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Transcript

Welcome

Benoît Potier
CEO, Air Liquide

Ladies and Gentlemen,

Welcome to Air Liquide's Investor Day, and thank you for being here with us this morning.

The Air Liquide ID

This is an important year for Air Liquide, as we celebrate in 2013, 100 years as a listed company on the Paris Stock Exchange. There are very few companies that began trading on the Paris Stock Exchange a century ago!

From a small start-up in 1902 to a world leader, Air Liquide has today a total revenue of 15 billion euros, and employs nearly 50,000 employees working in more than 80 countries around the world.

The Foundation

This is a unique human and industrial story: a century of development, innovation and success.

It is also the story of a remarkable stock price performance. Air Liquide has become one of the 15 largest market capitalizations in the Paris stock Exchange with a current valuation close to 31 billion euros.

Last but not least, it's a long story of steady earnings and dividend growth. In the course of the last 40 years, our dividend per share grew annually by +11%, and our share price increased by +12%/year.

What lie behind this exceptional track record are essentially 3 values embedded in the Group's DNA:

There is a **deep culture of engagement** around one core business, thanks to very motivated employees and a trust-based relationship with stakeholders. This is reflected in the loyalty of our people and of our long-term shareholders. We are thankful to have your support and remain deeply committed to delivering performance.

The second value is **long-term vision**, and it is illustrated in our strategy of profitable growth over the long term. This is the result of an intimate knowledge of our main markets and to the Group's global reach, which enables us to anticipate markets' evolution and to take on leadership positions.

The third value is **the capacity to innovate** continuously. For us, innovation is a smart combination of science, entrepreneurship and investment. Ideas, expertise, technologies and the can-do spirit form an integral part of our culture of innovation.

Short-term view

Today is an opportunity to share views and to connect you all with the management of the Group; to let you understand how we intend to extend this success over time. Let me take

the short term view first. Our last investor day, held in December 2010, saw the launch of ALMA 2015, whose objectives were announced in a quite different economic environment. Today, we will review the status of the ALMA programme, share with you the new light we have shed on our markets, and try to figure out what the next growth phase might be beyond 2015.

I am convinced that we have entered into a period of new trends, with visible changes at both countries' and citizens' levels. Our vision is shifting away from basically a geocentric two-dimensional view, where industrial growth was essentially coming from new capacities in developing economies, towards a more complex market-driven view, led by the search for added value, where every country is competing for a share of new markets and every citizen is expecting more, often for free.

The graph shows the convergence between economies after the 2008 crisis, and we can see that the gap between developing and mature economies is actually narrowing.

Against this backdrop, we have selected three major trends that shape our vision and strategy, and help to segment growth in our different markets. They will be used, during the day, to explain our approach.

The first trend fits well with our previous geographic-driven strategy, while the two others help build a richer and more nuanced understanding of our market-driven strategy.

Long-term view

Industry globalisation and resource constraints

The first trend is industry globalisation and resource constraints. Countries, industrial clusters, and companies are today competing on a global scale. They are all constrained by resources availability, be it natural gas, energy, human or financial resources, and must adapt to end market demand if they want to remain in the race. Manufacturing can move in and out of both developed and developing economies, which is a new phenomenon. We see a strong competitive wind blowing between countries, and many projects we follow are intended to give either a country or a customer a competitive advantage. Large Industries and Industrial Merchant world business lines follow this trend, and our positions in the world give us a leading edge to benefit from that trend.

Evolving consumption and demographics

The second trend is the evolving consumption and demographics. We are in a sort of soft revolution, where changes can be either rapid or slow, and which results from the rise of the middle class with new behaviours and expectations. Trends such as homing, urbanization, increased mobility and communication, concern about climate change, rising importance of health and wellness, ageing, and the rise of chronic diseases are all creating new opportunities for us. This is most notable in healthcare, where we see new prospects for home healthcare. Industrial merchant sees an equally high number of possibilities, specifically in the areas of energy and environmental applications, food and beverage quality management and digitalisation of our offers, with much potential for small end-users in cities. Our long-term experience in healthcare is unique and allows us to expand in new geographies, as well as to develop our service in new therapies. Our expertise in Industrial Merchant services and gas applications will be key success factors in all countries. This will magnify our global footprint and local presence simultaneously.

Appetite for innovation

The third trend is the appetite for innovation. My conviction is that this century will see technology blossom again. We know the appetite for innovation is booming from individuals to corporations and to society. New markets are being opened, creating opportunities for customers and for us. The challenge will certainly be the process by which and the speed at which the public will accept and buy into these new technologies. The electronic sector is a clear illustration of how the trends in end-user behaviour influence our products. The move towards mobile information and communication technologies spurred the evolution in the manufacturing of semiconductors, where more computing power and less energy consumption drive innovation, and as a consequence the usage of our new molecules called new precursors.

More globally, we have recently organised our innovation process differently to include entrepreneurship, disruptive innovation and capital venture on top of science and technology, in order to better reflect the way the world will innovate in the coming years. Our strategy is to deliver profitable growth over the long term. The new challenges that I just described will demand enhanced competitiveness and even smarter ideas, technologies and services, as there is no long term without competitiveness, nor any long term without innovation. Our source of inspiration, our oxygen, will be the creativity of our people and of our organisation. They will come up with the right ideas, so that we can offer the best products and value propositions to our present and future customers.

Air Liquide was built on oxygen, a vital resource for industry and health but also an essential element for generating new ideas. This is why I am pleased to introduce this morning our new tagline, 'Creative Oxygen'.

[FILM]

'Oxygen – central to life itself. Air Liquide was built on oxygen. For over 100 years we have been inspired by all the places it could take us, and when we think of the future we see the challenges and the opportunities as limits to be pushed. And we have confidence. This vital resource, oxygen, liberates ideas. As a company, it has given us wings, contributing in ways that have always been creative. Oxygen is fresh air, a positive energy that enables us to create value for our stakeholders, the jumping-off point for us as we move ahead. Oxygen is a source of inspiration for our most creative thinking, essential to industry and life. Oxygen is essential for new ideas, essential to growth, for all of us. Air Liquide – Creative Oxygen.'

[END OF FILM]

Concluding remarks

I hope you will enjoy and feel refreshed as you breathe new perspectives for the Group, and before we elaborate on the future, let us have a sort of soft landing and update you on where we stand with respect to the ALMA 2015 objectives. I will now hand over to Fabienne Lecorvaisier, who will present our ALMA 2015 achievements as of today. Thank you for your attention and have a good day.

Where Do We Stand?

Fabienne Lecorvaisier
CFO, Air Liquide

Good morning, everyone. I suggest that we spend some time discussing the economic context in which we have been evolving since 2010, before reviewing our performance relative to market, first globally and then by business line and by region. I will try to highlight the elements that have been in line with expectation and those which have triggered adjustment to our strategy. I will end, of course, by updating you on our 2015 objectives before handing over to the business presentations.

Ongoing economic difficulties

When we met at the end of 2010 I think we were all more-or-less under the impression that the crisis was over. None of us expected industrial markets to remain weak in Western Europe and in Japan in particular for such a long time. This chart, I think, is a very good illustration of what we have experienced. 2010 and 2011 GDP forecasts were pretty encouraging, but when forecasts were updated in 2012 and then again in 2013, the potential hopes of recovery were significantly delayed in the estimates. As you know, part of our business is strongly linked to GDP and even more to industrial production. This is in particular the case for our Industrial Merchant activities. As shown in the chart on the left, liquid sales of oxygen and nitrogen have remained more-or-less flat since the beginning of the crisis – a small premium that you can see for nitrogen being directly linked to the food and beverage industry. Conversely, our Large Industry volumes resisted much better, as you can see on the right, despite the downturn in the steel industry at the beginning of the period, which impacted oxygen. There is no need to say, as well, that those volumes were also largely supported by start-up and ramp-ups of new units over the period, in particular for hydrogen.

Global growth

If we now look at the global growth of our market, when we set up our 2010–2015 objectives, our expectation for market evolution at that time was more in the range of an average growth of +7%, and I believe that our competitors at the time had more-or-less the same assessment. In this context, we were committed to outperforming the markets by 1%–3%, resulting in a growth that we estimated between +8% and +10%. Since 2010, the market has been much weaker than we expected, and we now foresee an average market growth for 2010–2015 which is more in the +4% to +5% range.

Our commitment to outperform the market definitely remains. This has resulted in an updated growth objective between +5% and +7% at the Group level. We were more in the +6% to +7% estimate, but as you know, we have a strong currency headwind in 2013, and to take that into account we have widened the range to +5% to +7%. However, the situation remains contrasted between the business lines. On this chart you can see the initial ALMA 2010–2015 range, and then the current update. As explained before, Large Industries have been quite in line with expectation, thanks to strong development efforts and to a few strategy adjustments that we will discuss later this morning. And this has also been the case for Healthcare, where we have delivered thanks to a strong expansion in Home Healthcare. Things have of course been much more difficult with Industrial Merchant, more strongly linked

to industrial production, and Electronics, which have been impacted by lower consumption in many countries, at least between 2010 and 2013.

Large Industries

I will now come back in more detail on each of the business lines, starting with Large Industries. Large Industries have been in line with expectation in many regards, and in particular with the development in new geographies, where we now expect developing economies to represent 40% of our sales in 2015. As expected as well, the market has been moving more to hydrogen, and for oxygen to much larger air separation units. In terms of strategy, we continue to focus on China, but we have also opened a new battlefield with large energy projects in North America, and we have a special focus on project execution.

Industrial Merchant

In our Industrial Merchant activities, the erosion of the base business in Western Europe and Japan in particular for the small customer base was mostly unexpected, and it impacted strongly our cylinder business. This led us to make significant and deep adjustments to our way of doing business, which are still ongoing. We had to adjust our capacity and resources, which triggers important non-recurring costs, especially in 2013. We moved our focus from capacity extension to loading of the existing assets, and also to renewed offers for cylinders and speciality cases. We have also strongly reactivated our innovation processes for the Group to reinvent the future of the merchant business.

Electronics

Electronics is certainly the shakiest of the business segment. This is not necessarily visible when you look at the average figures, but during the period we had a range of quarterly sales variation from -30% to +30%. The electronic market decreased dramatically in Europe, with a violent shift of the photovoltaic industry to Asia. Our carrier sales have been holding strong, as expected, which is good news, but we had to refocus rapidly on developing both position in Asia, and our high-tech offer for the industry leaders.

Healthcare

Like large Industries, our Healthcare activities delivered in line with plans and even above. We were targeting one million patients for 2015, but we are already serving them today, thanks to acquisitions and expansion in new countries. We still focus on strengthening our base, in particular in Western Europe, while accompanying the reduction of the state budgets. Our business is still mostly in mature economies. The potential offered by new geographies remains huge. Simultaneously we continue to extend our offer with new therapies and further Home Healthcare services.

Sales expectations

Coming back to a more original view, you have here our expectations in terms of industrial sales, so excluding Healthcare, for the average growth of the full period 2010–2015. We should be able to deliver a strong +15% average growth in developing economies, and they should represent close to one third of our industrial activities in 2015. As shown on the graph, it is probably in Eastern Europe that we will grow faster, benefiting from the stronger acceleration of the outsourcing trend, in particular in Russia and Ukraine. But growth will also be robust in the other zones, supported by Large Industries and Industrial Merchant, and by Electronic as well in Asia. Mature economies should be around +3% average growth, with

North America remaining solid, Western Europe recovering very progressively, but Japan remaining probably weak in average over the period.

