 percent in India.⁸ Also important is the reuse of waste streams through techniques such as combined heat and power. While the conventional method of producing usable heat and power separately has a typical combined efficiency of 45 percent, combined heat and power systems can operate at levels as high as 80 percent,⁹ representing a significant potential for bottom-line benefits.

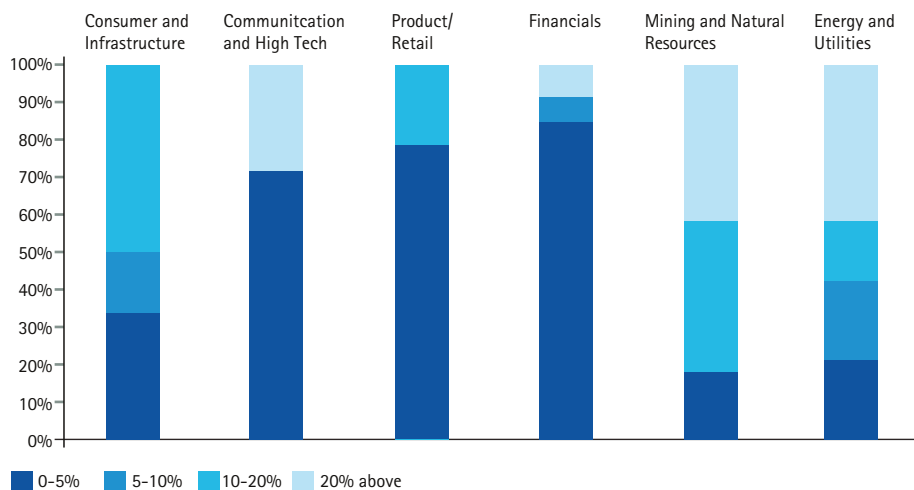


Figure 3: Energy as Percent of Total Operating Costs by Percent of Companies in Each Industry¹⁰

3 Brand Enhancement

Although intangible assets are difficult to quantify and directly link to a business' bottom line or top line, a brand with strong associations to sustainability in the minds of consumers can be a source of competitive advantage, especially in increasingly commoditized markets. Several recent studies have explored consumer preferences toward sustainability. One of these studies the Vestas TNS Gallup Global Consumer Wind Survey 2011, which surveyed 31,000 consumers, 26 markets, and 31 leading global brands, offers insights into consumer preferences toward climate-friendly corporations and consumers' willingness to make purchases based on sustainability characteristics. The study found that consumers believe that climate change is a serious challenge and that consumers show a strong preference for renewable sources of energy, not only to power their homes, but also to power the manufacturing of the brands they consume.

More specifically, the research found that:

- 90 percent of consumers worldwide want more renewable energy.
- 79 percent of consumers worldwide have a more positive perception of brands produced with wind energy.
- 50 percent of consumers worldwide would pay extra for products based on renewable energy.

Businesses must also work to build their brand with governments and the local communities where they operate. Although often considered primarily social and philanthropic, projects such as providing access to modern energy services (electricity and clean cooking facilities) at

a small scale and local capacity building have multiple benefits including enhancing government and community goodwill, and creating new micro-economies by training individuals to operate and maintain new energy sources for long-term management and educating local community members. These actions not only provide for societal improvements, but they also help build brand awareness, strength, and equity. In addition, these are ways to spur and step into local energy markets. Although local markets may not be profitable in the short run, greater business opportunities will come as the energy demand grows. Other intangible assets – such as the ability to attract and retain the best talent, company culture, and ability to innovate – can all be positively impacted by engagement with *Sustainable Energy for All*.

4 Risk Management

Business value creation from risk management can be described in multiple ways. For example, renewable energy can act as a hedge—a financial mechanism that can shift a company's energy budget from a variable to a fixed cost. The hedge protects a company against volatile energy prices and stabilizes a portion of its operations budget. Renewable energy can also act as a regulatory hedge as new carbon restrictions may be proposed over the life of long-term generation assets.

From an energy efficiency perspective, industries that require stable, uninterrupted power sources can deploy combined heat and power systems. For example, hospitals must perform critical, lifesaving functions even when a widespread disaster interrupts their supply of electricity from the utility grid. Combined heat and power systems can be designed to maintain necessary infrastructure and enable the hospital

to operate independently of the grid for a short period. Energy efficiency can also help limit the risk associated with operational cost increases by reducing exposure to potential fuel price increases.

Which actions will your company take to drive value?

A company's business model, corporate strategy, and consumer base, as well as external factors such as extent of regulation and economic context, will all influence the particular actions it chooses to drive business value. For example, as shown in Figure 3 the mining and natural resources industries, and the energy and utilities industries, have the most companies with energy operating costs of 20 percent and above, compared to products and retail which have no companies with costs at that level. Thus, mining, resources, and utilities companies are more likely to focus on actions that drive cost reductions and/or risk management as an approach to sustainable energy. At the same time, the other industries listed in Figure 3 are more likely to capitalize on the opportunity for new market development and revenue growth through sustainable energy to address customer and consumer end energy use. Additionally, all of the industries in Figure 3 also deal with issues such as, stakeholder engagement, workforce management, and attracting the best talent – signifying the importance of brand value and brand enhancement, which can be strengthened by a company's approach to sustainable energy.

Priority Actions for Industry: Overview

The United Nations Global Compact and Accenture have identified actions that companies can take across nineteen different industries to advance the three objectives of *Sustainable Energy for All* while driving business value. The purpose of identifying these priority actions is to provide guidance and inspire companies across all industries to take action.

The priority industry actions identified are intended to embody high-impact areas under which a company can act to: 1) maximize their contribution to achieving the three objectives of the *Sustainable Energy for All* initiative; and (2) maximize the business benefits they can realize by ensuring access to modern energy services, improving energy efficiency, increasing the use of renewable energy, advancing sustainable innovations in products and services, and collaborating across industries through transformative partnerships. The priority industry actions identified do not necessarily represent every relevant action an industry can take in the area of sustainable energy.

Different Types of Contributions

Because of each industry's unique business attributes and characteristics, different industries will make different types of contributions to the objectives of *Sustainable Energy for All*. For example, all industries can take actions to improve energy efficiency and increase their use of renewable energy, whereas fewer are in a position to contribute to improved access to energy because of the business models and the locations in which they operate. Specifically, 49 percent of the priority actions identified are oriented toward energy efficiency; 38 percent focus on renewable energy; and 13 percent target increased energy access (see Figure 4).

Energy producers and providers—such as companies in the oil and gas, renewable energy, forest products, metals and mining,

and utilities industries—are best suited to contribute to energy access because of their energy use or generation profile, and because they often operate in remote locations where access to energy has historically been more limited. Conversely, industries that are consumers of energy should be more focused on energy efficiency and renewable energy. Detail for each industry's contribution to the three *Sustainable Energy for All* objectives is illustrated in Figure 5.

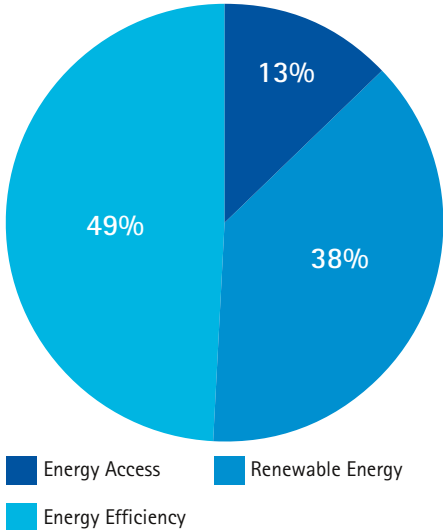


Figure 4: Breakdown of Industry Actions by Sustainable Energy for All objectives

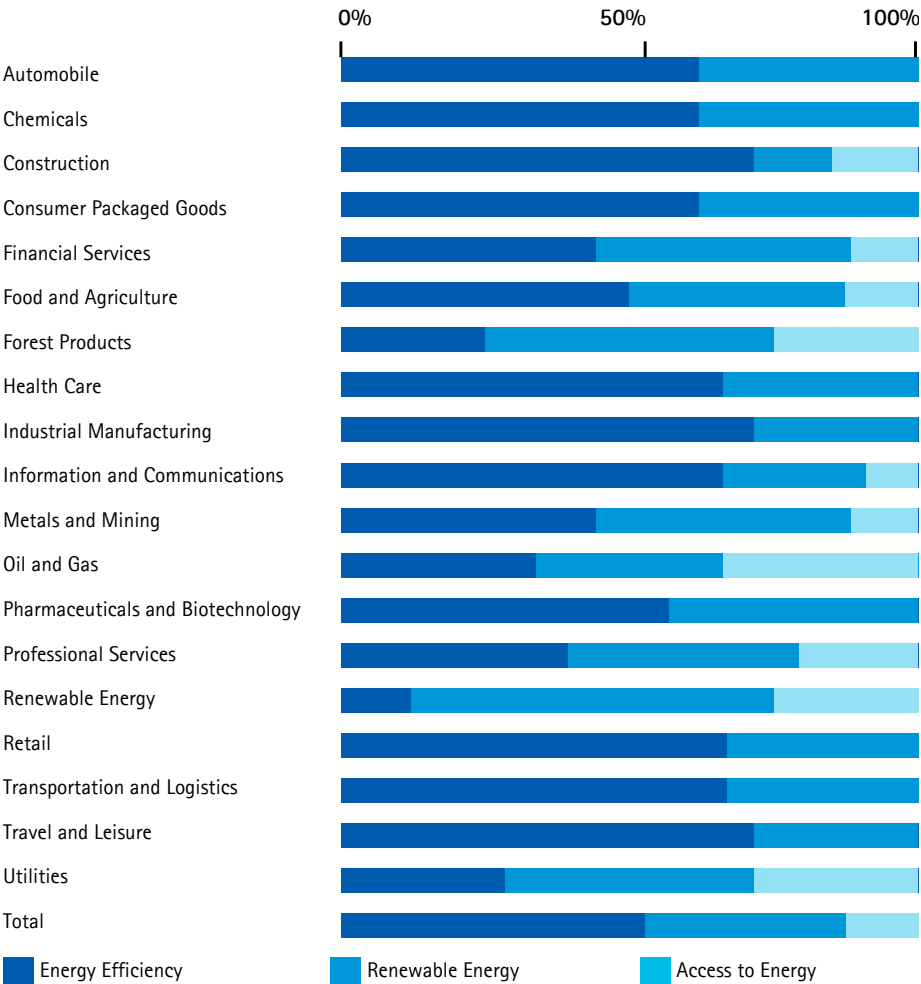


Figure 5: Sustainable Energy for All Objectives by Industry

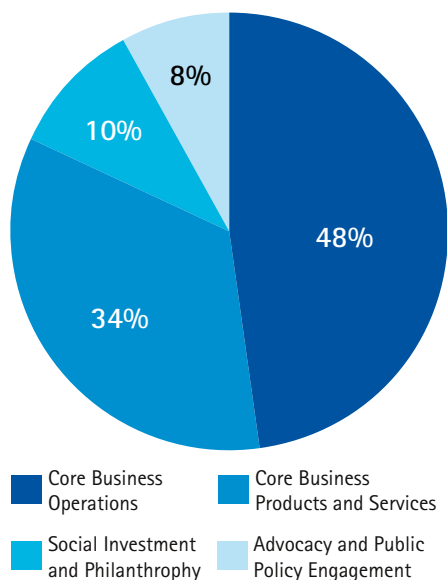


Figure 6: Breakdown of Industry Actions by Engagement Modality

There are four ways companies can implement the identified actions, in a manner that is aligned with core business strategies and creates value, to advance the three objectives of *Sustainable Energy for All*.

