Good morning ladies and gentlemen. I come to you today proud to announce the launch of the 2014 Energy Efficiency Market Report.

As you all know, energy efficiency has played, and continues to play, a large and valuable role in sustainable development and emissions reductions: the link there is clear. In IEA scenarios for limiting global temperature increase to 2 degrees Celsius, fully 40% of necessary greenhouse gas emissions reductions will have to come from energy efficiency.

What is not always so clear is the valuable role that it will play in the global economy. The market for energy efficiency investments is very large and is producing results: the IEA now estimates that the energy efficiency market is larger than USD 310 billion annually and is growing. It is moving from a niche interest to an established market segment, with increasing interest from institutional lenders and investors.

On top of climate and economic growth, energy efficiency also provides a suite of other benefits, from enhancing energy security to supporting innovation, competitiveness and growth, to improved air quality. It often provides an important alternative to using more oil in cars, or coal for power plants, or even renewables.

In fact in many ways energy efficiency represents an alternative fuel, and so, last year, we added energy efficiency to the suite of fuel market reports prepared by the IEA. This year, we are launching the second annual report on the energy efficiency market.

In addition to highlighting developments in finance, and expanding the number of countries we cover, this year’s report includes an in-depth look at energy efficiency developments in the transport sector. Huge new waves of demand for mobility are emerging in non-OECD countries, bringing with them the challenges of pollution and congestion already faced in OECD countries. Fuel-economy standards and other policies are expected to help shape the market for more energy-efficient vehicles in the years to come.

All of this investment is significantly shaping our energy system. The steady improvement in the energy efficiency of our cars, homes, appliances and other energy consuming equipment over the last four decades has driven total final consumption 60% lower than what it hypothetically would have been in IEA countries – saving more energy than the total final consumption of any fuel.
An invisible powerhouse

These savings are significant.

In fact the savings from energy efficiency improvements and investments in 11 IEA countries where we had consistent data were larger than total final consumption in the EU. This means that in 2011, long-term improvements and investments in energy efficiency in IEA countries served to reduce from the global energy system the equivalent of the energy consumption of a major economy.

Energy efficiency is the invisible powerhouse in IEA countries and beyond, working behind the scenes to improve energy security, lower our energy bills and move us closer to reaching our climate goals.

Of course these savings are not limited to IEA countries. Energy efficiency is also helping to dampen the growing energy consumption in emerging countries, strengthening their ability to generate sustainable economic growth.

Without these improvements in efficiency the energy system would have been significantly more strained than it is today in providing energy, security and economic opportunities to the global population.

Savings from efficiency

Our analysis has now expanded to 18 IEA countries, and looking at the past decade the results demonstrate that efficiency is saving significant amounts of energy.

Without investments over the last decade to improve energy efficiency, total final consumption would have hypothetically been 8% higher by 2011. The cumulative savings from efficiency adoption in 18 IEA countries was more than 1 700 million tonnes of oil equivalent, larger than the total final consumption of the United States and Germany combined in 2012.

Reducing demand

In the countries evaluated in this year’s report, energy efficiency has been the prime mover in reducing energy demand since 2001. Total final consumption was down by 5% from 2001 to 2011, with efficiency having the greatest downward impact on energy consumption.

We can see what energy demand would have hypothetically been if we isolated for economic and population growth, changes in the structure of our economies or by changes in energy efficiency. Efficiency investments have been the major driver in offsetting the upward push of economic and population growth on total final consumption.
Transport efficiency

This improvement in energy efficiency is witnessed in actual progress in important energy-consuming sectors. Transport, which constitutes 27% of global energy consumption, is one important example.

The IEA estimates that the energy efficiency market in the transport sector will grow to USD 80 billion by 2020. Keys to driving this opportunity are ambitious standards that already apply to 50 million new vehicles sold, namely 70% of the global new vehicle market.

Under announced policies, the fuel economy of new vehicles will improve anywhere from 14% to 57% over the next 5 to 20 years, depending on the jurisdiction. Fuel economy standards make simple sense, as they more than pay for themselves in avoided fuel costs.

We estimate that currently announced standards will save at least USD 40 billion by 2020 and have the potential to save up to USD 190 billion if more countries enact such standards and compliance is strengthened.

But the story for the efficiency market in transport doesn’t just end with fuel economy standards.

Alternate transport modes like mass rail transit can move a passenger with one-tenth of the energy of a personal vehicle. So shifting the way we move people and freight can generate important efficiency gains. At USD 195 billion, current investments in infrastructure for more efficient modes represent a small share of total transport infrastructure investments, but the potential opportunity is large.

Transport efficiency

An important aspect of the projected evolution of the transport sector is the growing importance of non-OECD countries.

Compared with 2000, energy demand in these countries had nearly doubled by 2010. Between 2010 and 2020 the amount of travel is projected to increase by 90%, shifting the bulk of the global transport sector outside of the OECD.

This growth in non-OECD countries is not without important consequences for the transport system. Oil prices and expenditure on oil hit all-time peaks at the beginning of this decade. From 2001 to 2011, oil expenditure as a share of GDP grew from 1% to 3% in OECD countries and from 2% to 7% in non-OECD countries.