Healthcare will grow +7% to +8%, supported by bolt-on acquisitions, more specifically in mature countries, and expansion in new geographies as well. We currently have a high double-digit growth in new geographies, and that should continue. Healthcare will continue to represent between 18% and 20% of our Gas and Services business until 2015.

As a result, we expect our business mix to continue to strengthen, with Large Industries and Healthcare representing close to 60% of the Gas and Services business, which will certainly help in reducing dependency on industrial production. Our geographical footprint is also progressively becoming more balanced, with the stake of industrial activities in mature economies being reduced by 10% from 66% to 56% in 2015.

Coming back to the global picture, based on a market growing globally between +4% and +5%, we now foresee the Group average growth for the period between +5% and +7%, and we therefore confirm our +2% outperformance. The base business should be in the +2% to +3% range, and the contribution of our development initiatives will add +4% to +5% to growth.

During the period, we will have invested approximately €12 billion – €10 billion in industrial capex and €2 billion or so in acquisitions, which is consistent with what we have announced in 2010. It is worth mentioning that, as you probably saw, we have been upgraded by S&P from A to A+ last night, which is of course good news for us but also for our customers.

ALMA was not only about growth but about profitable growth. We had initially targeted efficiencies, cost savings of €200 million per year, or €1 billion over the period. As you know, we have upgraded this objective by +30% and we are now confident that we will achieve €1.3 billion of sustainable cost reduction at the end of 2015, partly supported by the ongoing adjustment plans. This will contribute to sustained profitability improvement.

You can see on the chart on the left that over the last 10 years our depreciation to sales have decreased progressively, demonstrating that our efforts in terms of controlling capital intensity are delivering. As a result, as shown on the right, operational margin has significantly improved over time, and in particular during the crisis, where we had the major step change in 2009 that we have been able to confirm and to maintain. We see no reason why that should not continue.

Business lines

Just for your enjoyment, we will give you the detail of the business lines. You can see that here again the improvement over time is visible. The first curve is the Large Industries curve where, as you know, we have significantly increased the stake of hydrogen, which requires less capital but also delivers slightly lower margins. Nevertheless, if we exclude the natural gas impact – this is the dotted curve at the top – you see that we have been able to more-or-less stabilise our margins. For the other curves, whether we consider Industrial Merchant, Electronics or Healthcare, you see that the improvement is steady over time, and I think that the chart speaks for itself.

Investment

The third pillar of ALMA 2010–2015 was investment and return on investment. With the crisis and with the emergence of larger projects, it is clear that the time lag between investment decision, capex disbursement and contribution to sales has extended a little bit. Some of you have worried about investment decisions increasing in 2012 and 2013, and the contribution to sales of start-ups and ramp-ups remaining modest. We want to reiterate that the 2012 and 2013 high-level of investment decisions will generate growth and return, and that will materialise in the three to four years to come. This is a very solid base for our future development.

Projects in hand

As a consequence, we confirm that our 2010–2015 estimate for industrial capital expenditures in the €10-billion range. These investments are largely focused on growing markets, energy conversion in Large Industries and developing economies in Industrial Merchant. At the present time – and this is very important to note – we have approximately €2.6 billion of projects in hand – what we call 'projects in hand' are projects that have been decided and are signed, under construction or even erected, but not started yet. What is important to note is that this also represents €1.3 billion of annual sales reserve, which will materialise progressively between 2014, 2015, and for some of them even beyond. This is also why, even if those projects in hand are temporally weighing on the return on capital employed, we are still confident in our long-term 12% to 13% objective. However, to take into account the extension of the cycle, we will extend the range from 11% to 13%.

Acquisition

In terms of acquisition, we are also confirming the initial estimate of around €2 billion, with a large part in Healthcare, in particular in mature economies. You know that in Healthcare and in Merchant, bolt-on acquisitions are an excellent complement to organic growth, as they allow us to increase local density. They also create a large opportunity for further efficiencies.

It is also worth pointing out that we have enhanced our value creation, being the difference between our return on capital employed and weighted average cost of capital over time. In the years to come in particular, we have extended cycles on larger projects. We certainly have more volatility on return on capital employed from one year to another. Nevertheless, here again we are confident in our ability to continue to increase added value that we will create through our targeted investment strategy.

Responsibility commitment

The fourth pillar of ALMA 2010–2015 was our responsibility commitment and here again we have made significant progress. Acting responsibly is now more and more embedded in our strategy and way of thinking. We have rearticulated our commitment around three axes: contributing to our customers and patients, and to the society at large; building relationships with our shareholders and all of our stakeholders; and developing our people and running our operations.

The examples of our achievements are numerous. You have some here. The commitment is really integrated in our actions, whether we consider relationships with customers, employee safety, micro-initiatives for communities through the Air Liquide Foundation, energy consumption or value delivered to our shareholders. I will just comment on the last one.

Since the creation of the CAC 40 index in 1987, the Air Liquide share has outperformed by 2.3 times the index performance.

Concluding remarks

To summarise, we believe that the main objectives of our ALMA plan are still valid, relative to a context that is clearly not what we were anticipating in 2010. We are still committed to growing faster than the market. We have increased our efficiency targets by 30%. In terms of return on capital employed, it will also be more volatile than in the past. We are still confident that the way we manage our investment will lead us to improvement. At the same time responsibility is more and more embedded in the way we act and manage our operations and initiatives.

As Benoît stated, we need to adapt to a different environment. Our past and current investments will deliver. We are progressively shifting from a geographic strategy to a more market-oriented strategy, and the major trends that we have identified are also creating huge opportunities. For the rest of the morning, we will try to drive you through the renewed strategy of our values businesses, while sharing with you these opportunities.

For now, I will hand over to Pierre Dufour, who will comment on the impact of industry globalisation and resource constraints on our business. Thank you for your attention.

Industry Globalization and Resource Constraints

Pierre Dufour

Senior Executive Vice-President, Air Liquide

Levers

Good morning, everyone. The levers that have been supporting our Large Industries business for a long time are well known. Our customers need to either expand or modernise, or expand and modernise, the production of metals, of chemicals, or of refined products. They need to meet more exacting environmental standards. They need to remain or become or re-become competitive on a global scale.

In order to do all this, industrial gases and technology are key. Our customers increasingly turn to us to either acquire technologies or to entrust us with their industrial gas needs through outsourcing. These levers have taken on significantly more importance in the last 10 years or so, because of two key evolutions of the energy market.

First, energy prices have taken a significant hike since the early 2000s. Both oil and natural gas have seen their prices multiply by five or six in that period. Other commodities have seen a similar trend, albeit less violent for some.

Second, for all of those countries that need to import their raw materials, and especially their energy, the race for energy independence is on. We will spend the next 45 minutes or so, including Q&A, explaining how all of this is providing opportunities for Air Liquide and how we create value for our customers and our shareholders in the process. Francois Jackow, Group Vice President, Corporate Strategy and Large Industries Business Line, and Mike Graff, Senior Vice President Americas, Safety and Industrial Systems, will share in the presentation. They

will be joined for the Q&A session by Cristiano Tortelli, Vice President Global Engineering and Construction Solutions; Frédéric Despréaux, Vice President Large Industries, China; and Christophe Chalier, Vice President Eastern Europe.

Large Industries

François Jackow

Group Vice President, Large Industries, Air Liquide

I am going to show, in the next few minutes, how the market is going to continue to grow at a rate reaching probably above +8% per year, and also how Air Liquide is going to reinforce its leadership position and grow faster than the market.

Market situation

Let us start by looking at the market. In the major levers that Pierre just mentioned, there are a few which are especially relevant for the Large Industries business, for our customers and then for us. The first one relates to globalisation and modernisation of the manufacturing industry. The second one relates to the highly differentiated energy prices in the world. The last trend is related to use of local resources.

Globalisation and modernisation

When local players need to meet local demand, they are adding capacity and improving. More and more, though, they are also competing globally. This could mean adding capacity, but not only adding capacity. It also means improving productivity, reducing emissions and meeting environmental standards. Let us listen to Metinvest, one of the leading steel companies from Ukraine.

[FILM IN UKRAINIAN]

Metinvest is an international integrated steel and mining company owning assets in Ukraine, Europe and the United States. Our assets include the largest integrated steelmaking sites in Ukraine: Mariupol with Azovstal and Ilyich, as well as Yenakieve Steel.

We have a strong competitive position and a favorable geographic location to supply the steel demand of the future, both in mature and fast growing economies.

This position is based on a number of sustainable competitive advantages including low-cost reserves of iron ore, secure and diversified supply of high quality coking coal. Both of them are available locally in Ukraine. And we are modernizing and improving constantly the competitiveness and efficiency of our production base.

[END OF FILM]

Modernisation of the industry is not a new trend, but there are two things that are making it extremely relevant for our industry. The first one is the fact that the intensity of industrial gas is increasing, which means that the quantity of industrial gases that are used by our customers to make their products is increasing. When companies want to modernise, very often they have to change their processes to reduce emissions, to improve productivity and to reduce energy consumption. To do that they implement more and more sophisticated

manufacturing processes, which very often requires more industrial gases. If you look at the oxygen consumption in the steel industry or the hydrogen consumption in refining for the past 10 years, you see this increase clearly. This is actually going to continue and to accelerate.

Besides the increase in the intensity of industrial gas usage, there is another trend that is extremely important. This is the fact that when companies want to modernise, very often they consider shifting from self-production to outsourcing. This represents a very significant opportunity. If you look at oxygen globally, only one third of the total installed capacity in the world is being outsourced. This is 70% in the mature economies and only 20% in the developing ones. If you take hydrogen, the ratio is not even one third; it is probably 15% that is being outsourced today.

Clearly, though, things are changing. If you take China, for example, in the past three years 50% of the new oxygen demand has been outsourced. So we see that this trend of globalization and modernization is creating new opportunities and market growth, of course related to overall economic growth and GDP growth, but also a change in the structure of the industry, intensity of the industrial gas usage and outsourcing of captive production. Just as an illustration, if you consider only 2% of the self-production market shifting towards outsourcing, this represents an available market of €1 billion.

Energy prices

So let us look at the second trend now. The second trend relates to the shift that we have seen in the past few years around the energy prices in the world. There has been a clear decorelation of the energy prices in different parts of the world. The most striking effect has been what has happened in the US with the shale gas revolution. Let us listen to Huntsman, a leading petrochemical company.

[FILM]

'The shale gas revolution in the United States is a real advantage to the petrochemical industry. It gives access to cheaper energy prices and cheaper feedstock, because ethane, present in large quantities in shale gas, is the feedstock of choice for chemicals manufacturing. The United States is now the second most competitive region in the world, just after the Middle East. This is driving an overall reindustrialisation wave in the United States in the chemical industry alone. About 100 projects have been announced, valued at \$70 billion. Huntsman will reinvest in the US Gulf Coast, for example, with a new ethylene oxide capacity in Texas, a new isocyanates capacity in Louisiana. We also have several other projects currently under consideration.'

[END OF FILM]

In a few minutes, Mike Graff is going to talk more about this trend and how it is creating significant opportunity in North America.

Access to energy resources

Let us finish with the third lever in the market. This is the fact that in order to meet their growth objectives companies and nations have to access energy and resources. In doing so, they have to consider three very important aspects. The first one is the independence of energy supply, the security of supply. This is becoming more and more important. The second

one is, of course, the competitiveness of the supply. The third one, which is also becoming more and more present, is the environmental impact.