1. **Core Business – Operations:** Businesses can transform their operations through increased energy efficiency and the use of renewable energy alternatives.
2. **Core Business – Products and Services:** Businesses can innovate and modify their core products and services to meet the new and developing market demands for more energy-efficient products, sustainable energy, and the infrastructure needed to extend energy access around the world.
3. **Social Investment and Philanthropy:** Businesses can identify ways to establish a strategic link between social investments and their core strategies to increase the likelihood that such activities will be sustained and able to reach scale.
4. **Advocacy and Public Policy Engagement:** Businesses can seek to engage governments (national, regional, or local) on relevant issues that protect competitiveness and drive opportunities, while working toward the objectives of *Sustainable Energy for All*.

The largest share of the identified priority industry actions—48 percent—are related to core business operations, given that all companies have a measure of direct control over their operations. The remaining breakdown is as follows: 34 percent of the actions are related to core

business products and services; 10 percent are about advocacy and public policy engagement; and 8 percent concern social investment and philanthropy (see Figure 6).

Regulatory environments (and the presence or absence of mechanisms such as incentives, tax breaks, and subsidies) strongly influence an industry's decision to engage in advocacy and public policy around energy. For instance, industries that are highly regulated and that are significant consumers / producers of energy (such as oil and gas companies, chemical companies, and utilities) are most likely to already be engaging in public policy advocacy.

The Role of Innovation

Innovation relates to the priority actions companies can take to advance the objectives of *Sustainable Energy for All* in two ways: 1) it can help harness the power of technology to improve energy performance of operations and the products and services available in the marketplace; 2) it can drive financial and business model transformation to enable companies to overcome current barriers and challenges.

Some of the identified priority actions represent areas of technological innovation. Whether being applied internally to operations, or externally through the products and services that companies bring to market, there are significant opportunities to advance the three objectives of *Sustainable Energy for All* through innovation as new technologies are developed and deployed. For example, developments in the fields of chemistry and biotechnology are leading to the development of next generation biofuels; improvements in energy storage are supporting the large-scale deployment of wind and solar power; better communications technology is enabling the electricity grid to be more efficient and deliver power to consumers more effectively.

Other priority actions are focused on financial and business model innovation for the commercialization of technology, the realization of operational benefits, or to scale solutions. In these cases, stakeholder collaboration is necessary to develop new financing mechanisms, define regulatory best practices, act on policy implementation frameworks, change unsupportive behavior, improve

weak business policies, or increase engagement. An example of business model innovation that can help companies take full advantage of the cost savings potential associated with purchasing energy efficiency products and services is value chain collaboration between customer procurement and supplier sales. This collaboration can help elevate the importance of total lifetime cost of ownership and operation over initial lowest cost when it comes to purchasing decisions.

Five Priority Actions that are Common Across Industries

In spite of the differences between industries, many common themes arise based on an analysis of the actions across all industries. Five priority actions in particular emerged as central to most industries and therefore are important for executives to consider as they plot how to have the greatest impact on the three objectives of *Sustainable Energy for All* in the shortest timeframe, while realizing the increased business value. These priority actions can also help to identify opportunities for public-private partnerships and cross-industry collaboration.

The five priority actions that are common across industries relate to renewable energy and energy efficiency. As noted earlier, about half of the industries are not well positioned to contribute to the objective of improved energy access because they

are primarily energy consumers and do not typically operate in the remote areas where access to energy is a main concern.

The five priority actions common across industries, identified from our research and discussions, are as follows:

1. Increase the energy efficiency of operations.
2. Increase the use of renewable energy to power operations.
3. Provide for energy efficiency through products and services.
4. Identify ways to beneficially reuse waste streams.
5. Educate stakeholders on how to achieve energy efficiency.

Figure 7 shows these top action areas mapped to the 19 industries represented in the industry-specific opportunity reports.

	Increase the energy efficiency of operations	Increase the use of renewable energy to power operations	Provide for energy efficiency through products and services	Identify ways to beneficially reuse waste streams	Educate stakeholders on how to achieve energy efficiency
Automobile	•	•	•	•	•
Chemicals	•	•	•	•	
Construction	•	•	•	•	
Consumer Packaged Goods	•	•	•		
Financial Services	•	•			
Food and Agriculture	•	•		•	
Forest Products	•	•	•	•	
Health Care	•	•	•		
Industrial Manufacturing	•	•	•		•
Information, Communications and Technology	•	•	•		
Metals and Mining	•	•	•	•	
Oil and Gas	•	•	•	•	•
Pharmaceuticals and Biotechnology	•	•	•		
Professional Services	•	•	•		•
Renewable Energy	•	•			
Retail	•	•	•		
Transportation	•	•	•		
Travel and Leisure	•	•	•		
Utilities	•	•	•		•

Figure 7: Top Five Common Industry Actions Mapped by Industry

Driving Business Value through the Five Most Common Industry Actions

The following maps each of the top five common actions across industry to a specific business value lever:

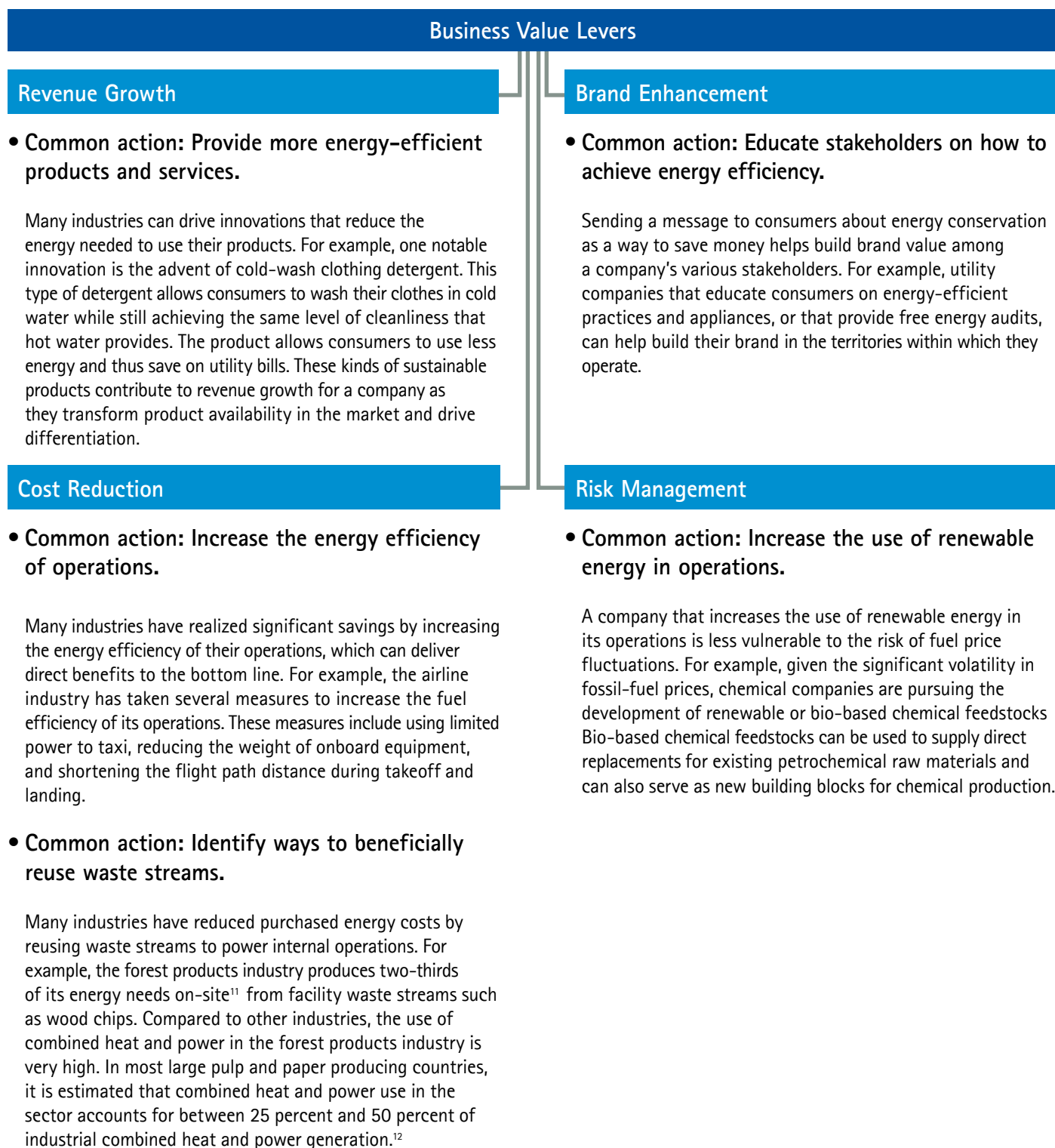


Figure 8: Top Five Common Priority Action Areas Mapped to the Four Business Value Levers

Conclusion

Sustainable Energy for All has been established to improve the global energy landscape over the next two decades – by advancing access to energy, improving energy efficiency, and increasing the use of renewable energy. These objectives are inextricably tied with the growth agendas of many of private sector companies. This strategic link can help the business community make significant contributions towards the advancement of *Sustainable Energy for All* while driving new business value related to revenue growth, cost reduction, brand enhancement, and risk management.