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Policies, standards and investments in efficient vehicles are a critical response to addressing this exponential growth. In addition to reducing energy costs, vehicle efficiency has multiple benefits including improved health from lower emissions.

New transport demand and an increasing number of vehicles will have important impacts on our cities, which are growing at a rapid rate, in particular in non-OECD countries. Local air pollution and congestion threaten to add significant costs, yet building roads to alleviate that congestion cannot keep pace with the adoption of personal vehicles in many emerging countries.

These represent potentially strong drivers to increase investments in more efficient modes to alleviate congestion and air pollution while also improving the efficiency of the entire transit system.

**Financing**

Achieving this investment requires financing.

We have estimated that 40% of the USD 300 billion energy efficiency market is financed with debt and equity meaning that the financial market for energy efficiency is in the range of USD 120 billion.

This year’s report found that the finance market is expanding and innovating in all different types of new products and that the market is establishing itself as a real business opportunity. The actual number of products and the volume of finance offered for energy efficiency loans are also greatly expanding.

Green bonds, corporate green bonds, energy performance contracts, private commitments, carbon and climate finance, and multilateral development banks and bilateral banks are all offering expanded sources of finance. We counted more than USD 22 billion in development finance for energy efficiency from bilateral and multilateral agencies.

As energy efficiency is essential to meeting our climate goals without hindering economic growth, the increasing use of finance is a welcome development. To fully expand this market, initiatives to continue to reduce barriers will need to strengthen.

We need to be nimble and responsive to the changing environments. Things evolve quickly in financial markets, and we believe that casting our attention and shedding light on the potential of efficiency as an energy market force will help to promote the development of additional new instruments and products. As the barriers to financing efficiency were disappearing almost in real-time during the production of this report, we witnessed the speed that the efficiency markets have been moving,
With that said, more remains to be done. For example, efforts to standardize efficiency loans can provide greater transparency and information to the market, reducing uncertainty and transaction costs for potential investors.

**Case studies**

In addition to evaluating the total market, we evaluated national energy efficiency markets in 11 countries, including key developed and developing countries.

In comparison with last year, this year we covered more countries from emerging economies, notably from Asia. Our goal is to present innovative new policies and programs as well as sub-markets or important national contexts. While the scale, maturity and drivers of national energy efficiency markets vary among countries, each country is engaging in some way to improve efficiency.

China is an important example as a leader in the scale of its energy efficiency activities.

China alone invested USD 120 billion between 2006 and 2010 in its 11th Five Year Plan and achieved more than 240 million tonnes of oil equivalent in energy savings during that time.

China plans on investing USD 200 billion to USD 270 billion between 2011 and 2015 to achieve similar levels of energy savings. It is also moving to balance its energy efficiency investments to focus more on buildings and capacity building. This is critical as building a sizeable technical and human capacity for energy efficiency will unlock more new energy efficiency potential in the future.

The European Union has shown consistent progress on energy efficiency and reducing both its energy intensity and energy consumption.

Since 1990 it lowered energy intensity by 28%. EU countries have achieved the greatest energy efficiency improvements among IEA member countries, and the union is discussing even further improvements. Financing is already increasing from public lenders with more than USD 10 billion in structural and investment funds available.

And indeed, there is room for further progress to be made, including in buildings and transport.

New targets to be announced will likely show the EU’s continued leadership on energy efficiency.

Italy was another interesting case study.
With comparatively high energy prices and significant exposure to energy imports, Italian energy efficiency programs are working to save 13 million tonnes of oil equivalent per year. New Italian targets for energy efficiency are more ambitious, with plans to reduce 20 million tonnes per year by 2020 while saving EUR 9 billion in energy costs.

Out of the countries we reviewed, these actions place Italy as a leader in supporting growth for the energy efficiency market. Total Italian activity could mobilize more than EUR 50 billion of investment by 2020. Energy efficiency is a key goal in Italy, not just for improving its energy security, but also for increasing its competitiveness.

Conclusion

From this second IEA energy efficiency market report, we again confirm that energy efficiency is a significant component of the global energy system – yet likely one of the least well understood from a market perspective. Efforts such as this report – though incomplete in coverage and early in the stages of comprehending the market’s components and dynamics – are nonetheless providing critical insight into this resource of avoided energy consumption and the drivers that shape it.

Signals are pointing to continued interest in expanding and financing this market. To continue to exploit this resource we need policies to enhance technological improvement and exploration of new opportunities, and to increase transparency and clarity for market actors on the returns they can expect.

Like oil and gas wells or power plants, these investments satisfy energy service demand over their lifetime. Those avoided joules of consumption are increasing energy security, improving fiscal balances and achieving important environmental benefits for years to come. While the benefits of efficiency provide ample appeal for market actors and policy makers to expand its role and reach, it’s the urgency of the problem that compels us to act.

A decarbonized energy system providing opportunity and prospects for growth, including for the world’s developing countries and their people, will not be achieved without energy efficiency. This report and the IEA’s continued work on efficiency are more steps towards understanding and unlocking its huge potential for the sake of us all.

Thank you.