In China, where oil is not readily available, we see more and more projects not just burning coal as a fuel in power plants to make electricity – which sometimes creates local pollution – but to upgrade coal into a gasification route, to make basic building blocks for the petrochemicals, the refining and the fuel industry.

Let us listen to what SCJ is saying about one of their projects in China.

[FILM]

'The glass is traditionally used in construction and in automobiles. It is also found in growing markets through new applications in electronics, solar energy and touch panels. Taiwan Glass believes that the profit of a high value-added glass remains stable, and plans to strengthen its investment in high-quality processed gases. With limited Chinese resources, in oil and natural gas, coal is the most available feedstock and it can be used for soda ash production. It is the major raw material for glass.'

'At SCJ, we have applied a strategy of upwards vertical integration into soda ash, and we believe this competitive advantage will allow us to prosper in the future.'

[END OF FILM]

Those projects, which are energy conversion projects and which upgrade coal or natural gas, currently happen in both mature and developing economies. They represent very significant opportunities, not only because of their size – usually they are very large projects – but also because they offer opportunities to supply much more than just 'over the fence' oxygen, as we will see in a few minutes. If you take the average size of those energy conversion projects, they are typically two to four times larger than the classical 'over the fence' project.

Growth in the Large Industries market

To summarise, we saw that those different market levers combine to create significant growth in the Large Industries market. We see the growth being above +8% again being driven by economic growth as well as by change in the structure of the market, increase in the gas intensity, and increase in the outsourcing or change in the scope.

Air Liquide positioned to capture growth

Technology and engineering capabilities

The first element, which is at the heart of our value creation in the Large Industries market, is our technology and engineering capabilities. We have more than 1,600 patents. These were originally based on Air Liquide core technology, but are being expanded and further developed with the Lurgi acquisition. Today, we cover the full spectrum of technologies for industrial gas production, separation, purification and transformation.

Our 5,000 engineers, who support and work in close collaboration with our Large Industries operation team, deliver not only innovation in terms of cost reduction, limitation of emissions, but also outstanding capabilities for project execution. A very tight discipline on capex spending is absolutely key in the Large Industries business. As an illustration, even within the difficult market in China, our last twenty projects there have been executed within plus or minus 1% of the initial capital budget.

Being present in China, India, the Middle East, Eastern and Western Europe, and North America, our global reach not only gives us the ability to be very close to the market and the customers, but also allows us to design and execute projects in a very cost-effective manner. Our ability to create, design and build the best-in-class plant is absolutely key in our Large Industries business; it is key for our customers because it creates differentiation and legitimacy, and it is key for us because it is a fundamental element of the profitability of the business.

Positioned within top industrial clusters

The second element, which is very important in capturing the growth of the market, is our position within the top industrial clusters. Today, two-thirds of the petrochemicals, and refining industries are located in those large industrial clusters. By offering economy of scales and infrastructure, those clusters provide an extremely competitive environment for the petrochemicals and refining industries.

As a matter of fact, growth of the chemical industries in those clusters will be four times the average of the industry. Today, Air Liquide is positioned in more than 60% of the top clusters in the world. Having extensive pipeline networks and multiple large plants, we are able to provide unique benefits to our customers. These benefits relate to quality of supply and, as an example, in our European network we have had no nitrogen interruption over the past 20 years. These benefits also relate to competitiveness; being able to optimise both capex and opex for the supply of the products and the services, as opposed to a stand-alone solution.

Having more pipeline infrastructure than all our competitors combined, we believe we will be in a very good position to capture more growth than our competitors in those clusters.

Excellence in operations

Excellence in operations is true for the networks as well as all of our assets, and this is the only way to gain the trust and satisfaction of our customers over the 15- or 20-year contracts that we have. This is, of course, based on a system and all of our plants are certified with our proprietary industrial management system. However, this is also based on our teams and today we have the largest pool of industry professionals; they are highly committed to develop and provide best-in-class services to our customers.

Safety is, of course, our number one priority and we keep improving our safety in performance. As an illustration of this, we have divided our loss-time accidents by three in the past ten years whilst significantly growing our business. Regarding quality of supply and limiting the interruption of supply to the customer, we have already reached a high level in terms of reliability of our supply. However, this spirit of continuous improvement is extremely important. This is also true for the energy efficiency, where we keep improving the energy consumption of our units. All this continuous improvement and excellence in operations delivers value to our customers over the duration of the contracts.

Customer satisfaction

All those different ingredients have basically been the recipe for the success of our 'over the fence' Large Industries business. The fact that more than 98% of our contracts are being renewed after the initial term is a sign of the value and satisfaction of our customers. We have developed a very strong customer loyalty based on the performance over time. This

recipe will allow us to capture growth in these Large Industries businesses in the future and we will be applying this, of course, by continuing to improve.

However, we will not stop here, because we also see the potential to go further and be on this 'over the fence' model. This is especially true in the energy conversion project that I mentioned just before. We can, of course, provide, and we are providing, 'over the fence' offers in those projects, and those projects are usually very large projects. On top of this, thanks to our technology portfolio we can offer much more to the customers and we have technology processes which add value within the transformation chain of the feedstock within customers' processes. On top of the 'over the fence' supply, these open the door to technology licenses, to proprietary equipment sales or to service sales. With this package, we can provide a unique benefit to the customer.

On the dozen of deals like this that we are working on today, in both mature and developing economies, we see clearly that we are moving from a strict supplier position to a differentiated partner. In fact, in more than 50% of those projects, we are in exclusive negotiation or partnership with the customer, which is a strong sign of the unique value that we are bringing to those new opportunities.

Summary

To summarise some of the key messages for Large Industries, the first point is that we clearly see the market growing based on structural changes in the market, as well as economic growth. We have built a strong market position and we will leverage those trends. However, we will go further by expanding beyond the 'over the fence' model. In doing so, we will rely on the very strong customer base and loyalty that we have earned over the years. With this, our ambition is to grow faster than the market and to reinforce our leadership position.

Thank you very much.

Energy Evolution and Opportunities in North America

Michael Graff

Senior Vice President, Americas, Air Liquide

Opening comments

Good morning, everybody. I would like to take a couple of minutes and build on some of the things Pierre and François spoke of, and to spend a little time discussing the energy evolution in North America, some of the key underlying drivers and, really more importantly, some of the clear opportunities that this brings.

Pioneering energy technologies

Overview

This energy evolution in North America is predominantly driven by the combination of two well-proven, well-developed technologies: horizontal drilling and hydraulic fracturing. When combined, these technologies provide the capability to exploit and produce previously unrecoverable hydrocarbons that were in difficult-to-reach places.

With the application of these combined technologies, suddenly the level of development and the significant increase in production of oil, natural gas, and the associated production of natural gas liquids, have really changed, not only the prospective of energy in North America, but have created significant opportunity for new investment created significant opportunity for new investment. This really results in North America becoming energy independent and becoming a real focal point, not only for North American investment but for global investment in certain energy-intensive industries.

As a result, we have already seen roughly \$90 billion in annual spending to go ahead and develop these new sources of oil and natural gas. When you begin to look at the associated investment in energy-intensive industries, primarily in petrochemicals and the associated derivatives, we see an estimate of over \$70 billion in capital investment in the coming three to four years.

Impact of these technologies on development: 'over the fence' demand

When we look at this from an Air Liquide perspective, the level of opportunity is multi-fold. Let us first look at the 'over the fence' demand for oxygen as an example. If we begin to look at the addition of new crackers, the expansion of existing crackers, and the significant investment in the derivative units that are associated with the petrochemical industry in methanol, we see what could be a demand increase of up to 50,000 tons of oxygen per day in the North American market.

Additionally, as well look as what is happening in the refining system and its continuing expansion in growth – given the lower cost of energy resources in North America – and the need to go ahead and continue to meet new environmental regulations, we see a significant uplift in the demand for 'over the fence' in hydrogen to support the refining industry as well.

A third element of this, which is really important from an Air Liquide perspective, is that the two investments really combine, to some extent, with the development and investment in new crackers in North America, in addition to producing all of the related chemical products, they will co-produce significant quantities of hydrogen off-gas. With the right technologies, which we possess, and the right capabilities to store and deliver that hydrogen in a reliable way, we can meet some of the growing needs of hydrogen in North America.

Impact of these technologies on development: application to new opportunities

A second key area of opportunity for Air Liquide lies in the deployment and application of our technologies and engineering capabilities to these new opportunities. François had mentioned earlier that globally E&C Solutions really combines the historic air gas and cryogenic technologies of Air Liquide with the hydrocarbon gasification and syngas capabilities that we gained with the Lurgi acquisition back in 2007.

This combined platform of technologies and engineering allows us to not only provide better and more efficient means from an 'over the fence' perspective, but will also allow us to go ahead and directly apply those technologies, to help the petrochemical companies as they begin to go ahead, and grow and expand, on the Gulf Coast.

Impact of these technologies on development: merchant business

The third area of significant development for us is in our merchant business, and it is really threefold. The first key point relates to oil well services, as we look at how you go ahead to

produce oil and gas at the well head utilising these technologies; I will speak more about that in a minute. The second key area relates to manufacturing that will be there to support all of these energy intensive industries, and significant growth for those manufacturing areas that are energy dependent. Thirdly, with the significant growth in oil and gas production, the significant growth in investment in new facilities – especially in petrochemicals – and the ever-increasing regulatory needs, there will be a significant uplift in the demand for emission monitoring. This will drive a demand for all of our speciality gases that serve those markets.

Oil well service companies

If we take a minute and look at the opportunity we see directly in working with the oil well service companies and the oil and gas companies, and actually producing oil and specifically shale gas and its associated natural gas liquids. We see that this has created a significant opportunity for us right there at the well head. We have worked closely with the oil well service companies over the course of the last five years, looking at what technologies we can bring to aid in the evolution and development of these technologies, and how we can do this in a more sustainable way.

As you are aware, hydraulic fracturing requires significantly large quantities of water in order to go ahead and develop the wells. This can be up to 4 million litres of water just for the development of one well. That water not only has to be available – or, if not available, trucked in – but must be treated and dealt with, since by the end of the day it is contaminated, brackish water.

We have worked with the oil well service companies to begin to displace these large quantities of water that are necessary for the fracking process. We are beginning to replace the water with liquid nitrogen or liquid carbon dioxide – it is now predominantly the former – to go ahead and back out much of this water. This has created significant opportunity for us at the well head, just in the water displacement, for all those reasons I have mentioned.

Additionally, in working closely with the oil well service companies for some of these formations, we have found that it actually improves the efficiency of the natural gas release in some of these shales, and actually increases the efficiency and is more cost-effective, in terms of the cost per unit of shale that is fractured. As a result, we have invested significantly in the right areas to provide the liquids necessary to support this evolution. We have created an opportunity where we now have contracts with all the major oil well service companies and we are the leader in this market in North America. We can leverage those technologies and their capability, as this may develop worldwide.

Large Industries pipeline system

Another key area of opportunity for us clearly lies in our 'over the fence' opportunities in Large Industries. As François mentioned earlier, one of the key and core components of competitive advantage for Air Liquide – especially on the Gulf Coast, whether it is in Texas along the entirety of the Texas Gulf Coast, or whether it is in the state of Louisiana, along the Mississippi river pipeline – is that over time we have been able to develop and actually create a Large Industries pipeline system in order to meet the needs of our customers.