Many industries will face a variety of challenges and barriers in implementing and scaling their actions related to *Sustainable Energy for All*. These include country specific policy and regulatory barriers, a lack of appropriate and available financial mechanisms, and inflexible or ineffective business models. For these reasons, no one overarching global solution exists, and industries must partner and collaborate with each other, with governments, and with civil society to develop successful frameworks and opportunities for change. *Sustainable Energy for All* can thus be a critical enabler for change – by establishing a common global vision and with clear objectives, providing a platform for collaboration and facilitating partnerships, and improving the enabling environment and coordination actions—to ensure the world has the sustainable energy future it needs to create new business opportunities, increased development, and new possibilities for the advancement of mankind.

Industry Executive Summaries

The Automobile Industry

The automobile industry uses substantial amounts of energy in the manufacture of its products, but perhaps more importantly, the industry determines through the design of its products, how end-users will consume energy related to their use. Transportation accounts for approximately one quarter of global energy use. This is projected to increase by nearly 50 percent by 2030 and by more than 80 percent by 2050 in the absence of new regulations.¹³ By using new materials and technologies to make vehicles lighter and more efficient, and by producing new and innovative vehicles that run on renewable or alternative fuels, the

automobile industry can have a significant impact on the energy consumption of consumers. This influence makes automobile companies essential to the global effort to use energy more efficiently and further advance renewable energy.

Because the automobile manufacturing industry is also a major consumer of electricity and fossil fuels, the industry has the opportunity to transform its operations and achieve cost savings and hedge against future volatility in energy prices through more efficient processes, increased use of renewable energy, and more self-generation of electricity. Due to the diversity of the automotive manufacturing industry and the many finished parts of a vehicle, operational energy use must be assessed across the

entire supply chain; from raw materials, to parts production, to manufacturing assembly, in order to optimize efficiency and renewable energy use.

For automobile companies to advance their business opportunities related to energy efficiency and renewable energy, the industry should focus on six priority actions—mapped to the business value levers, objectives, and engagement modalities of *Sustainable Energy for All*:

Priority Industry Actions	Business Value Levers	Objectives	Engagement Modalities
Improve vehicle fuel economy.	<ul style="list-style-type: none"> Revenue Growth Brand Enhancement Risk Management 	<ul style="list-style-type: none"> Energy Efficiency 	<ul style="list-style-type: none"> Core Business: Products and Services
Manufacture flexible-fuel vehicles and educate customers on the usage and benefits of flexible-fuel vehicles.	<ul style="list-style-type: none"> Revenue Growth Brand Enhancement Risk Management 	<ul style="list-style-type: none"> Renewable Energy Energy Efficiency 	<ul style="list-style-type: none"> Core Business: Products and Services
Manufacture automobiles that derive energy from sources other than petroleum.	<ul style="list-style-type: none"> Revenue Growth Brand Enhancement Risk Management 	<ul style="list-style-type: none"> Renewable Energy Energy Efficiency 	<ul style="list-style-type: none"> Core Business: Products and Services
Make production processes more energy efficient and identify opportunities to reuse waste streams.	<ul style="list-style-type: none"> Cost Reduction Risk Management 	<ul style="list-style-type: none"> Energy Efficiency 	<ul style="list-style-type: none"> Core Business: Operations
Use renewable energy to power operations.	<ul style="list-style-type: none"> Brand Enhancement Risk Management 	<ul style="list-style-type: none"> Renewable Energy 	<ul style="list-style-type: none"> Core Business: Operations
Promote gas-saving strategies among drivers.	<ul style="list-style-type: none"> Brand Enhancement 	<ul style="list-style-type: none"> Energy Efficiency 	<ul style="list-style-type: none"> Advocacy & Public Policy Engagement

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The Chemicals Industry

Chemical companies are major consumers of electricity and fossil fuels—primarily oil and natural gas. For this reason, they have a significant opportunity to transform their core operations through improved energy efficiency and through innovations in sustainable energy.

Equally important, the industry can drive growth and innovation both for itself and for its customers because it is also a principal supplier of materials that make the global economy more energy efficient. Over 96 percent of all manufactured goods are directly touched by the business of chemistry.¹⁴ Producing a wide range of innovative solutions, the chemicals industry is also enabling the development of new, renewable energy technologies

and solutions. It has a significant potential impact on consumer energy consumption and is essential to the global effort to use energy more efficiently and to advance renewables.

For chemical companies to advance their business opportunities related to energy efficiency and renewable energy, the industry should focus on seven priority actions— mapped to the business value levers, objectives, and engagement modalities of *Sustainable Energy for All*:

Priority Industry Actions	Business Value Levers	Objectives	Engagement Modalities
Improve the energy efficiency of production processes.	<ul style="list-style-type: none"> Cost Reduction Risk Management 	<ul style="list-style-type: none"> Energy Efficiency 	<ul style="list-style-type: none"> Core Business: Operations
Use more energy-efficient techniques to generate electricity and steam in operations.	<ul style="list-style-type: none"> Cost Reduction Risk Management 	<ul style="list-style-type: none"> Energy Efficiency 	<ul style="list-style-type: none"> Core Business: Operations
Develop products and services that drive consumer energy efficiency and enable increased renewable energy uptake.	<ul style="list-style-type: none"> Revenue Growth Brand Enhancement Risk Management 	<ul style="list-style-type: none"> Energy Efficiency Renewable Energy 	<ul style="list-style-type: none"> Core Business: Products and Services
Establish an integrated, enterprise energy management function within the organization.	<ul style="list-style-type: none"> Cost Reduction Risk Management 	<ul style="list-style-type: none"> Energy Efficiency 	<ul style="list-style-type: none"> Core Business: Operations
Beneficially reuse waste streams as process inputs or to generate energy.	<ul style="list-style-type: none"> Revenue Growth Brand Enhancement Risk Management 	<ul style="list-style-type: none"> Energy Efficiency 	<ul style="list-style-type: none"> Core Business: Operations Core Business: Products and Services
Develop more renewable and bio-based feedstocks.	<ul style="list-style-type: none"> Revenue Growth Risk Management 	<ul style="list-style-type: none"> Renewable Energy 	<ul style="list-style-type: none"> Core Business: Operations Core Business: Products and Services
Use more renewable energy for operational energy needs.	<ul style="list-style-type: none"> Brand Enhancement Risk Management 	<ul style="list-style-type: none"> Renewable Energy 	<ul style="list-style-type: none"> Core Business: Operations

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The Construction Industry

The construction industry uses and consumes a significant amount of raw materials – many of which are energy intensive to process and produce. It is estimated that as much as 50 percent of all materials extracted from the earth are transformed into construction materials. Moreover, these materials account for approximately 50 percent of all waste generated prior to recycling.¹⁵ Working with its customers, the industry has significant opportunities to become more energy efficient primarily through the use of less virgin raw material and the reuse / recycling of waste.

Opportunities also exist to drive business value through more sustainable production and operations. Companies can collaborate across their supply chain to improve the energy efficiency of new construction, and also engage stakeholders to improve the energy efficiency of existing buildings.

For construction companies to advance their business opportunities related to energy access, energy efficiency, and renewable energy, the industry should focus on seven priority actions— mapped to the business value levers, objectives, and engagement modalities of *Sustainable Energy for All*:

Priority Industry Actions	Business Value Levers	Objectives	Engagement Modalities
Reduce consumption of raw materials by sourcing recycled, repurposed and renewable resources.	<ul style="list-style-type: none"> • Brand Enhancement • Risk Management 	<ul style="list-style-type: none"> • Energy Efficiency 	<ul style="list-style-type: none"> • Core Business: Operations • Core Business: Products and Services
Increase the use of renewable energy and alternative fuels.	<ul style="list-style-type: none"> • Brand Enhancement • Risk Management 	<ul style="list-style-type: none"> • Renewable Energy 	<ul style="list-style-type: none"> • Core Business: Operations
Increase energy efficiency of processes and facilities.	<ul style="list-style-type: none"> • Cost Reduction • Brand Enhancement • Risk Management 	<ul style="list-style-type: none"> • Energy Efficiency 	<ul style="list-style-type: none"> • Core Business: Operations
Support the construction of infrastructure to supply energy to local communities.	<ul style="list-style-type: none"> • Revenue Growth • Brand Enhancement 	<ul style="list-style-type: none"> • Energy Access 	<ul style="list-style-type: none"> • Core Business: Operations • Social Investment and Philanthropy
Construct and renovate buildings so they are energy efficient and produce their own electricity.	<ul style="list-style-type: none"> • Revenue Growth • Brand Enhancement • Risk Management 	<ul style="list-style-type: none"> • Energy Efficiency • Renewable Energy 	<ul style="list-style-type: none"> • Core Business: Products and Services
Facilitate product recycling and identify opportunities to beneficially reuse waste.	<ul style="list-style-type: none"> • Cost Reduction • Risk Management 	<ul style="list-style-type: none"> • Energy Efficiency 	<ul style="list-style-type: none"> • Core Business: Operations
Promote energy-efficient building codes and regulatory incentives for more energy-efficient building projects.	<ul style="list-style-type: none"> • Revenue Growth • Brand Enhancement • Risk Management 	<ul style="list-style-type: none"> • Energy Efficiency 	<ul style="list-style-type: none"> • Advocacy & Public Engagement

The findings presented here are the result of research, interviews, and focus groups conducted in support of the development of the *Sustainable Energy for All* initiative by the UN Global Compact and Accenture. More than 70 companies across 19 industries—primarily UN Global Compact LEAD companies and Caring for Climate Signatories—contributed to these findings. Specific to the construction industry, the following companies and organizations provided valuable input and contributions: Lafarge and Skanska

The Consumer Packaged Goods Industry

The consumer packaged goods industry is resource intensive, using energy at many different points throughout the product lifecycle. Sourcing, manufacturing, packaging, distribution, consumption, and disposal all require significant amounts of energy. Consumer packaged goods companies are continuing to expand into emerging markets and develop products with a very high replacement rate – both factors which impact the industry's use of energy.