We have tremendous rapport with our customers, because they need not only our oxygen and our hydrogen to be able to go ahead and meet their needs on an ongoing basis, but they need our nitrogen systems in order to provide safe operations and safe off-processes in the

event of a shutdown. That pipeline system allows us to not only link all the major industrial centres, and combine the needs of our customers with our production capabilities across the vast geography, but assures that we are there when they need them from a reliability and availability perspective.

If you look, for example, at the Gulf Coast, and you recognise the significant infrastructure and the advantage it gives us today, and you overlay all of the new projects that have been announced, and you look at where they're located – recognising that there are 42 projects currently under development that will benefit from this energy evolution in the petrochemical space and, to some extent, in the steel space – you will see that every one of those opportunities on the Gulf Coast lies adjacent to our pipeline system.

This creates tremendous opportunity for us as we think about not only what we can offer to our customers, and how we can go ahead and leverage that with additional growth, but the 3,200km of pipeline systems that we have and the current capacity of 20,000 tons of oxygen, in addition to the world's largest hydrogen cavern to store hydrogen and make it available as appropriate. This will make us a clear leader, not only today but for the future, from a growth perspective.

Concluding comments

In conclusion, if we look at where we are today, this energy evolution clearly creates significant opportunity in North America for a multitude of investments. Firstly, from an Air Liquide perspective, we have worked hard to position ourselves by bringing the technologies to bear to support the energy industries that are concentrated in North America, and to bring our capabilities in order to work with them on new opportunities of development in support of their needs.

The second key point relates to our engineering capabilities. We not only have – especially if we continue to grow and develop – our engineering capabilities consistent with the level of growth and opportunity we see specific to North America, but we are able to leverage our global capabilities, and our global technologies that are developed worldwide, to concentrate them in North America to take advantage of these opportunities.

The final point relates to our leadership position that has been strategically well-placed on the Gulf Coast, which has really created an opportunity for us to be very well-positioned as we capture some of these clear opportunities within the industrial gas space.

Thank you.

Q&A

Andrew Stott (Bank of America Merrill Lynch): Just on outsourcing, I wondered if you could somehow quantify where we are with outsourcing opportunities that you see relative to, say, three years ago? I am trying to relate this to the target for sales growth shifting down. I am assuming that is all just the economic environment, rather than outsourcing, but I just wondered if we can go back to basics on that whole concept. Perhaps you could give a few examples of areas where you still see a lot of opportunity there.

François Jackow: As I mentioned before, the overall capacity for industrial gases is being self-produced. Therefore, today we are probably in the range of 20%–21% of being outsourced between all the different gases globally. This would have probably been 2% less ten years ago, and the market has grown very significantly in the meantime.

One of the biggest impacts was in China and relates to added capacity. At the beginning, most of the oxygen demand for the steel industry actually related to the sale of equipment. In the past three to five years we have seen a shift towards more outsourcing. As I mentioned before, 50% of the oxygen demand was outsourced.

When we look forward we see that this trend will continue overall, and in the next five years we will probably see another 2% in the share of the outsourcing overall. I think you have to realise that this is, of course, a trend in the market, but it is also based on the ability that we have to convince the customer to switch. We believe that we have been quite successful in doing this. We have done several takeovers, where we basically take the existing assets from the customer. On average, in the past few years we have done more than four takeovers every year.

That is the overall trend and we do believe that the trend is probably going to be more pronounced for oxygen, where it will receive a higher share of outsourcing than for hydrogen. However, hydrogen still represents the largest potential.

Christian Faitz (Macquarie): Can you talk about current growth trends in Large Industries in China and how you see that evolving into 2014? Is there any improvement there compared to the growth shock of 2013?

Pierre Dufour: China has seen a pretty significant evolution in the definition of the market for the last ten years. Up to about 2012, the growth was mainly from the steel industry. This growth has now abated quite a bit, because most of the new capacity has been built, and although there is some continuing modernisation projects, the growth is no longer coming from steel. It is now coming from what we call energy conversion, which is the use of coal as a feedstock for a lot of things. As François was saying, it is not just burned – which is actually discouraged – but is transformed into either chemicals or liquid fuels.

That is generating the new wave of growth which we expect to be of the same magnitude of the growth that we have seen in the past, except with fewer large projects than what we have seen previously. If a 2,000-ton project represented the average project in the past, now the average is more than 8,000 to 10,000 tons per day. Therefore, there are fewer projects which are larger, but overall the same growth pattern remains.

Frédéric Desprésaux: I think there is a combination of different effects, but if we project ourselves up to 2015 – even beyond 2020 – I think the trend on steel is clearly going to decrease bottlenecks, but it will also reveal opportunities on outsourcing, as François mentioned. The production of chemicals from everything from coal to X represents the predominant trend. These are larger projects and we see quite a few. Gasification is another part of the growth opportunity, and we signed a contract with Shenyuan Chemical, in the Fujian province, in April of this year; this is something that we are going to develop and this will also fuel our growth.

Pierre Dufour: The last trend which I think is important is the move towards the West. Most of the coal resources are in the North West and in the Far West, and this is where most of the projects are being developed today. This presents its own challenges and opportunities.

Thomas Gilbert (UBS): Benoît Potier talked about a change in strategy from a more geographic to a market-driven approach. I just want to understand the way in which this affects the capital allocation in your business, because it is a basin strategy business. I want to understand whether you are the segment of Air Liquide that is exempt from this change in strategy, and how it is affecting you.

The second question relates to whether you can disclose the 309 air separation units, and I am not talking about hydrogen. Can you disclose how many are connected to a pipeline today?

The third question relates to Lurgi. There is a bit of a debate, as you said, on whether the model for inner Mongolia should be a plant sale, or engineering-only, model or an engineering plus an 'over the fence model', given the 20-year contract basis, environmental costs, and water scarcity. I am just wondering whether you would be prepared to go just for plant sales, or whether Lurgi's function is really mainly to win you the 'over the fence' contract as well, and how you are technologically positioned.

Pierre Dufour: I will address the first question. Firstly, when the President announces a strategy, nobody is really exempt from it; I am sure you realise that. In Large Industries, we used to have a focus which stated that all of the projects would come from our subsidiaries and that they would propose the projects for investment. The flow of opportunities was channelled mainly through our geographies. However, we are now seeing more and more that this flow of opportunities is coming through key customers and strategic customers, irrespective of geography.

Of course, a plant and a network are in a location, and the local operations have to execute these investments at the end. However, the flow of opportunities has seen a more market-driven channel than in the past. Our implementation is not changing, but the flow is a little bit more market-driven than it was in the past. That is how this market versus geostrategy plays out for Large Industries.

François Jackow: I do not have the answer to the 2nd question. Regarding the number of plants connected to the pipeline, I think we can come back to you. We are looking more at the capacity split for oxygen and nitrogen, which is perhaps of interest to you. However, having more than a dozen systems globally, those systems have a very large capacity; we typically have 20 plants connected, for example, in the US on the different systems. I can come back to you on this.

Pierre Dufour: It is largely above half, although we will get you the exact number. Most of our plants are connected to a system.

Cristiano Tortelli: As far as the third question is concerned, as François described, we are working very closely with Large Industries and our objective is to solve customers' problems. Through technology, we are willing to offer both the 'Over the Fence' solution integrated with the sale of the technology, and the larger component, the proprietary equipment. For us, it is integrated in one way to make sure that we solve the customer's issue from an executional

and operational point of view at the end. The answer is 'yes': we are working together to offer both packages.

Pierre Dufour: Lurgi's mission is to both support the Group, and to develop its offer and its competitiveness on the open sale of equipment market; to make sure they stay on edge in terms of competitiveness. I am not sure we planned for it, but we expect that the Group investments will represent about half of Lurgi's business or load, and that the other half would come from a sale of equipment basis.

Peter Mackey (Morgan Stanley): Can you talk about how you price contracts when you are bolting people under clusters? You talked about the capex and opex savings; how much of that is passed to the customer through the contract terms and how much do you enjoy better return on capital on those investments.

Secondly, you talked a lot about the opportunities in North America, both integrating the offer with Lurgi, and also the advantage you have in your pipeline in the Texas/Louisiana range. That is effectively your US peers' backyard and they do not have that engineering integration. Can you talk about the competitive environment and how they are trying to compete with your offering in North America?

Michael Graff: I think, when you look at pricing and you look at the evolution of the business itself there are always many components to what might go into that. To begin with, I think you have to understand, from a customer standpoint, their alternatives, their capabilities and the value is that it has brought to them.

We then look at our capability to supply. We understand the integrated nature of our pipeline system and seek to understand the reliability and that availability that it brings, rather than just our production costs. That is to say that it is not just, 'here is a molecule', but, 'here is a molecule that we are able to go ahead and provide you, because we have a pipeline system that comes from multiple sources.' We take all of those things into consideration as we think about how that evolves.

In the end, if we think about the advances from an engineering and technology standpoint, we continue to build larger plants that are more efficient and tie them into our pipeline systems. This allows us to leverage those economies of scale and create a good pricing environment for our customers, whilst assuring that we preserve the level of returns that we need and capture the value we should for those investments that we have made.

Pierre Dufour: Regarding the response of our competitors to this, you are probably better off directly asking them the question, because when we do they do not really answer. It is fair to say, and I have been saying it for a long time, that with our position we can either get a project at the same return than the competition with a lower price to the customer, or get a better return at an equal price than the competition. I think that is the only comment we can make at this time on this question.

Andrew Benson (Citigroup): On page 21 you talk about the Gulf Coast pipeline system advantage, and you have about 40 green stars there indicating the projects. Can you share with us the proportion of those you have won, and what that means or how you think you are placed to win that business, and how much is set to come or been won? This will just give us an idea of how confident you are of growing there.

The second question, possibly to Fabienne on page 10: you talk about the 2011–2015 growth period, but we have had three years of that. So, really you are talking about the growth in 2014 and 2015. Given that the growth in the last three years has been below trend, are you implying that you are looking at double digit growth in 2014–2015 with what you are saying here?

Michael Graff: The evolution of these 42 projects is not all at one time. Many are still in development and are not quite in a place yet where they are out for bid or out for need. One of the key components for us is to assure, from a relationship standpoint, we are having the right level of discussions, we really know our customers' needs and begin to bring solutions, not just in terms of over the fence capability but jointly with engineering and construction globally, to go ahead and assure we understand where they may be going, what may be happening and how we go ahead and meet those needs.

If I think about where we are today, and so capturing some level of benefit already, I might phrase it this way: if I look at the level of Large Industries investment and significant merchant investment specific to this space, you would look at that over the course of the last five years and say if you invested €1.2 billion in the North American landscape over the last four or five years, some 75% of that went directly into the Gulf Coast and supplying the needs of many of our customers. The reality is that almost half of that – some 40%–45% of it – has already been committed in the last 12 months specific to these projects. If you look at the level of announcement, that far outweighs anything else that is out there in the market right now and those investments are specific not just to one customer necessarily, but to the pipeline system that enables other capabilities.

Pierre Dufour: To be precise, I think we can identify two projects that were already decided from a customer perspective, and we won both of them. So, I am not sure if we can project the curve to all 42, but so far, so good.

Fabienne Lecorvaisier: For Large Industries over the period 2010–2015, we project 8%–9% average growth. This is consistent with what we have done so far; 2011 and 2012 were relatively strong, whilst 2013 is slower due to the currency headwind and also to a lower contribution of start-ups and ramp-ups. We always said that this contribution is going to accelerate in 2014 and even more in 2015 due in particular to the start-up of our Yanbu project in the Middle East. That does not imply double-digit for 2014–2015, but stronger growth than what we had in the first three years.

Jeremy Redenius (Sanford Bernstein): I had a question about capex in Industrial Merchant. Looking at your growth target of +3% to +5% for Industrial Merchant, I would have said that is in a world of about 4% industrial production weighted regionally for your geographic exposure. But then I see you are probably putting something like €600–700 million per annum capex into that Industrial Merchant business, roughly. So, I am wondering where that capex is going? Is that just to meet the demand growth – because I would have thought you had overcapacity – or is that capex for other parts of the world because you have oversupply in some parts of the world and you need to build in others? I would just like a little clarity on where that capex is going, please.

Pierre Dufour: When we launched ALMA 2015 we realised that we were underdeveloped for liquid production in the emerging economies, and a good part of our shortfall in growth in the

emerging economies came from that. So, we had a very clear programme to increase liquid capacity in the emerging economies from that programme, which is largely completed today. Most of that investment you have quoted comes from this programme; we invested in excess of 10,000 tonnes of liquid over the period.

The focus now goes to loading those assets, which take anywhere from two to seven years depending on the growth rates of the specific geography where these plants are. Again, these geographies are not necessarily countries; they are really areas of about a 200km radius around the plants. So, now we are totally focussed on loading this capacity over the next two to four years.

The investments we are doing today in merchant and will continue to do in the next few years are much more reduced than these levels, and they mostly deal with CO₂ and with cylinder-filling capabilities as we grow that business mainly in the emerging economies as well.

Jeremy Redenius: Just to follow up on that, would it be fair to say for the European Industrial Merchant business if we see a little bit of economic growth here in Europe the incremental capex on that would be relatively minimal?

Pierre Dufour: Most of the capex we have seen was not put in Europe; it was put in China, it was put in the Middle East, it was put in South America, some of it in North America to support fracking and some of it in Eastern Europe, though not in a significant way. Europe was not the main recipient of these investments.

Markus Diebel (JP Morgan): Just on China: you highlighted the future already for coal-to-chemical plants, which are largely in the west. My question is on the competitive environment. Given that obviously the Western area is still at an early starting point, do you see any changes in competitors behaviour maybe to the times when we were talking more about the East here a couple of years ago. Given it is also an interesting opportunity for everyone there, is there anything more competitive than maybe in the early stages in China a couple of years ago?

Pierre Dufour: You know our industry quite well. We have a bit of a herd mentality; when there is a market growth somewhere we all rush to it and try to position ourselves first or in a good position. That has not changed, and the competition which sees the same markets as we do is also present in the west in Inner Mongolia and in these high-growth areas of China.

So, there is no less and no more competition than what we have seen in previous times. With a few exceptions which were technology-driven, in China we have always seen three or four competitors on every piece of business that we go after. That has not changed; it is not worse and it is not better. I wish it would change for the better, but it has not.

Thank you very much

[BREAK]

Evolving Consumption and Demographics

Jean-Pierre Duprieu
Executive Vice President, Air Liquide

Welcome

Good morning, everyone. We are now going to cover the second trend that Benoît Potier mentioned earlier at the end of his presentation: the evolution of the consumer's pattern, the evolution of the consumer behaviour, the evolution of demographics and how it is going to impact our society, certainly, but also how it is going to impact our company and what kind of opportunity we can have from this major evolutions that we see in these consumption patterns and in this evolution of the demographics.

I am Jean-Pierre Duprieu, Executive Vice President of the Group and I am pleased to have with me today to cover the subject which will be Industrial Merchant, and sale oriented as you can imagine, Remi Charachon who is the Vice President of World Business Line Industrial Merchant, Pascal Vinet who is heading our Healthcare global operations. He is a member of the Executive Committee of the Group.

And also to answer the questions at the end of their presentation, Guy Salzgeber who is the Vice President, Western Europe Industrial and a member of the Executive Committee. Francois Venet who is the Vice President, Asia Pacific and Rui Coelho who is the CEO of our Brazilian operation.

Striking evolutions

A few highlights about these evolutions. Look, the population is ageing, strongly ageing in the advanced countries. The people more than 60 years old will grow to 30% by 2050 from 22% today. The world's urban population will go from 2 billion to 5 billion people by 2030. The waste generated by the OECD countries will double between 2010 and 2015.

These are just a few examples and you have many others on the chart here and many other that are not on the charts that are strongly impacting us globally, but we strongly believe that we can benefit from a certain number of these trends and we will cover the subject first with Remi on IM and then with Pascal on healthcare.

Industrial Merchant

Remi Charachon
Vice President, Industrial World Business Line, Air Liquide

Major trends shape the future

Good morning, ladies and gentlemen. I will talk about how well Industrial Merchant, IM, is positioned to capture profitable growth through value added offers, innovation and competitiveness.

Let us look at evolving consumption and demographic trends and how they shape IM present and future growth. These trends offer a significant potential in our core business and help us imagine new gas opportunities to create new markets and expand our offer.

So what do we see? First, medicine and cosmetics productions are increasing. The use of biopharmaceuticals and organic ingredients is booming. Growing urbanisation leads populations to consume safe and more sophisticated foods and beverages, ready-to-cook and ready-to-go. We observe an increased mobility of citizens. They are travelling more and differently to go to work and for holidays.

Simultaneously, the scarcity of natural resources and the increased pollution is at stake. Industries and cities are in need of sustainable solutions for water treatment, waste management, recycling, energy efficient infrastructures and connectivity. For all these needs, industrial gases are a solution.

Since years, Industrial Merchant moves industries forward helping our customers enhance their productivity and product quality, optimise their process and achieve more efficient use of resources. Being the addition of thousands of small- and medium-sized deals in all industries is the force of Industrial Merchant and the source of our inventiveness.

Major trends shape the future of our markets

IM today is a €5.3 billion business that covers 54 industrial segments grouped in five markets, as you can see on the screen. I will now illustrate the dynamism of IM through five examples and explain how we leverage on market trends, evolving consumption and demographics to grow profitably through value added offers, innovation and competitiveness. These examples are related to metal fabrication, beverage industry, craftsmen and the environmental market.

Automotive and fabrication market

Let us zoom first on the automotive and fabrication market, one of our largest businesses with 30% of our IM sales and see how we are creating value in a very traditional sector but with attractive segments.

Automotive and fabrication grows fast at +6% per year. It is about building infrastructures and cars in developing economies and constructing high-speed trains, planes, windmills, offshore platforms and gas power plants in advanced economies.

Arc welding is widely used in that market. It offers every year €200 million industrial gases sales to capture. For Air Liquide, arc welding gas application account for over 12% of its IM sales. We are a leading actor in that market with our ARCAL brand launched several years ago.

To bring an answer to customers asking for reliability, simplicity and performance, we have designed ARCAL new generation. Its four optimal gas compositions instead of many to cover practically any and all welding applications. Four products, including the best of our innovations, intelligent built-in gas regulator, with on-off level and supply solutions from cylinder to bulk, with unique innovative gas mixers.

In short, four ready-to-weld products to make arc welding easier, safer and better. Today ARCAL sales are increasing by 10% each year with €100 million additional sales since 2010. With ARCAL new generation, we expect more.

Food and pharma industry

Let us move to our second example in the beverage industry. Industrial gases find a wide range of applications in the food and pharma industries, which represent 15% of IM sales. In

food, gases can be used as ingredients. For instance, beverage carbonation, as food additives in modified atmosphere packaging or as processing aids in cryogenic freezing.

These gases must of course be suitable and safe for their intended use. This is especially true for carbon dioxide, CO₂, commonly used as an ingredient in carbonated beverages. It represents for us one-third of our food and pharma sales.

Today, major beverage companies require that their ingredient suppliers achieve certification to ensure product quality, thus providing safe drinks to consumers. In order to meet this market demand, Air Liquide has launched early 2011 the implementation of a global food safety management system for liquid CO₂.

The auditing and certification process of our facilities has provided us with the opportunity to further improve quality and efficiency and win new businesses as we are leading the industry in that process. Today, 80% of our 74 liquid CO₂ plants are certified and the programme is ongoing.

Our global accounts are extremely satisfied because it ensures the harmonisation of CO₂ quality worldwide. Our sales, just to take an example, our sales to a famous leading international beverage company have grown by more than +10% per year over the last years.

Craftsmen and network

I would like now to talk about very different segments closer to B2C, the craftsmen world. Craftsmen and light professionals belong to the large world of service. They are plumbers, workers in the construction industry, auto repair, heating and ventilation engineers or other equivalent professionals.

They are all using quite small quantities of gas in their daily work. Craftsmen today are not fully satisfied with current gas offers. Rental models are complex, traditional cylinders are too heavy and difficult to transport. Craftsmen represent a gas market of €2.8 billion and 15% of our IM sales, a segment where service and simplicity are more valued than the molecule.

In 2010, Air Liquide launched ALbee, an easy offer where the craftsman owns the cylinder and exchanges empty versus full in specialised retail outlets. As you can see on the screen, it advertises four gas usages – Cool for air conditioning maintenance, Flame for cutting, Weld for welding and Fly for balloons.

Easy to choose and go, easy to use thanks to our proprietary miniature valve, ensuring Air Liquide exclusivity for the refilling. ALbee is a very unique offer. Now available in 15 countries with 25,000 cylinders sold in 2013, double 2012 sales and the soon available digital application for localisation of distributors where the products are available. We target 150,000 cylinders sold by 2017, representing many more annual gas refilling.

Materials and energy

The two last examples that I will take are related to environmental stakes. The first being water treatment and the second recycling. They are part of our Materials and Energy market, our second largest business with 30% of IM sales.

In developing economies, increasing populations need more water to drink. Water scarcity requires more recycling in industries and environment pollution, more efficient waste water treatments.

Water treatment is a resilient gas market of €1.2 billion worldwide expanding at +10% per year in developing economies. Customers want cost-effective and easy to implement solutions whether for drinking water, recycling and water treatment.

At Air Liquide, we propose a unique set of comprehensive water treatment offers including, of course, industrial gases, oxygen in particular, expertise and advanced oxygen dissolution equipment, energy efficient and price competitive.

Traditionally, advanced economies have been ahead in using such solutions. But our offers supported by our ALTEC worldwide network of application experts are expanding successfully also in developing economies. Our success can be measured today by more than 1,500 references worldwide.

Technology and research

My last example is about a very smart technology we invented for aluminium recycling. Evolving consumption and urbanisation foster the use of aluminium for canned foods or car components. The proportion of aluminium recycling grows from 33% to 50% over the past five years in advanced economies to cope with the natural resources depletion.

In these geographies, the gas market is expected to grow at +7% per year from €100 million up to €140 million in 2017. Customers need to increase existing products and capacities to limit investment in new furnaces while minimising their environmental footprint.

Here, the oxy combustion technology using pure oxygen instead of air in the furnace is not new. What is new is our unique monitoring system combined with our patented burners. Implemented in smelting furnaces, this monitoring system is capable to heat up the furnace using at first the combustible impurities such as paper, plastics and grease contained in metal scraps and only when there are not any left, the system allows the use of natural gas, thus enabling to save it in the overall process.

In short, we combine performance and responsibility, increasing customer production by +50%, reducing their fuel consumption by up to +50% while minimising air pollution with nitrous oxide reduction of 90%. In two years, we signed 20 references in advanced economies such as Germany or France, but also in developing countries such as Morocco, Philippines, India and China and demand is growing.

Summary

In summary, evolving consumption and demographics represent many opportunities for Air Liquide to grow profitably on existing and new markets. We are very well positioned today as we address market needs with increased competitiveness and innovation capabilities.