Consumer packaged goods companies can take advantage of a number of business value creation opportunities associated

with sustainable energy. The supply chain and packaging areas represent potential opportunities to reduce costs, as well as improve brand value as consumers become more interested in sustainable supply chain issues such as product packaging. Manufacturing processes can be optimized to reduce costs in the areas of water use, electricity and steam use, and refrigeration. Non-process energy use in manufacturing and distribution facilities, such as lighting and heating, ventilation, and air conditioning, can also drive down energy consumption, reducing costs. Improving the energy efficiency of the products themselves will position consumer packaged goods companies to drive revenue growth by capturing a growing segment of sustainable consumers. Further, the transportation and distribution of

products can be made more efficient, driving cost savings and risk management through improved trucking routes and intermodal transport. These areas represent a future focus area for consumer packaged goods as they look to drive business value and advance sustainable energy.

For consumer packaged goods companies to advance their business opportunities related to energy efficiency and renewable energy, the industry should focus on six priority actions— mapped to the business value levers, objectives, and engagement modalities of *Sustainable Energy for All*:

Priority Industry Actions	Business Value Levers	Objectives	Engagement Modalities
Reduce product packaging, and increase the use of renewable feedstock in its manufacture.	<ul style="list-style-type: none"> Cost Reduction Brand Enhancement 	<ul style="list-style-type: none"> Energy Efficiency Renewable Energy 	<ul style="list-style-type: none"> Core Business: Operations Core Business: Products and Services
Increase the energy efficiency of operations in manufacturing and distribution.	<ul style="list-style-type: none"> Cost Reduction Brand Enhancement 	<ul style="list-style-type: none"> Energy Efficiency 	<ul style="list-style-type: none"> Core Business: Operations
Create products that enable consumers to be more energy efficient.	<ul style="list-style-type: none"> Revenue Growth Brand Enhancement Risk Management 	<ul style="list-style-type: none"> Energy Efficiency 	<ul style="list-style-type: none"> Core Business: Operations Social Investment and Philanthropy
Use renewable energy to power operations and facilities.	<ul style="list-style-type: none"> Brand Enhancement Risk Management 	<ul style="list-style-type: none"> Renewable Energy 	<ul style="list-style-type: none"> Core Business: Operations
Reduce the amount of energy required to refrigerate and cool products.	<ul style="list-style-type: none"> Cost Reduction 	<ul style="list-style-type: none"> Energy Efficiency 	<ul style="list-style-type: none"> Core Business: Operations Core Business: Products and Services
Minimize energy required to source, treat, heat, and transport water.	<ul style="list-style-type: none"> Cost Reduction Brand Enhancement Risk Management 	<ul style="list-style-type: none"> Energy Efficiency 	<ul style="list-style-type: none"> Core Business: Operations Core Business: Products and Services

The findings presented here are the result of research, interviews, and focus groups conducted in support of the development of the *Sustainable Energy for All* initiative by the UN Global Compact and Accenture. More than 70 companies across 19 industries—primarily UN Global Compact LEAD companies and Caring for Climate Signatories—contributed to these findings. Specific to the consumer packaged goods industry, the following companies and organizations provided valuable input and contributions: The Coca-Cola Company, and Unilever.

The Financial Services Industry

The financial services industry has a significant opportunity to drive the development of sustainable energy in two ways. First, it can finance projects to expand energy access, improve energy efficiency, and increase the development of renewable energy sources. This financing can be provided traditionally, or via innovative financing mechanisms. Directing capital towards sustainable energy investments has the potential to drive significant revenue growth and increase brand value for the financial services industry.

Secondly, the financial services industry can transform their own operations, specifically their use of buildings and data

centers, so that they consume energy more efficiently and realize cost savings. While the overall operations of the financial services industry are not overly energy intensive, there are select opportunities to save energy across the asset portfolio while mitigating risk associated with volatile energy costs as well as reducing costs.

For financial services firms to advance their business opportunities related to energy access, energy efficiency, and renewable energy, the industry should focus on five priority actions— mapped to the business value levers, objectives, and engagement modalities of *Sustainable Energy for All*:

Priority Industry Actions	Business Value Levers	Objectives	Engagement Modalities
Direct more capital toward energy access and the commercialization of energy efficiency and renewable energy technologies.	<ul style="list-style-type: none"> Revenue Growth Cost Reduction Brand Enhancement 	<ul style="list-style-type: none"> Energy Access Energy Efficiency Renewable Energy 	<ul style="list-style-type: none"> Core Business: Products and Services
Increase energy efficiency of operations.	<ul style="list-style-type: none"> Cost Reduction Brand Enhancement Risk Management 	<ul style="list-style-type: none"> Energy Efficiency 	<ul style="list-style-type: none"> Core Business: Operations
Use renewable energy to power operations and facilities.	<ul style="list-style-type: none"> Brand Enhancement Risk Management 	<ul style="list-style-type: none"> Renewable Energy 	<ul style="list-style-type: none"> Core Business: Operations
Support microfinance institutions that work on energy access, energy efficiency, and renewable energy.	<ul style="list-style-type: none"> Revenue Growth Brand Enhancement 	<ul style="list-style-type: none"> Energy Access Energy Efficiency Renewable Energy 	<ul style="list-style-type: none"> Core Business: Products and Services Social Investment and Philanthropy
Support policy frameworks that drive investment in energy access, renewable energy and energy efficiency.	<ul style="list-style-type: none"> Revenue Growth Brand Enhancement Risk Management 	<ul style="list-style-type: none"> Energy Access Energy Efficiency Renewable Energy 	<ul style="list-style-type: none"> Advocacy and Public Policy Engagement

The findings presented here are the result of research, interviews, and focus groups conducted in support of the development of the *Sustainable Energy for All* initiative by the UN Global Compact and Accenture. More than 70 companies across 19 industries—primarily UN Global Compact LEAD companies and Caring for Climate Signatories—contributed to these findings.

The Food and Agriculture Industry

The food and agriculture industry consumes energy by harvesting, processing, and selling food. The industry relies heavily on petroleum-based fuels to power equipment and vehicles to harvest crops, raise livestock, and distribute the products produced. It also requires electricity and heat for manufacturing and processing. While increasing energy costs and decreasing margins have more recently driven companies towards increasing energy efficiency, there is potential for additional improvement. There is also potential for companies in the food and agriculture industry to drive increased business value through renewable energy (whether through using biofuels or producing input feedstock for second-generation biofuels development) and through providing energy access in areas where modern energy services are limited.

Food and agriculture companies have a unique opportunity to use their waste streams to create new sources of revenue and reduce costs. Companies generate

plant and animal matter that can be used as an energy source – either to generate energy on-site or as a feedstock for others to use. This can help reduce purchased electricity costs by generating energy on-site, and increase revenue through the sale of biomass. Additionally, on-site energy generation from renewable sources can protect against potentially rising energy costs and help improve brand value as companies making investments to increase the use of renewable energy are often viewed as more sustainable to customers. Additionally, food and agriculture companies have the opportunity, through the use of improved transportation and infrastructure, better insulation of food storage facilities, and reductions in packaging and food waste, to reduce energy consumption and improve efficiency across the operational profile.

For food and agriculture companies to advance their business opportunities related to energy access, energy efficiency, and renewable energy, the industry should focus on six priority actions— mapped to the business value levers, objectives, and engagement modalities of *Sustainable Energy for All*:

Priority Industry Actions	Business Value Levers	Objectives	Engagement Modalities
Create closed-loop systems that reuse waste streams as production inputs.	<ul style="list-style-type: none"> Cost Reduction Risk Management 	<ul style="list-style-type: none"> Energy Efficiency Renewable Energy 	<ul style="list-style-type: none"> Core Business: Operations
Increase the energy efficiency of growing food crops.	<ul style="list-style-type: none"> Cost Reduction Brand Enhancement Risk Management 	<ul style="list-style-type: none"> Energy Efficiency 	<ul style="list-style-type: none"> Core Business: Operations
Increase the energy efficiency of production, packaging, and transportation processes.	<ul style="list-style-type: none"> Cost Reduction Brand Enhancement Risk Management 	<ul style="list-style-type: none"> Energy Efficiency 	<ul style="list-style-type: none"> Core Business: Operations
Increase the use of renewable energy to meet operational energy needs.	<ul style="list-style-type: none"> Brand Enhancement Risk Management 	<ul style="list-style-type: none"> Renewable Energy 	<ul style="list-style-type: none"> Core Business: Operations
Use waste streams to provide energy access in areas where access is limited.	<ul style="list-style-type: none"> Brand Enhancement 	<ul style="list-style-type: none"> Energy Efficiency 	<ul style="list-style-type: none"> Core Business: Operations Social Investment and Philanthropy

The findings presented here are the result of research, interviews, and focus groups conducted in support of the development of the *Sustainable Energy for All* initiative by the UN Global Compact and Accenture. More than 70 companies across 19 industries—primarily UN Global Compact LEAD companies and Caring for Climate Signatories—contributed to these findings. Specific to the food and agriculture industry, the following companies and organizations provided valuable input and contributions: Netafim, PepsiCo, Sekem.

The Forest Products Industry

The forest products industry is a major consumer of energy, the fourth largest industrial sector globally in terms of energy use.¹⁶ Additionally, it is one of the leading industrial producers of renewable energy. The competitive edge of this industry is based on resource and operational efficiency and on the sustainability of its raw materials and products. This expertise is the foundation for a bio-based and sustainable future.¹⁷

The forest products industry has the potential to play a leading role in integrating and optimizing raw material resources, increasing operational energy efficiency and producing biomass energy both for its own operations and for retail. It also has a significant opportunity to transform its core business model through innovations in sustainable energy by producing biofuels for retail in its processing plants along with traditional paper and wood products.