First, we have stepped up our competitiveness and we will continue. We have realigned our business wherever needed, as Fabienne mentioned earlier. Our supply chain efficiency results are exceeding objectives while strengthening delivery reliability.

Among them, we have increased bulk logistics efficiencies by +3% every year thanks to the generalisation of telemetry and optimisation tools. We have made strong efforts to strengthen

productivity by standardising our production assets while ensuring product consistency, whatever the geography is.

With 22 Floxfill built-in filling centers installed since 2010 in developing economies, we can produce 15,000 additional cylinders per day to support our growth. Finally, we can leverage on our recently invested assets to capture growth in promising markets and geographies.

Our competitive products package and value added offers are now widely available and make the difference in the market. A few months ago, I was the head of Air Liquide in China and I can tell you this is a reality. Secondly, we are well positioned because innovation, I would say inventiveness, is at the heart of Industrial Merchant.

To wrap up what I have said, our innovation comes from the diversity, geographies, markets, applications; our direct connections to more than 1 million customers, feeding R&D and our unique ALTEC network of customer process experts. In short, we are very well positioned to capture profitable growth.

Last but not least, growth boosters will come from entrepreneurship programmes such as offshore oil and gas and from dedicated organisations such as aB&T. But this is another story that my friend, Pierre-Etienne Franc, will present in the next session. Thank you.

Healthcare

Pascal Vinet

Vice President, Healthcare Global Operations, Air Liquide

Worldwide healthcare needs will continue to rise

Good morning, everyone and welcome to the healthcare part of our presentation.

Evolving consumption and demographics will have an impact on healthcare. We will have fast ageing population, we will have fast changing lifestyles.

Fast ageing population

Fast ageing will increase the prevalence of chronic diseases such as COPD. COPD is becoming the third largest cause of death worldwide right after cancer and cardiovascular diseases. Fast ageing will also increase the prevalence of some cancers and of neurodegenerative diseases such as Parkinson's or Alzheimer.

Fast changing lifestyles

Fast changing lifestyles, changing food habits. That brings obesity. Obesity in turn brings diabetes, sleep apnea.

Obesity. Obesity is a fast growing issue. 500 million adult obese in the world right now. This number will double in less than 20 years. By 2030, we will have more than 1 billion obese adults in the world.

Diabetes. The prevalence is increasing sharply not only in advanced economies but also in developing economies. Take China for example. From nothing 20 years ago, prevalence of diabetes is today above 12%. This is above US levels.

All that to say that healthcare needs will keep growing, but not only they will grow but they will shift from treating acute diseases to more treating chronic diseases.

Different healthcare systems

Healthcare systems. Healthcare spending is very dependent on the economic development of the country. Healthcare spending is also very dependent on the healthcare system that is put in place in any given country. Globally, healthcare costs are growing faster than GDP.

China

Let us take a few examples. China. China is spending 5% of its GDP on healthcare. China is busy building infrastructures. China is busy building hospitals. China has not moved yet to treating chronic diseases.

Brazil

Let us take Brazil. Brazil is also busy building hospitals but they have already put in place what is necessary to have a system that can treat chronic diseases. They are already in home healthcare development.

More mature countries

Now if we look at more mature countries, take Germany or the US, for example. These countries have a full infrastructure in place. They have everything that is needed to deal with chronic diseases. Now they face ever increasing costs.

Their issue today is to get into some sort of global health system that not only takes into account acute diseases, chronic diseases but also goes into prevention, well-being, anything that can somehow limit the increase of healthcare costs.

We will have growing healthcare needs for the years to come but we will also have slowly evolving systems that will converge to a global system in many countries that will take care of acute diseases, chronic diseases and global health aspects including prevention and well-being.

An expert along the continuum of care

Air Liquide. We have been focussing on our healthcare markets for almost 30 years. We have grown that market steadily year after year after year. In 2012, we had €2.3 billion of sales.

We started with medical gases for hospitals and we are still actually busy developing that business worldwide. But already 20 years ago, we went into home healthcare. Actually, at the request of doctors that wanted us to take care of their patients when they were discharged from hospitals, were going back to home and needed oxygen.

From oxygen for home healthcare, we went quickly into ventilation then later on in sleep apnoea. And today, we are expanding our offer into infusion therapies to treat diabetes, for example, and other diseases like Parkinson's.

At the same time, we have invested; we have developed a prevention and wellbeing business around hygiene and healthcare specialty ingredients. That is mainly Schülke and Seppic.

Today, we have a well balanced portfolio. As you can see, we have 36% of our business in Medical gases for hospitals to treat acute diseases. We have 45% of our business in Home healthcare and we have 19% of our business in Hygiene and Specialty ingredients.

We are in 30 countries. We are serving 7,500 hospitals around the world and after 20 years, we are caring for 1 million patients at home. This is not only a significant activity, it is an absolutely significant commitment. It is actually an embedded social responsibility.

A confirmed strategy

Our strategy. Our strategy is not new. It is simple. It is based on two things: geographies and markets.

Geographies

Geographies. Of course, we want to consolidate our positions in the countries we are already in, but we also want to go to new countries. We want to enter the geographies where healthcare systems are being put in place and developed. To do that, we are ready to make small- or medium-sized acquisitions if they can speed up our process.

Markets

Markets. We want to continue bringing innovative offers to our markets. Innovation can be in technologies. Innovation can be in therapies. Here again, we want to make small- or medium-sized acquisitions if they can help our development.

Now, all that is to cover our growth. We have fast growing markets. We want to capture growth. But as I mentioned earlier, in many countries, we have healthcare systems that are facing cost issues, so we need to remain cost-conscious. We may need to remain cost-competitive. We need to keep our cost down, leverage our size and offer to our customers the most cost-competitive solutions.

Along the continuum of care

Our strategy goes along the continuum of care. It goes from acute diseases, medical gases; chronic diseases, home healthcare services for our chronic patients; into prevention and wellbeing with Seppic and Schülke.

This simple effective strategy has allowed us to have continuous profitable growth for many years. In the last 10 years, we have delivered +7% growth in average.

New medical gases offers for hospitals

I would like illustrate our strategy with a few examples, starting with medical gases.

Takeo is our new oxygen cylinder. Not only it is a cylinder that is easy to handle, but it is actually the first intelligent cylinder that tells the doctor or the nurse how much breathing time there is left in the cylinder for the patient.

We are very busy implementing this new cylinder in 12 countries right now. Our target is to get to 100,000 cylinders in hospitals within two years.

Geographic expansion. Here we tend to piggy back our industrial organisations. They have infrastructure in many, many countries, so we have developed; we have started medical gases businesses in countries like China, Taiwan, Chile, Egypt, Russia in the last three years.

Developing Home healthcare with new therapies, services and acquisitions

Let us move to Home healthcare with the same sort of examples.

Innovation. Here you can see a patient with a small infusion pump. This is to deliver the drug to patients that have Parkinson's or diabetes, for example. These new technologies available, we can package it into a service, we can offer it to the healthcare systems and our customers.

It is improving the patient quality of life. It is not only doing that. It is also helping the patient to be very compliant with the treatment. That is good value for money for the healthcare systems.

Geographies. Here we are not piggy backing on our industrial activities. We have made quite a few small-, medium-size acquisitions. We have made acquisitions in the last few years to enter into new countries.

We have made acquisitions in Korea, we have made acquisitions in Poland, for example. We have also made acquisitions to enlarge our offers. We have acquired Snore in Australia, we have acquired NordicInfu Care in the Nordic countries and we have made acquisitions to consolidate our positions. You, I am sure, have heard of LVL in France or Gasmedi in Spain.

Enabling global health and cost-effectiveness

A few more examples on cost-effectiveness and on prevention.

Nowapi. Nowapi is our homemade sleep apnoea telemonitoring system. We are implementing it in France at the request of the French Social Security System. The French Social Security wants to know if the sleep apnoea patients are compliant with their treatment, if they are following well their treatment. They want to know if their money is well spent.

We are implementing this system right now, 5,000 patients a week. Our target is to get to 150,000 patients by mid next year. This is actually one of the largest telemonitoring, telehealth experiments in the world.

Now to prevention. Schülke has developed very innovative products, antiseptics and disinfection products, to fight nosocomial diseases in hospitals. That is one of the biggest problems that hospitals are facing these days.

Seppic has become the world leader in veterinary vaccine adjuvants. That is to fight pandemics. Seppic is also involved in quite a few clinical trials related to human cancer vaccines. If one of these trials is successful, then Seppic will have opened for them a very nice, very important new market.

Conclusion

In conclusion, I would like to highlight a few things. We have been the pioneers in our healthcare markets for more than 20 years. We have grown that business year after year. We think we have today an extremely good positioning.

We are in acute diseases, in hospitals with our Medical gases. We are in home healthcare with our Home healthcare services for chronic patients. We are in prevention and wellbeing with Seppic and Schülke.

We have a very simple strategy. It has not changed. It has delivered, so we think we are perfectly positioned. We truly believe we can continue on the growth trend we have had for years. Thank you.

Q&A

Jean-Pierre Duprieu: Now we can open the questions, so please we will start.

Markus Mayer (Kepler Cheuvreux): One question on the acquisitions you mentioned in the healthcare segment. On the slide 20, you show where you have been active on consolidating the market and it looks that you have been mainly active in the southern parts of Europe and also then in the Americas.

Looking forward, first question is, do also then acquisitions in the more merchant markets like Eastern Europe make sense? And, secondly, in the Americas and particularly North America, several targets can be on the market but you are more on the medium-size. Would these kinds of targets also make sense to acquire them or are the prices for these kind of targets too high?

Pascal Vinet: The slide you have seen, you had the acquisitions we have made in the last three years, so yes, we have acquired companies to consolidate our positions in Canada, in Spain, in France.

Now if you go back a little further, we have also made the same acquisitions in Germany. We have been very busy in Germany a few years back. We made the same sort of acquisitions in the UK also five years ago or six years ago.

I think we can do that in many geographies. We can continue on that trend. It will depend on the country. It will depend on the opportunities.

Rui Coelho: To talk a little bit about Brazil, in the last four years, we have been able to do in Brazil four acquisitions and today we treat around 27,000 patients.

Just to illustrate what was mentioned by Pascal of these bolt-on acquisitions, in the south of Brazil four years ago, we bought a company that had revenues of less than €1 million and today in 2014, the sales for that region will signify €10 million.

Guy Salzgeber: On the merchant side because that is what we would be talking about in the industrial field, when there are small players or when there are small opportunities to indeed consolidate our positions and things like that, yes, we look at them quite actively. We have done a very successful one in the UK a couple of years ago. There are not that many but if they do come up, we will certainly consider them.

Peter Clark (SG): Yes, good morning. I have got two questions actually. The first one is on the Industrial Merchant business and the assumption of the growth rate in Western Europe because obviously it is still half of the business, or a little bit more, and how that squares with the 2% growth you see in Western Europe for the gases business in 2015 and perhaps beyond that timeframe, as well where do you see the growth in the Western European Industrial Merchant?

And then squaring back from that again, on the return issue, it is quite clear that the investment in Industrial Merchant has come down from 35% to 25% now. Looking at the return drag that the loading might have, I am just wondering if that is material in the new return target you have of 11 to 13%. I realise the onsite business is the bigger issue with that. I was just wondering if there is an issue with the loading in the Industrial Merchant for that return target.

Guy Salzgeber: Okay, maybe first on the top line or the growth. I think what we are seeing now is first a stabilisation of the overall, let us say, industrial activity as compared to the prior years. And the forecast of going from a negative forecast to something reasonably above zero, so I think that is a positive news.

In terms of what is going to drive our growth, I think a lot of the things Remi was mentioning and I particularly believe in things like small cylinders, applications like that, will really complement our growth going forward.

Now, we have always had that but the prior years when we had the activity which was dragging the base business so much down, you could not see that. The good news for me is that looking forward now, we probably have a more stabilised base activity on which that will add on and probably pull us forward.

Coming back maybe to investments and maybe loading issues, we do not see any significant investments in terms of capacity for the coming years. The loading overall in Europe of the industry is on the low side, clearly, as it has dropped its overall industrial activity not only for us but for the whole industry.

There will not be significant investments. Now, we will continue to manage assets, basically being quite proactive in terms of repositioning out of the zone possibly the number of cylinders and tanks and trailers and things like that, so as much as possible so as to optimise assets and to free them for other zones and other growing areas. So that is quite an active programme that we have to manage those assets. And then if there are opportunities to indeed adjust capacity, that is part of also the things that we are looking at quite actively. We will continue to be quite dynamic and pushy in terms of managing this aspect of things.

Jean-Pierre Duprieu: We are busy optimising assets. We are busy realigning our costs, but we are also busy in finding the opportunity for growth also in Europe.

Andrew Benson (Citigroup): On the home care side, I thought that there was a big technology shift away from cylinders to small generators. You seem to be focussing on cylinders here and I wondered where you see the trends and how you see the value capture opportunity changing because of the potential for that technology shift.

Pascal Vinet: Yes, the focus on the oxygen cylinder was something that was dedicated to hospitals. So this is the medical gas part for hospitals. On the home healthcare side, yes, we see different technologies. We do have access to all those technologies and we do participate in moving the different shares of the technologies, depending on the country, depending on also what doctors want to prescribe.

In many countries, it is the doctor's decision if the patient will get an oxygen cylinder at home or will get a concentrator or will get something small that will help him or her to deambulate, to walk around either the house or even the block.

For us, I would say cylinder is still a huge focus on the hospital side because it is really a differentiating factor. On the home healthcare side, it is quite different. We have several technologies available. We use all of them.

Thomas Gilbert (UBS): One question on the Industrial Merchant automotive fabrication side. Can you just clarify, and I really do not know, when you look at bulk parts of a car and then more specialty parts, the technical parts of a car, there is a trend to substitute metal

with plastics in the more structural parts of a car. Is it right to assume that you are more in the "carrosserie", the bulky part or is that something that is putting a break on growth in the automotive industry for industrial gases?

Remi Charachon: I talked about the arc welding, so it is growing quite fast but it is true in cars you have some switch of technologies. But for cars components, you have also some other usage of gases such as – for instance, for air bags, you need some mixture of gases with helium for the inflating of air bags.

You have other gases which are used in the other fabrication of the car. You have still some welding also still growing in that manufacturing.

I am not sure I have exactly the intensity factor but I will say you see different gases used in the manufacturing of the car. Like for the plastics, the bone, the glasses, all are using gases – this is typically the car is maybe one of the best example where our gases are used everywhere.

Jean-Pierre Dupriou: Including probably the increase of the electronic intensity in the car which is going directly to impact our business as well.

Remi Charachon: Yes, true.

Andrew Benson (Citi): Given this clear emphasis on demographics for the healthcare side, why is the target for Healthcare being dropped today?

Jean-Pierre Dupriou: Pascal, you could probably give a vision on the growth and how we developed the growth in healthcare, how we reconcile with the questions and how we manage the pricing issue in healthcare as well, at the same time and how we end up with this growth perspective – the model, in other words.

Pascal Vinet: Yes. Just to go back to the numbers to start with, I think some years back we said we would have growth above +8%. That was way back. In 2010, we said we would have growth above +7% because we saw appearing some price pressures that we did not have in the previous years.

Today we are still saying we will grow the way we have grown in the recent years, so we are not dropping or a window, if you want. Now, talking about price aspects and managing the price aspects, we do have price pressures in healthcare. It is a direct consequence of what I mentioned, the developed countries having to face still huge healthcare need increases while having pretty flat economics.

We get that price pressure. We are used to managing that. We have three ways of managing that. We do leverage our size. We do make efficiencies all the time. We have a purchasing power with our suppliers, that is quite significant.

Now, one thing that is very important to understand is that in our business, the next patient, the next cylinder of oxygen, the next concentrator is very profitable. We have all the infrastructure in place. We have all the network with physicians, with the health operators in place and we have growth. So that growth in itself – and that is a second lever, if you want – is bringing what is necessary to fight price decreases.

And then the third lever is small bolt-on acquisitions. When we do small bolt-on acquisitions, we integrate that into our system and we make synergies and those synergies are somehow efficiencies that help us as well fighting the price decreases we have.

Jeremy Redenius (Sanford Bernstein): Following on with the question from healthcare, you mentioned earlier in the presentation about helping governments reduce their state budgets, which implicitly means price reductions.

Having worked with procurement organisations in my previous career, I find they ask for price reductions first and then talk about total cost of operation reductions much later. I am curious to hear any details about how your organisation is set up to work with the government agencies to try to capture total cost of operation reductions sooner rather than later.

Jean-Pierre Duprieu: Okay, that is interesting. By the way and before Pascal is answering, we are helping governments to reduce their cost, particularly to move the patients from the hospital to home, which is structural before talking about the cost of ownership first. I think it is an interesting comment I wanted to make.

Pascal Vinet: First, our business is different in every country. It is a big difference with the industrial businesses we may have in the Group. In one country, you have private insurances. In another country, you have state-owned hospitals. In another country, you have a global Social Security System. In many countries, you have a mix of all that.

So we do not only deal with government agencies. In fact, there are not that many countries where we deal only with government agencies. That is to explain that, for us, it is very important to keep that wide portfolio of countries, systems, customers because at the end of the day, it is helping us a lot to have a very stable and very good business.

To illustrate the way we do that with customers, we have innovation that is helping. We know how to deal with the procurement people as any industry or any business. We have a lot to offer. And as Jean-Pierre said, we are at the heart of a big move from acute disease care in hospitals to chronic disease care at home. That in itself is a huge saving for any healthcare system around the world.

We are the heart of a saving process. We may have less pressure than others. Second thing, we have volumes and those volumes, again, they are helping.

Jean-Pierre Duprieu: I think that we have also a support which is structural, that we bring to authorities. Would it be insurance, would it be hospital themselves in certain countries or would it be state authorities, the fact that we help them to follow the compliance of the patients is typically embedded into the total cost of ownership vision that they can have. They are ready to reimburse, provided the patient is compliant. And we are supporting them in that respect. I think it is also an important part of it. Nowapi, Pascal was referring to, is an interesting illustration. By the way, we are going to have a workshop this afternoon dedicated to Nowapi.

Peter Mackey (Morgan Stanley): Firstly, maybe a slightly bigger picture once again for Remi on IM in general. The utilisation rate at the moment, it was touched on earlier that obviously utilisation rate is relatively low, globally. Can you talk about that level, what the spare capacity is, what the ramp up rates are looking like today? I think if we had asked you

a couple of years ago in China, you would have been talking about merchant ramping up within 18 months, now I suspect you are talking about a longer period.

And if I can tie that in with your comments you made in the statement first thing this morning that capex from 2016 to 2020 will be about €10 billion, the same is for 2010 to 2015. Is that basically an absence of merchant capex in exchange for slightly more Large Industries capex?

The second one is just a follow up on Markus Mayer's question a moment ago about the US healthcare market and whether you consider that as an effectively missed market or a market you are not interested in entering given the changes that have taken place there already?

Jean-Pierre Duprieu: Regarding the loading of the activity and how it goes today in different geographies, I would like François Venet to comment on what is going on in Asia regarding the invested capacity, after a period where the growth was extremely strong and ramp-up was extremely quick, where now ramp-up is a little bit slower certainly, but goes well. And Guy will explain in Europe what we are experiencing.

Francois Venet: I think an important element is that you can load in two ways. You can load with your direct clients or you can load through distributors. If you want to load with your direct clients, you can load on purchase orders or you can load on contracts.

Clearly, the important part is to load on contracts and that is what we are looking for. That is a lot of investment in technology. That is a lot of investment in the development of the sales force and it is a lot of investment in the capillarity of the relationship with clients.

Now, additionally, beyond what you get from your direct clients and contracts, you can also address the loading of the plants for technical reasons, working with dealers or working with refillers. On average, I would say that today in a relatively short period of time, we can get all of the assets above 80% and we are running, depending on the products anywhere, between 65% and 90% loading of direct clients.

I have to admit there are a certain number of geographies that attract everybody and, Pierre was mentioning that sometimes industry behaves like a herd, it looks like sometimes when one is investing everybody does, and then it becomes an interesting exercise. We rely a lot on the training of our people and the capillarity of our relationships. And today, as I said, in most of the locations, we can load the assets above 80% in less than two years.

Guy Salzgeber: Maybe one thing about the loading of plants in Western Europe. We should keep in mind that our liquid plants, mostly, are totally linked to Large Industries plants. Basically, because the loading has two impacts, of course, there is the investment but also if you do not load beyond a certain level, your operation performances degrade very significantly.

We are not impacted so much by that because basically our loading of Large Industries customers is quite satisfactory and therefore, basically, the variation we may have on the load of the merchant which is linked, as we call piggy backs sometimes, is not so impacting our industrial performances.

Yes, we have a relatively lower loading in a cycle, but the impact on the operation performances is not too critical in Western Europe, so it is quite a manageable situation.

Jean-Pierre Duprieu: On the second aspect of what you mentioned, the €10 billion that has been mentioned earlier today are, of course, worldwide with the mix of Large Industries, Industrial Merchant, Healthcare and Electronics.

Industrial Merchant, and if you are referring to Europe, we are going to be prudent and we are going to accompany the growth when investment will be needed. And if no investment is needed, we are not going to invest. It will be quite a reasonable approach on the investment on IM.

On your last question regarding US healthcare, I think that Pascal could certainly take this very interesting question.

Pascal Vinet: Yes. We are in the US but we are in the US with Medical gases. We are in the US with SEPPIC. We are in the US with Schulke. We are not in the US with home healthcare. We were quite a long time ago. We decided to get out.

We are looking at that market and we have looked at that market. It is a difficult market. Price pressures are extreme in the US. You have a lot of significant local players who have been there for years.

To write a big cheque to get into the most difficult market in the world, I think we have obviously better opportunities and we have had better opportunities. We have demonstrated that in our numbers, I would say. Now, never say never but I would say not yet.

Jean-Pierre Duprieu: Okay. We are at the end of our session. Thank you very much for all your questions, thank you.

Appetite for Innovation

François Darchis, Air Liquide
Senior Vice-President

So we have been through the two first mega trends and this is the third one. To give you some good feeling about this trend, appetite for innovation, we will be doing kind of interaction and there will be two presentations. One by Chris Ryan. Chris is the VP of the World Business Line Electronics. And Pierre-Etienne Franc who is the VP of the Network aB&T, based in Europe.

There are three other people who are going to help us on answering all your questions. Diana Schillag who is VP of Healthcare World Business Line; Olivier Delabroy, the Vice President for corporate R&D; and Ole Hoefelmann, who is COO of our Merchant operations in the US and also CEO of aB&T Americas, so you will have two representatives of the aB&T network.