For forest products companies to advance their business opportunities related to energy access, energy efficiency, and renewable energy, the industry should focus on six priority actions— mapped to the business value levers, objectives, and engagement modalities of *Sustainable Energy for All*:

Priority Industry Actions	Business Value Levers	Objectives	Engagement Modalities
Beneficially reuse waste streams to generate energy and expand renewable energy use for operations.	<ul style="list-style-type: none"> Cost Reduction Brand Enhancement Risk Management 	<ul style="list-style-type: none"> Energy Access Energy Efficiency Renewable Energy 	<ul style="list-style-type: none"> Core Business: Operations
Improve the energy efficiency of operations.	<ul style="list-style-type: none"> Cost Reduction Brand Enhancement Risk Management 	<ul style="list-style-type: none"> Energy Efficiency Renewable Energy 	<ul style="list-style-type: none"> Core Business: Operations
Promote the development of new feedstocks.	<ul style="list-style-type: none"> Risk Management 	<ul style="list-style-type: none"> Renewable Energy 	<ul style="list-style-type: none"> Core Business: Operations
Modify current or create new pulp and paper manufacturing facilities as new innovative "bio-refineries".	<ul style="list-style-type: none"> Revenue Growth Risk Management 	<ul style="list-style-type: none"> Energy Efficiency Renewable Energy 	<ul style="list-style-type: none"> Core Business: Operations Core Business: Products and Services
Expand production and sale of wood pellets as a renewable energy source in home heating, cooking and power generation.	<ul style="list-style-type: none"> Revenue Growth Brand Enhancement 	<ul style="list-style-type: none"> Energy Access Renewable Energy 	<ul style="list-style-type: none"> Core Business: Products and Services
Support regulation to develop sustainable forestry management standards, access to raw materials and renewable energy policies.	<ul style="list-style-type: none"> Brand Enhancement Risk Management 	<ul style="list-style-type: none"> Energy Access Renewable Energy 	<ul style="list-style-type: none"> Advocacy & Public Policy Engagement

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The Health Care Industry

The health care industry is energy-intensive. Hospitals can consume 2.7 times more energy than typical office buildings.¹⁸ While many such facilities have turned to energy-efficiency strategies to offset high costs caused by rising energy prices, there is still a significant opportunity to transform core operations through improved energy efficiency and through innovations in sustainable energy. The business case to pursue energy efficiency projects in the healthcare industry is strong. In some cases, the cash flow benefit of small cost savings for a hospital operating at a narrow margin can be analogous to significantly increasing incremental revenue.¹⁹ In addition to cost savings resulting from reduced energy consumption, hospitals and health care facilities that have invested in energy efficiency have realized benefits in terms of reputation, staff retention and patient care.

For health care companies to advance their business opportunities related to energy efficiency and renewable energy, the industry should focus on three priority actions— mapped to the business value levers, objectives, and engagement modalities of *Sustainable Energy for All*:

Priority Industry Actions	Business Value Levers	Objectives	Engagement Modalities
Increase energy efficiency of operations.	<ul style="list-style-type: none"> • Cost Reduction • Brand Enhancement 	<ul style="list-style-type: none"> • Energy Efficiency 	<ul style="list-style-type: none"> • Core Business: Operations
Increase the use of renewable energy to power operations.	<ul style="list-style-type: none"> • Brand Enhancement • Risk Management 	<ul style="list-style-type: none"> • Renewable Energy 	<ul style="list-style-type: none"> • Core Business: Operations
Develop and purchase energy-efficient medical devices.	<ul style="list-style-type: none"> • Revenue Growth • Cost Reduction • Brand Enhancement • Risk Management 	<ul style="list-style-type: none"> • Energy Efficiency 	<ul style="list-style-type: none"> • Core Business: Products and Services • Core Business: Operations

The findings presented here are the result of research, interviews, and focus groups conducted in support of the development of the *Sustainable Energy for All* initiative by the UN Global Compact and Accenture. More than 70 companies across 19 industries—primarily UN Global Compact LEAD companies and Caring for Climate Signatories—contributed to these findings.

The Industrial Manufacturing Industry

Industrial manufacturing is energy intensive in most aspects of the production processes it runs from an operational standpoint. It demands on- and off-site power, large amounts of process energy for the manufacture of goods, and non-process energy to maintain facilities. Industrial manufacturers continue to explore new ways to reduce energy costs through technologies such as combined heat and power, variable frequency drives, and advanced insulation. By reducing energy consumption, industrial manufacturing companies can drive business value by lowering operational costs and the total cost of goods sold. This has the potential to improve profitability as well as manage risks associated with volatile energy prices.

For industrial manufacturing companies to advance their business opportunities related to energy efficiency and renewable energy, the industry should focus on five priority actions—mapped to the business value levers, objectives, engagement modalities of *Sustainable Energy for All*:

Priority Industry Actions	Business Value Levers	Objectives	Engagement Modalities
Increase use of combined heat and power and distributed renewable power generation at manufacturing facilities.	<ul style="list-style-type: none"> • Cost Reduction • Risk Management 	<ul style="list-style-type: none"> • Energy Efficiency • Renewable Energy 	<ul style="list-style-type: none"> • Core Business: Operations
Improve the energy efficiency of operational processes.	<ul style="list-style-type: none"> • Cost Reduction 	<ul style="list-style-type: none"> • Energy Efficiency 	<ul style="list-style-type: none"> • Core Business: Operations
Incorporate more energy-efficient design into core product streams, and explore the practical use of new and emerging technologies.	<ul style="list-style-type: none"> • Revenue Growth 	<ul style="list-style-type: none"> • Energy Efficiency 	<ul style="list-style-type: none"> • Core Business: Products and Services
Empower employees to cut energy consumption through behavioral changes and continuous improvement programs.	<ul style="list-style-type: none"> • Cost Reduction • Brand Enhancement 	<ul style="list-style-type: none"> • Energy Efficiency 	<ul style="list-style-type: none"> • Core Business: Operations
Increase cross- industry collaboration and partner with academic institutions and policy makers to drive innovation and technological breakthroughs.	<ul style="list-style-type: none"> • Revenue Growth • Cost Reduction 	<ul style="list-style-type: none"> • Energy Efficiency • Renewable Energy 	<ul style="list-style-type: none"> • Social Investment and Philanthropy • Advocacy and Public Policy Engagement

The findings presented here are the result of research, interviews, and focus groups conducted in support of the development of the *Sustainable Energy for All* initiative by the UN Global Compact and Accenture. More than 70 companies across 19 industries—primarily UN Global Compact LEAD companies and Caring for Climate Signatories—contributed to these findings. Specific to the industrial manufacturing industry, the following companies and organizations provided valuable input and contributions: EADS NV, Embraco, Grundfos and Tata Group.

Information and Communications Technology

The information and communications technology industry provides a wide range of products and services, and leads innovation efforts across electronics, software, and telecommunications. The industry acts as an important enabler for other industries; nearly every other industry relies on the technologies, communications services, and software and hardware produced by the information and communications technology industry.

The information and communications technology industry has, and will continue to have, a tremendous impact on the ability

of governments, private sector companies, and individuals to provide energy access, achieve energy efficiency, and incorporate renewable energy into the global energy mix. Technologies like demand side management for the electrical grid will allow utilities and renewable energy companies to better manage electricity flows and to incorporate renewable energy into the electrical grid. Other technologies, like onboard telematics, have allowed logistics companies to manage their fleets with more information and efficiency. In short, the products and services provided by the information and communications technology industry are at the heart of almost every other industry's operations. In this way, companies in the information and communications technology industry can have a far-reaching impact on

the *Sustainable Energy for All* objectives not only by improving the energy efficiency of their own operations, but also by providing innovative products and services to enable other industries and companies to achieve their sustainable energy objectives. At the same time, information and communications technology can simultaneously drive business value as demand for their innovative and enabling products increases.

For information and communications technology companies to advance their business opportunities related to energy access, energy efficiency, and renewable energy, the industry should focus on nine priority actions— mapped to the business value levers, objectives, and engagement modalities of *Sustainable Energy for All*:

Priority Industry Actions	Business Value Levers	Objectives	Engagement Modalities
Increase virtualization of products, services, and processes.	<ul style="list-style-type: none"> Revenue Growth Brand Enhancement 	<ul style="list-style-type: none"> Energy Efficiency 	<ul style="list-style-type: none"> Core Business: Products and Services
Develop products and services that enable cities and urban areas to be more energy efficient and integrate renewable energy.	<ul style="list-style-type: none"> Revenue Growth Brand Enhancement 	<ul style="list-style-type: none"> Energy Access Energy Efficiency Renewable Energy 	<ul style="list-style-type: none"> Core Business: Products and Services
Continue development of products and services in support of smart grids.	<ul style="list-style-type: none"> Revenue Growth Brand Enhancement 	<ul style="list-style-type: none"> Energy Efficiency Renewable Energy 	<ul style="list-style-type: none"> Core Business: Products and Services
Develop products and services to improve the energy efficiency of travel and logistics.	<ul style="list-style-type: none"> Revenue Growth Brand Enhancement 	<ul style="list-style-type: none"> Energy Efficiency 	<ul style="list-style-type: none"> Core Business: Products and Services
Develop products and services that improve the energy efficiency of vehicles.	<ul style="list-style-type: none"> Revenue Growth Brand Enhancement 	<ul style="list-style-type: none"> Energy Efficiency 	<ul style="list-style-type: none"> Core Business: Products and Services
Improve the energy efficiency of the products and services offered to the market.	<ul style="list-style-type: none"> Revenue Growth Brand Enhancement Risk Management 	<ul style="list-style-type: none"> Energy Efficiency 	<ul style="list-style-type: none"> Core Business: Products and Services
Increase the energy efficiency of operations.	<ul style="list-style-type: none"> Cost Reduction Risk Management 	<ul style="list-style-type: none"> Energy Efficiency 	<ul style="list-style-type: none"> Core Business: Operations
Use renewable energy to power operations and facilities.	<ul style="list-style-type: none"> Brand Enhancement Risk Management 	<ul style="list-style-type: none"> Renewable Energy 	<ul style="list-style-type: none"> Core Business: Operations
Support policies that encourage information and communications technology-enabled energy efficiency and renewable energy.	<ul style="list-style-type: none"> Revenue Growth Cost Reduction Brand Enhancement Risk Management 	<ul style="list-style-type: none"> Energy Efficiency 	<ul style="list-style-type: none"> Advocacy and Public Policy Engagement

The findings presented here are the result of research, interviews, and focus groups conducted in support of the development of the *Sustainable Energy for All* initiative by the UN Global Compact and Accenture. More than 70 companies across 19 industries—primarily UN Global Compact LEAD companies and Caring for Climate Signatories—contributed to these findings. Specific to the information and communications technology industry, the following companies and organizations provided valuable input and contributions: ARM, Cisco, Ericsson, Infosys, Intel, SK Telecom, Telefonica S.A.

The Metals and Mining Industry

The metals and mining industry is uniquely positioned to not only drive business value related to energy efficiency and increased use of renewable energy, but also as it relates to access to modern energy services as companies in this industry can be a catalyst for sustainable development in areas with little or no existing energy infrastructure. This characteristic shared by some companies in the metals and mining industry – the operation of facilities in remote areas – provides the opportunity to link access to energy with core strategic business value drivers, like risk management for example, by protecting the "license to operate" and brand enhancement through community outreach and collaboration. This opportunity is one of collaboration and partnership as it relates to broader development concerns – of which access to energy is a primary enabler, and is reflective of metals and

mining companies providing energy services individually.

Additionally, the products produced by the metals and mining industry are critical to drive sustainable energy forward as they are components in the solutions that enable improvements in energy efficiency and the increased deployment of renewable energy. Not only can the metals and mining industry drive innovation for itself – through changes in its operations and products and services – but also for the communities that host its activities and the customers who purchase its products.

For metals and mining companies to advance their business opportunities related to access to energy, energy efficiency, and renewable energy, the industry should focus on seven priority actions— mapped to the business value levers, objectives, and engagement modalities of *Sustainable Energy for All*:

Priority Industry Actions	Business Value Levers	Objectives	Engagement Modalities
Partner with local governments and utilities to provide energy services to communities surrounding operational locations.	<ul style="list-style-type: none"> Brand Enhancement Risk Management 	<ul style="list-style-type: none"> Energy Access 	<ul style="list-style-type: none"> Core Business: Operations Social Investment and Philanthropy Advocacy & Public Policy Engagement
Improve the energy efficiency of current operations.	<ul style="list-style-type: none"> Cost Reduction Risk Management 	<ul style="list-style-type: none"> Energy Efficiency 	<ul style="list-style-type: none"> Core Business: Operations
Build advanced energy considerations into the design and development of new assets and operations.	<ul style="list-style-type: none"> Cost Reduction Risk Management 	<ul style="list-style-type: none"> Energy Efficiency Renewable Energy 	<ul style="list-style-type: none"> Core Business: Operations Advocacy & Public Policy Engagement
Diversify the portfolio to develop products and generate materials that drive energy efficiency and renewable energy uptake.	<ul style="list-style-type: none"> Revenue Growth Risk Management 	<ul style="list-style-type: none"> Energy Efficiency Renewable Energy 	<ul style="list-style-type: none"> Core Business: Products and Services
Use waste and process outputs as fuel sources.	<ul style="list-style-type: none"> Cost Reduction Risk Management 	<ul style="list-style-type: none"> Energy Efficiency Renewable Energy 	<ul style="list-style-type: none"> Core Business: Operations Core Business: Products and Services
Use more renewable energy sources to support operational power needs.	<ul style="list-style-type: none"> Brand Enhancement Risk Management 	<ul style="list-style-type: none"> Renewable Energy 	<ul style="list-style-type: none"> Core Business: Operations

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The Oil and Gas Industry

The oil and gas industry sits directly at the heart of the production and consumption of energy. About half of all energy supplied to the world is provided by oil and gas and energy demand is expected to continue to grow.²⁰ Although recent economic turmoil has reduced energy consumption the past few years, 2010 saw a strong rebound with consumption growing 5.6%, the highest rate since 1973 across all forms of energy and all regions.

The oil and gas industry is energy intensive and requires significant amounts of energy to extract resources from the ground,

process them, and transport them to the end-user. Although fossil fuels will continue to dominate global energy use for the foreseeable future, the oil and gas industry can still affect change along the supply chain by promoting national energy plans, investing in new renewable fuels, and increasing efficiency in their own operations.

For oil and gas companies to advance their business opportunities related to access to energy, energy efficiency, and renewable energy, the industry should focus on five priority actions— mapped to the business value levers, objectives, and engagement modalities of *Sustainable Energy for All*:

Priority Industry Actions	Business Value Levers	Objectives	Engagement Modalities
Use more renewable energy sources and emphasize energy efficiency throughout the entire fuels supply chain.	<ul style="list-style-type: none"> Cost Reduction Risk Management 	<ul style="list-style-type: none"> Energy Efficiency Renewable Energy 	<ul style="list-style-type: none"> Core Business: Operations
Reduce the flaring of gas from operations and identify opportunities to reuse captured gas on-site or provide energy to local communities.	<ul style="list-style-type: none"> Revenue Growth Cost Reduction Risk Management 	<ul style="list-style-type: none"> Energy Access Energy Efficiency 	<ul style="list-style-type: none"> Core Business: Operations Social Investment and Philanthropy
Invest in R&D and utilize core competencies to bridge the gap from fundamental research to commercialization of liquid renewable transportation fuels and renewable generation technologies.	<ul style="list-style-type: none"> Revenue Growth Risk Management 	<ul style="list-style-type: none"> Renewable Energy 	<ul style="list-style-type: none"> Core Business: Products and Services
Promote international trade in sustainable energy products.	<ul style="list-style-type: none"> Revenue Growth Risk Management 	<ul style="list-style-type: none"> Energy Access Energy Efficiency Renewable Energy 	<ul style="list-style-type: none"> Advocacy & Public Policy Engagement
Use innovative business models and create new products and services to improve energy affordability and to enable access to clean cooking and heating solutions.	<ul style="list-style-type: none"> Cost Reduction Risk Management 	<ul style="list-style-type: none"> Energy Access 	<ul style="list-style-type: none"> Core Business: Products and Services Social Investment and Philanthropy

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The Pharmaceuticals and Biotechnology Industry

The pharmaceutical and biotechnology industry invests significantly in research and development, acting as a technology engine for many other industries – including healthcare, alternative energy, chemicals, fuels, and agriculture. Additionally, the industry has the opportunity to advance the availability of commercial-scale second generation biofuels which can help the automobile and transportation sectors become more sustainable and efficient.

Opportunities also exist to drive business value through more sustainable operations. The industry has a significant opportunity

to transform core operations through improved energy efficiency and increased use of renewable energy to power operations. Companies can also collaborate across their supply chain to create products that use less energy in their life cycle. These actions collectively will help drive energy cost savings and mitigate climate change risks while advancing renewable fuel sources.

For pharmaceutical and biotechnology companies to advance their business opportunities related to energy efficiency and renewable energy, the industry should focus on seven priority actions— mapped to the business value levers, objectives, and engagement modalities of *Sustainable Energy for All*:

Priority Industry Actions	Business Value Levers	Objectives	Engagement Modalities
Increase the energy efficiency of operations.	<ul style="list-style-type: none"> Cost Reduction Brand Enhancement 	<ul style="list-style-type: none"> Energy Efficiency 	<ul style="list-style-type: none"> Core Business: Operations
Drive advancements in second generation biofuels development within the biotechnology industry.	<ul style="list-style-type: none"> Revenue Growth Brand Enhancement 	<ul style="list-style-type: none"> Renewable Energy 	<ul style="list-style-type: none"> Core Business: Products and Services
Assess the lifecycle energy demand for products and services and work to increase the overall energy efficiency of products and services.	<ul style="list-style-type: none"> Cost Reduction Brand Enhancement 	<ul style="list-style-type: none"> Energy Efficiency 	<ul style="list-style-type: none"> Core Business: Operations Core Business: Products and Services
Reduce packaging waste associated with products and reduce the energy intensity of packaging.	<ul style="list-style-type: none"> Cost Reduction Brand Enhancement Risk Management 	<ul style="list-style-type: none"> Energy Efficiency 	<ul style="list-style-type: none"> Core Business: Operations Core Business: Products and Services
Utilize renewable energy to power operations and facilities.	<ul style="list-style-type: none"> Risk Management Brand Enhancement 	<ul style="list-style-type: none"> Renewable Energy 	<ul style="list-style-type: none"> Core Business: Operations
Work to influence public policy that will advance energy efficiency, the deployment of renewable energy, and encourage innovation.	<ul style="list-style-type: none"> Revenue Growth Cost Reduction Brand Enhancement Risk Management 	<ul style="list-style-type: none"> Energy Efficiency Renewable Energy 	<ul style="list-style-type: none"> Advocacy & Public Policy Engagement

The findings presented here are the result of research, interviews, and focus groups conducted in support of the development of the *Sustainable Energy for All* initiative by the UN Global Compact and Accenture. More than 70 companies across 19 industries—primarily UN Global Compact LEAD companies and Caring for Climate Signatories—contributed to these findings. Specific to the pharmaceutical and biotechnology industry, the following companies and organizations provided valuable input and contributions: Novo Nordisk A/S, Novozymes and Allergan

The Professional Services Industry

Companies in the professional services industry vary in terms of the services and products they bring to market, however they share an energy profile that focuses on building usage, travel, data centers, and events. These companies have an opportunity to improve the energy efficiency of their operations and increase the amount of renewable energy used while simultaneously increasing long-term business value.

Professional services firms have the opportunity to provide services to companies, governments, and civil society organizations that are working to advance the *Sustainable Energy for All* objectives. This may include providing energy efficient information technology platforms, assisting companies with developing energy efficiency or renewable energy strategies, assisting companies with renewable energy or energy efficiency reporting, or providing legal advice to entities interested in

increasing energy efficiency or renewable energy development. Professional services firms in the media and entertainment space have an opportunity to advance the objectives of *Sustainable Energy for All* by promoting awareness and publicizing positive messaging to their audiences. By taking action to advance the objectives of *Sustainable Energy for All*, from an operational as well as a market-facing perspective, the professional services industry can drive increased business value in the areas of revenue growth, cost reduction, brand enhancement, and risk management.

For professional services companies to advance their business opportunities related to access to energy, energy efficiency, and renewable energy, the industry should focus on four priority actions— mapped to the business value levers, objectives, and engagement modalities of *Sustainable Energy for All*:

Priority Industry Actions	Business Value Levers	Objectives	Engagement Modalities
Improve the energy efficiency of operations and increase renewable energy use.	<ul style="list-style-type: none"> • Cost Reduction • Brand Enhancement • Risk Management 	<ul style="list-style-type: none"> • Energy Efficiency • Renewable Energy 	<ul style="list-style-type: none"> • Core Business: Operations
Provide services focused on improving energy access, energy efficiency, and renewable energy use.	<ul style="list-style-type: none"> • Revenue Growth • Brand Enhancement 	<ul style="list-style-type: none"> • Energy Access • Energy Efficiency • Renewable Energy 	<ul style="list-style-type: none"> • Core Business: Products and Services
Promote awareness related to <i>Sustainable Energy for All</i> and create positive messages around the initiative's objectives.	<ul style="list-style-type: none"> • Revenue Growth • Brand Enhancement 	<ul style="list-style-type: none"> • Energy Access • Energy Efficiency • Renewable Energy 	<ul style="list-style-type: none"> • Core Business: Products and Services
Educate employees on energy efficiency and the benefits of renewable energy.	<ul style="list-style-type: none"> • Cost Reduction • Brand Enhancement 	<ul style="list-style-type: none"> • Energy Efficiency • Renewable Energy 	<ul style="list-style-type: none"> • Core Business: Operations

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The Renewable Energy Industry

The renewable energy industry has the unique opportunity to contribute directly to the target of doubling renewable energy in the global energy mix by 2030 through expansion of its own products—thereby driving significant business opportunities for growth. The industry can also improve its own operations in both efficiency and purchasing / on-site generation of renewable energy. Because of the reduced level of grid infrastructure needed for distributed renewable technologies, the industry can also be a driver in the expansion of energy access to the 1.3 billion people around the world currently without access to electricity.²¹

The renewable energy industry is a principal supplier of technologies that make the global economy less reliant on

non-renewable fossil fuels. According to one report, renewables represented half of newly installed electric capacity worldwide in 2010, and they are becoming increasingly important in the heating and transport sectors.²² By producing a wide range of new, innovative products and services, and by continuing to reduce costs to make new and existing technologies cost competitive, the renewable energy industry is essential to the advancement of the objectives of *Sustainable Energy for All*.

For renewable energy companies to advance their business opportunities related to access to energy, energy efficiency, and renewable energy, the industry should focus on five priority actions— mapped to the business value levers, objectives, and engagement modalities of *Sustainable Energy for All*:

Priority Industry Actions	Business Value Levers	Objectives	Engagement Modalities
Continue advancing next generation renewable technologies.	<ul style="list-style-type: none"> Revenue Growth 	<ul style="list-style-type: none"> Renewable Energy 	<ul style="list-style-type: none"> Core Business: Products and Services
Conduct reverse innovation of core products to provide greater energy access.	<ul style="list-style-type: none"> Revenue Growth 	<ul style="list-style-type: none"> Energy Access Renewable Energy 	<ul style="list-style-type: none"> Core Business: Products and Services
Increase the energy efficiency and use of renewable energy in manufacturing and operational processes.	<ul style="list-style-type: none"> Cost Reduction 	<ul style="list-style-type: none"> Energy Efficiency Renewable Energy 	<ul style="list-style-type: none"> Core Business: Operations
Support policies that increase renewable energy generation in both developed and developing economies.	<ul style="list-style-type: none"> Revenue Growth Risk Management 	<ul style="list-style-type: none"> Renewable Energy 	<ul style="list-style-type: none"> Core Business: Products and Services Advocacy & Public Policy Engagement
Improve understanding of barriers to expanding energy access and renewable energy in developing economies, develop innovative solutions and build capacity for technology operation and maintenance.	<ul style="list-style-type: none"> Revenue Growth Risk Management 	<ul style="list-style-type: none"> Energy Access Renewable Energy 	<ul style="list-style-type: none"> Core Business: Products and Services Social Investment and Philanthropy Advocacy & Public Policy Engagement

The findings presented here are the result of research, interviews, and focus groups conducted in support of the development of the *Sustainable Energy for All* initiative by the UN Global Compact and Accenture. More than 70 companies across 19 industries—primarily UN Global Compact LEAD companies and Caring for Climate Signatories—contributed to these findings. Specific to the renewable energy industry, the following companies and organizations provided valuable input and contributions: Gamesa, Suzlon, and Vestas.

The Retail Industry

Retailers primarily consume energy in three main categories of operations: stores, distribution centers, and transportation. Additionally, many sell high volumes of energy-intensive products, such as electronics and appliances. Retailers have opportunities across all of these areas to improve operational and consumer energy efficiency and drive an increase in the use of renewable energy while creating new business value.

To reduce energy consumption in stores, distribution centers, and transportation operations, retailers can target energy intensive areas such as lighting and

heating, ventilation and air conditioning systems. Adding renewable energy sources to power operations diversifies the energy portfolio, minimizing risk by hedging against potential rising energy prices and tightening green regulations. Additionally, Accenture research demonstrates that adopting a more sustainable product mix can drive revenue growth by capturing the growing "lifestyle of health and sustainability" market segment.²³

For retailers to advance their business opportunities related to energy efficiency and renewable energy, the industry should focus on five priority actions— mapped to the business value levers, objectives, and engagement modalities of *Sustainable Energy for All*:

Priority Industry Actions	Business Value Levers	Objectives	Engagement Modalities
Increase energy efficiency of operations.	<ul style="list-style-type: none"> Cost Reduction Brand Enhancement 	<ul style="list-style-type: none"> Energy Efficiency 	<ul style="list-style-type: none"> Core Business: Operations
Utilize renewable energy to power operations.	<ul style="list-style-type: none"> Brand Enhancement Risk Management 	<ul style="list-style-type: none"> Renewable Energy 	<ul style="list-style-type: none"> Core Business: Operations
Increase the portfolio of energy efficient products.	<ul style="list-style-type: none"> Revenue Growth Brand Enhancement Risk Management 	<ul style="list-style-type: none"> Energy Efficiency Renewable Energy 	<ul style="list-style-type: none"> Core Business: Products and Services Advocacy & Public Policy Engagement
Work with suppliers to increase supply chain energy efficiency.	<ul style="list-style-type: none"> Cost Reduction Risk Management 	<ul style="list-style-type: none"> Energy Efficiency 	<ul style="list-style-type: none"> Core Business: Operations
Reduce packaging and packaging waste.	<ul style="list-style-type: none"> Cost Reduction Brand Enhancement 	<ul style="list-style-type: none"> Energy Efficiency 	<ul style="list-style-type: none"> Core Business: Operations Core Business: Products and Services

The findings presented here are the result of research, interviews, and focus groups conducted in support of the development of the *Sustainable Energy for All* initiative by the UN Global Compact and Accenture. More than 70 companies across 19 industries—primarily UN Global Compact LEAD companies and Caring for Climate Signatories—contributed to these findings.

The Transportation and Logistics Industry

Energy use in the transportation and logistics industry is tied to freight modes of transportation such as truck, air, rail, pipeline, and marine (domestic barge and cargo). These modes of transportation primarily rely petroleum based fuels and only use small amounts of natural gas and electricity. It is estimated that truck and rail transport account for approximately 30 percent of global transport energy use (which includes passenger transport). About 90 percent of that energy was used by road transport, which is far more energy intensive than rail. Marine transport is the most energy efficient mode of transportation and accounts for 9 percent of all global transport energy use.²⁴

Companies in this industry have an opportunity to drive significant cost savings from increasing the energy efficiency of transportation and operations. Additionally, transportation and logistics companies can drive value through increased revenues, brand enhancement, and risk management by building sustainable energy considerations into the services offered to the marketplace.

For transportation and logistics companies to advance their business opportunities related to energy efficiency and renewable energy, the industry should focus on four priority actions— mapped to the business value levers, objectives, and engagement modalities of *Sustainable Energy for All*:

Priority Industry Actions	Business Value Levers	Objectives	Engagement Modalities
Improve operations of vehicles, vessels or aircraft to maximize energy efficiency of transport.	<ul style="list-style-type: none"> • Cost Reduction • Brand Enhancement • Risk Management 	<ul style="list-style-type: none"> • Energy Efficiency 	<ul style="list-style-type: none"> • Core Business: Operations
Upgrade fleet to enable use of alternative, less carbon-intensive fuels and drive the use of renewables.	<ul style="list-style-type: none"> • Revenue Growth • Cost Reduction • Brand Enhancement • Risk Management 	<ul style="list-style-type: none"> • Energy Efficiency • Renewable Energy 	<ul style="list-style-type: none"> • Core Business: Operations
Improve the intermodal and trans-modal transfer systems to increase energy efficiency.	<ul style="list-style-type: none"> • Cost Reduction • Risk Management 	<ul style="list-style-type: none"> • Energy Efficiency 	<ul style="list-style-type: none"> • Core Business: Operations
Partner with manufacturers to improve the design and energy performance of vehicles, vessels, and aircraft.	<ul style="list-style-type: none"> • Cost Reduction • Brand Enhancement • Risk Management 	<ul style="list-style-type: none"> • Energy Efficiency • Renewable Energy 	<ul style="list-style-type: none"> • Core Business: Operations

The findings presented here are the result of research, interviews, and focus groups conducted in support of the development of the *Sustainable Energy for All* initiative by the UN Global Compact and Accenture. More than 70 companies across 19 industries—primarily UN Global Compact LEAD companies and Caring for Climate Signatories—contributed to these findings.

The Travel and Leisure Industry

Air travel and the energy consumption of buildings operated by hospitality companies are the two most energy-intensive aspects of the travel and leisure industry. Over half of the world's 5.9 million hotel rooms are located in Europe.²⁵ Approximately 90 percent of these European hotels are small, independent businesses that, studies show, are less proactive about reducing their negative environmental impacts than large hotel chains,²⁶ which have generally made more of the historic energy efficiency improvements in the hotel sector. Thus, looking broadly across the global hospitality industry, significant opportunities exist to improve energy efficiency at scale.

From the perspective of the airline industry, the International Council for Clean Transportation reports that energy efficiency of commercial aircrafts has doubled since 1960 due to the introduction of new aircraft designs. However, progress has stagnated in the last 20 years.²⁷ This is could result in greater issues in the

coming years because passenger air travel is expected to sustain 6 percent growth or higher in the next five years.²⁸ At this pace, increased demand will outstrip business-as-usual efficiency gains, causing energy consumption in the commercial airline component of the travel and leisure industry to continue to increase.²⁹

Although energy consumption for these purposes represents only a small portion of global energy consumption, commercial airlines and hotel chains are especially well-positioned to have an impact on sustainable energy. Their scale and global reach enable them to have an influence on large portions of the business community and society. Commercial airlines also have a significant incentive to adopt more energy-efficient operations, as fuel accounts for an increasingly large share of total costs.

For travel and leisure companies to advance their business opportunities related to energy efficiency and renewable energy, the industry should focus on five priority actions— mapped to the business value levers, objectives, and engagement modalities of *Sustainable Energy for All*:

Priority Industry Actions	Business Value Levers	Objectives	Engagement Modalities
Increase energy efficiency of hospitality operations.	<ul style="list-style-type: none"> Cost Reduction Brand Enhancement Risk Management 	<ul style="list-style-type: none"> Energy Efficiency 	<ul style="list-style-type: none"> Core Business: Operations
Optimize flight operations to maximize fuel efficiency.	<ul style="list-style-type: none"> Cost Reduction Risk Management 	<ul style="list-style-type: none"> Energy Efficiency 	<ul style="list-style-type: none"> Core Business: Operations
Increase the use of renewable energy to power operations.	<ul style="list-style-type: none"> Brand Enhancement Risk Management 	<ul style="list-style-type: none"> Energy Efficiency Renewable Energy 	<ul style="list-style-type: none"> Core Business: Operations
Purchase energy efficient consumer goods and appliances.	<ul style="list-style-type: none"> Cost Reduction 	<ul style="list-style-type: none"> Energy Efficiency 	<ul style="list-style-type: none"> Core Business: Operations
Build and renovate hotels so they are energy efficient and produce their own electricity.	<ul style="list-style-type: none"> Cost Reduction Brand Enhancement Revenue Growth 	<ul style="list-style-type: none"> Energy Efficiency Renewable Energy 	<ul style="list-style-type: none"> Core Business: Operations

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The Utilities Industry

The utilities industry can have a major impact on all three primary objectives of *Sustainable Energy for All*; energy access, energy efficiency, and renewable energy. With regard to energy access, utilities can expand service to developing urban areas as well as partner with governments and other organizations to expand access to rural areas, especially in developing countries. Improving energy efficiency in operations is also important; currently, a large percentage of the raw material inputs utilities use for power generation are not effectively converted to usable power. Finally, introducing renewable energy into the generation mix will become increasingly important to utilities' long-term strategies, especially as utilities face increased regulations for renewable energy. The utilities industry can take action to advance the three objectives of *Sustainable Energy for All* while simultaneously driving increased business value—in a number of different ways.

For utility companies to advance their business opportunities related to energy access, energy efficiency, and renewable energy, the industry should focus on six priority actions—mapped to the business value levers, objectives, and engagement modalities of *Sustainable Energy for All*:

Priority Industry Actions	Business Value Levers	Objectives	Engagement Modalities
Deploy distributed energy technologies (micro-or off-grids) to advance rural electrification efforts.	<ul style="list-style-type: none"> Cost Reduction Brand Enhancement 	<ul style="list-style-type: none"> Energy Access Renewable Energy 	<ul style="list-style-type: none"> Core Business: Products and Services Social Investment and Philanthropy
Use innovative business models and create new products and services to improve energy affordability among low-income populations.	<ul style="list-style-type: none"> Revenue Growth Risk Management 	<ul style="list-style-type: none"> Energy Access Renewable Energy 	<ul style="list-style-type: none"> Core Business: Operations Core Business: Products and Services Social Investment and Philanthropy
Increase adoption of smart grid technologies to modernize the grid.	<ul style="list-style-type: none"> Cost Reduction Risk Management 	<ul style="list-style-type: none"> Energy Efficiency Renewable Energy 	<ul style="list-style-type: none"> Core Business: Products and Services Advocacy and Public Policy Engagement
Leverage existing infrastructure to advance urban and semi-urban electrification efforts.	<ul style="list-style-type: none"> Revenue Growth 	<ul style="list-style-type: none"> Energy Access 	<ul style="list-style-type: none"> Core Business: Products and Services
Integrate a higher percentage of renewable energy into the electrical grid.	<ul style="list-style-type: none"> Brand Enhancement Risk Management 	<ul style="list-style-type: none"> Renewable Energy 	<ul style="list-style-type: none"> Core Business: Products and Services
Improve energy efficiency in operations.	<ul style="list-style-type: none"> Cost Reduction 	<ul style="list-style-type: none"> Energy Efficiency 	<ul style="list-style-type: none"> Core Business: Operations
Increase adoption of alternative energy vehicle infrastructure and a low carbon grid.	<ul style="list-style-type: none"> Cost Reduction Risk Management 	<ul style="list-style-type: none"> Renewable Energy 	<ul style="list-style-type: none"> Core Business: Products and Services
Educate consumers on how to improve energy efficiency.	<ul style="list-style-type: none"> Brand Enhancement 	<ul style="list-style-type: none"> Energy Efficiency 	<ul style="list-style-type: none"> Core Business: Products and Services
Create new products and services to increase sustainable consumption by end-customers.	<ul style="list-style-type: none"> Revenue Growth Risk Management 	<ul style="list-style-type: none"> Energy Access Energy Efficiency Renewable Energy 	<ul style="list-style-type: none"> Core Business: Products and Services

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Endnotes

1. REN21. 2011. Renewables 2011 Global Status Report (Paris: REN21 Secretariat)
2. <http://www.nrdc.org/energy/sunlocking.pdf>
3. Youngman, Richard, ICT Solutions for Energy Efficiency, http://siteresources.worldbank.org/INFORMATIONANDCOMMUNICATION-ANDTECHNOLOGIES/Resources/ICTSolutionsEnergyEfficiency_FinalJune30.pdf
4. A Vision Statement by Ban Ki-moon, Secretary-General of the United Nations, *Sustainable Energy for All*, November 2001, http://www.sustainableenergyforall.org/images/content/SG_Sustainable_Energy_for_All_vision_final_clean.pdf
5. UN Global Compact-Accenture CEO Study 2010
6. World Energy Outlook International Energy Agency (IEA) 2012
7. Accenture analysis, 2012
8. Youngman, Richard, ICT Solutions for Energy Efficiency, http://siteresources.worldbank.org/INFORMATIONANDCOMMUNICATION-ANDTECHNOLOGIES/Resources/ICTSolutionsEnergyEfficiency_FinalJune30.pdf
9. <http://www.aceee.org/topics/chp>
10. Based on respondent data for the 2011 Carbon Disclosure Project Report
11. American Forest and Paper Association, <http://www.afandpa.org/Energy.aspx>
12. http://www.iea.org/work/2006/pulppaper/discussion_paper.pdf
13. Transport, Energy and CO2: Moving toward Sustainability, IEA, 2009
14. <http://www.americanchemistry.com/ProductsTechnology>
15. Construction Industry as a partner for sustainable development. UNEP.
16. Energy Technology Transitions for Industry: Strategies for the Next Industrial Revolution, International Energy Agency, 2009.
17. Sustainability Report 2011, CEPI
18. US Energy Information Administration. http://www.emon.com/article_whitepaper_submeteringineducationandhealthcarefacilities.html
19. http://www.hfmmagazine.com/hfmmagazine_app/jsp/articledisplay.jsp?dcrpath=HFMMAGAZINE/Article/data/12DEC2011/1211HFM_FEA_TRENDS_sustainability&domain=HFMMAGAZINE
20. Key World Energy Statistics 2010 International Energy Agency http://www.iea.org/textbase/nppdf/free/2010/key_stats_2010.pdf
21. <http://www.iea.org/weo/electricity.asp>
22. REN21. 2011. Renewables 2011 Global Status Report (Paris: REN21 Secretariat).
23. Accenture – “The Sustainable Supply Chain: Creating Value through Sustainable Packaging”: <http://www.accenture.com/us-en/Pages/insight-sustainable-supply-chain-sustainable-packaging.aspx>
24. <http://www.iea.org/textbase/nppdf/free/2009/transport2009.pdf>
25. “Hotels can go green in energy consumption under new UN scheme.” UN News Center. 2011. <http://www.un.org/apps/news/story.asp?NewsID=39414&Cr=tourism&Cr1>
26. “Excellence in Energy for the Tourism Industry – Accommodation sector: SME hotels.” United Nations World Tourism Organization. 2010. <http://hes.unwto.org/sites/all/files/docpdf/analysisonenergyusebyeuropeanhotelsonlinesurveyanddeskresearch2382011-1.pdf>
27. “Aviation.” International Council for Clean Transportation (ICCT). 2011. <http://www.theicct.org/aviation>
28. “Current Market Outlook 2011–2030.” Boeing. <http://www.boeing.com/commercial/cmo/>
29. “Aircraft and Energy Use.” <http://web.mit.edu/aeroastro/people/waitz/publications/AircraftEnergyUse.pdf>

About the United Nations Global Compact

The United Nations Global Compact is a call to companies everywhere to: (1) voluntarily align their operations and strategies with ten universally accepted principles in the areas of human rights, labor, environment and anticorruption and (2) take actions in support of UN goals, including the Millennium Development Goals. By doing so, business can help ensure that markets advance in ways that benefit economies and societies everywhere. Endorsed by chief executives, the UN Global Compact is a leadership platform for the development, implementation, and disclosure of responsible corporate policies and practices. Launched in 2000, it is the largest corporate responsibility initiative in the world—with over 7,000 signatories based in more than 135 countries, and Local Networks existing or emerging in 90 countries. More information: www.unglobalcompact.org.

About Accenture

Accenture is a global management consulting, technology services and outsourcing company, with more than 246,000 people serving clients in more than 120 countries. Combining unparalleled experience, comprehensive capabilities across all industries and business functions, and extensive research on the world's most successful companies, Accenture collaborates with clients to help them become high-performance businesses and governments. The company generated net revenues of US\$25.5 billion for the fiscal year ended Aug. 31, 2011. Its home page is www.accenture.com.

About Accenture Sustainability Services

Accenture Sustainability Services helps organizations achieve substantial improvement in performance and value for their stakeholders. We help clients leverage their assets and capabilities to drive innovation and profitable growth while striving for a positive economic, environmental and social impact. We work with clients across industries and geographies to integrate sustainability approaches into their business strategies, operating models and critical processes. Our holistic approach encompasses strategy, design and execution to increase revenue, reduce cost, manage risk and enhance brand, reputation and intangible assets. We also help clients develop deep insights on sustainability issues based on our ongoing investments in research, including recent studies on consumer expectations and global executive opinion on corporate sustainability and climate change.

Find out more at www.accenture.com/sustainability

Contact us

The United Nations Global Compact and Accenture encourage leadership from all industries around the world to engage with the *Sustainable Energy for All* initiative. To do so, please contact:

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In support of 'Sustainable Energy for All'



SUSTAINABLE
ENERGY FOR ALL