Many opportunities in existing and new markets

So let me go for a quick introduction on innovation. I have got basically three main messages for that. The first one is the outside world of Air Liquide. It is just big. It is just very big. There are millions of opportunities because the world today is going for a very big trend of bringing innovation into everyday life.

Additive manufacturing

I have put some examples here, but it is documented of course. Additive manufacturing is going to affect us a lot in the next 10/20 years. As you know, we are local business, and additive manufacturing as we call it is very local.

I mean you can make things by yourself in your home today. You can make shoes in a shop to order. It will be a significant addition in the way we manufacture in the world. And obviously we are a local company as you know, so it is going to affect our business, and there will be a lot of gas applications around it.

New needs, new usages

New needs, new usages. That again is going to change drastically the way we interface with our customers. Again, we are a local company. We have local customers. And they are all requesting a local presence. And all those new technologies are going to change drastically the way, again, we interface with those people.

E-health,

Pascal has given already some indication on Takeo, or Nowapi. Certainly, Diana will be able to complement a little bit on that aspect.

Smart cities

Smart cities, we spoke about 70% of population being in cities meaning there would be a lot of constraint on environment, a lot of constraint in the water resource, on noise, and all of this is going to create I would say zillions of applications of our gases.

Innovation

And the last point is about innovation. The way innovation will be organised in the world, meaning that all countries will fight for innovation. All countries will try to attract academies. It is not anymore the ancient world where you have science in the mature economies and markets in the emerging economies. It is going to be a mix of everything and here we need to be prepared for this very open world. So many opportunities, that is my message number one.

Innovation booster

Message number two is that when you have a new world, you have to check whether you are prepared for the new world. I would say, historically, Air Liquide has been very good, I would say very, very good in science and technology. We have a very organised way of capturing those technologies. Research and development of course, engineering and construction, we spoke about it before. ALTEC centres which have been mentioned by Remi. I would say, these are the usual suspects which are very effective, but we felt, it was not enough. We needed to have some boosters. So, we have added three new vehicles to capture all those evolutions which are not yet totally understood by all of us, but for which we need to be prepared.

Open innovation

The first one is open innovation. So we have launched a new concept, the innovation lab, iLab. We have some posters to explain what it is about.

aB&T network

The second one is to make sure that we take some of those new activities in a way that is a bit different from the usual one. It is a big entrepreneurial push and aB&T, which stands for advanced business and technology, and it is business and technology in that order, is just to say that we are able through a network to capture all those opportunities.

ALIAD

And the last one is venture capital. Here we have a strong feeling that we will not invent everything, that there are a lot of small technology start-ups that will bring some new ideas that we need to be connected with, and participating in those small companies will certainly be another differentiating enabler for us.

But all of these being based on three important features and behaviours from our part which are again, not only expertise, but audacity will be important, and intuition. So imagine the future and daring, going!

Mapping battlefields

So message number two is that we now have a new set of vehicles to capture this innovation in the book. And the last message is that when everything is open, sometimes you may be a little bit closed. Where do we go? Where do we put our money and how do we focus? And for that purpose, we have designed a small matrix that I am going to explain here.

Based on two elements, advanced technology, I mean how far you want to go in changing the way we introduce our technology in the field. And the second one is the business model, how far we are prepared to go towards a new way of doing business.

The core

And here, it is very simple. The core is where we are today. And basically, the two examples you had before, were focused around the core. We cannot miss it. We cannot lose it. I mean this is a place where competitiveness is a big driver. We need to be here, I would say defending our position and growing in those businesses.

The adjacent

The second one is what we call the adjacent, so technology can be relatively different, but the business model will be the same. But you are still relying a lot on the network of our customers, of our plans, prediction, and logistics. But we have to go a little bit further than what we do today. And you will have some examples as to what is adjacent.

Transformational

And the last one is obviously transformational where here you have to imagine the world of tomorrow both from a technology point of view and we have some early signals that things are coming. And from a business point of view, the business model will not be necessarily the same as it is today.

So all combined, we have I would say a set of battlefields that we want to balance between again the core, that we cannot lose, the Adjacent, we could say we cannot miss it, and the transformational, where we cannot wait for things to happen. We need to be there already.

Okay, so we will start with the first presentation of Chris along those lines and after that, Pierre-Etienne.

Advanced Electronics Materials

Chris Ryan

Vice President, Electronics World Business Line, Air Liquide

From Core to Adjacent

Good morning. I am very excited to talk to you this morning about how innovation is driving a couple of specific examples in the Electronics business line along the battlefield, the core and adjacent battlefields that François was just talking about.

If we look at the electronics business as Fabienne illustrated this morning, it can be high growth, but it can also be a very cyclical business. So if we look at how we have evolved few of our product lines from 2000 and 2012, what we are showing in the graphic here is the relative weight of a few of those product lines in that particular period of time.

And what we have tried to do is to focus and tailor our product offering to our customers in ways that can generate more consistent sales and profitability over the long term.

So the examples we have here are carrier gases, electronic specialty gases, and advanced electronic materials.

Carrier gases

Carrier gases. We are talking about typically large onsite nitrogen generators at the customer site as well as high purity haul-in (bulk) gases.

Electronic specialty gases

Electronic specialty gases. We are talking about materials our customers use in enabling the manufacture of their process or the material, but not necessarily ingredients of the material.

Advanced electronics materials

Advanced electronics materials. We are actually talking about the materials that go into the customers' process that actually help make it. Now I will illustrate that a little bit further in my presentation.

Carrier gases

But if we look at the evolution of our business in the carrier gas business, you can see that the relative weight that the business has changed quite a bit and evolved quite a bit since 2000 to 2012, going from 22% to 42%. And that has happened through a very specific and innovative focus in the core technologies in carrier gases.

Electronic specialty gases

Electronics specialty gases, which remain a very important part of our portfolio, have changed. We have come from a little bit less than 50% of the portfolio to a little bit less than a quarter where we are today, which overall is better for the stability of the business because of the cyclical nature of those particular sales.

Advanced electronics materials

And what we are particularly excited about is our increasing presence in the advanced electronic materials space. These materials are helping bridge the gap between our role as a traditional gas supplier to a technology enabler for our customers. And what we see are these

materials going into the latest, high-tech devices, which even though the industry demand cycles go up and down, demand for the latest and greatest gadgets are fairly robust in comparison with the electronics market in general. So I will talk about some of these things more specifically.

Core technologies

Core business, obviously as François emphasised, we cannot miss it, we cannot forget about it. It is the gate. We have to be competitive. We have to lower our total cost of ownership. We have to continue to be attractive and maintain and build on our core offers.

Carrier gas driver

We would take the carrier gas example. We look at something as basic as nitrogen, for example. Nitrogen is nitrogen. That has not changed. However, how our customers are using nitrogen and the volume that they require has changed substantially.

If we look at the evolution of customer production from 2000 to what we expect by the end of this decade, the average customer production facility will require six times the amount of nitrogen in that facility than what it required in 2000. So that is a pretty amazing step change in the space of less than 20 years.

Along with that increase in scale, there is a requirement for the customer absolutely to reduce their cost. And reducing their cost, the main input is electricity, we have been able with leveraging the technologies that we have within Air Liquide and doing specific innovation into the electronics offer, we have really been able to not only scale and standardise our portfolio of offer to the industry in carrier gases, but we have been able to increase the efficiency of our plants by 40%, which is extremely substantial because not only does it help keep us competitive with the customers and help increase our sales as you can see in the graphic both in terms of the relative weight in the portfolio and the average sales progression overtime, but it means a lot in terms of the environmental footprint. A lot less greenhouse gases are being generated in the production of electricity for these particular plants.

Adjacent space

In the adjacent space, as I have mentioned before, it is really about transitioning from the traditional roles of gas supplier to a technology partner with our customers. That creates a halo effect that makes us more relevant to our customers, not only as someone who supplies the day to day needs that they have, but actually enabling their business, enabling them to have a competitive edge for the technologies they require to go ahead and build the next generation of technologies.

The underlying driver for the electronics business is pretty clear. We all understand that we want the latest smartphones, we want the latest tablets. We see the changes that are happening today. And as a matter of fact, those changes continue to accelerate.

Cray 2 versus iPad 2

So a great example that we have here, a Cray 2 supercomputer in 1985 was the most powerful computer in the world. It consumed kilowatts of electricity, was millions of dollars in terms of expense. The iPad 2, which was released in 2011, has the equivalent computing power in your hands where the electricity is measured in milliwatts, instead of kilowatts.

It illustrates a significant shift. Furthermore, if we look at the iPad 2, to which this device was compared, the iPad Air which was just released last month has six times the computing power of the iPad 2. So this trend is not slowing down. It is increasing along its exponential curve and we expect that trend to continue into the future.

So along with that, this change, this mega change in computing, in what our expectations are in terms of our personal devices, we see a significant shift in total energy consumption for computing.

In the 1980s, computing represented almost nothing in terms of the world's total energy consumption. Today it represents 10%. So it is very significant both from an energy-intensity perspective and also an environmental perspective.

Advanced electronic materials

So how does Air Liquide participate in this space? What are we doing to contribute? How do we tap into that growth? Let us talk a little bit about advanced electronics materials and compare that to a more traditional electronics market that we have today in the electronic specialty gases.

ESG

When we look at ESG, typically higher volumes to customers requiring localised manufacturing and manufacturing in bulk. So a fairly capital intensive business compared with the advanced electronics materials.

Customised for customers

The advanced electronics materials are customised for our customers' needs. That means these molecules are synthesised specifically for them based on what they require, and along with that comes IP (Intellectual property) which, in turn, helps protect these particular molecule sales over the longer-term compared to ESGs, which are more largely commodity items.

Advantages

Obviously with these high value add molecules, there is higher degrees of profitability with higher barriers of entry, so that is always exciting. And as I mentioned before, a little bit less sensitive to business cycles, because our demand for the latest and greatest typically transcends the trends that we see in the normal economic cycles.

This market will develop to more than \$1 billion by 2017. We are already players in this particular space. However, the growth potential is growing and you may be aware that in September of this year, we recently acquired Voltaix, which is another advanced electronics materials company. And we will talk about that a little bit more in terms of how these things tie in together.

Chip of the future

If we look at a 14 nanometer FinFET transistor, which is the generic advanced device that we will see manufactured between 2014 and 2017, depending on who that manufacturer is. You can see the complementary material offer that we have between our existing line of advanced precursors and materials or ALOHA line of products compared with what Voltaix is bringing to the table.

And what this does is this allows us to bring the full portfolio of material offerings to our customers that are making the next generation of advanced microprocessors. So we look in this example both from a low and high-k materials as well as the shallow trench insulator as well as the silicon germanium that is involved in the stressors in the material. We have the material, the full portfolio of materials covered in this new generation of devices. And what is particularly interesting on these new generation devices is not only the materials that are required, but as the devices become more sophisticated there are actually more layers stacked on top of each other to do all the things that chips needs to do. So there is extreme potential for growth there.

Three-way partnership

How does this work? The innovation required in this particular space is quite a bit different than typically what we have in our core technology. As you are probably aware, in the electronics or the semiconductor space, the number of players continues to consolidate. The number of toolmakers or the technology providers for the electronics customers also continues to consolidate.

And the trend of new technology has really been enabled more by new and novel materials than anything else. So this is creating an ecosystem of collaborative partnership if you will between the material supplier, the end customer and the toolmaker.

So we see an evolution in the way that we are doing our collaboration with customers. Instead of R&D taking place in isolation, it very much takes place now in collaboration with the customer and with the toolmaker.

There are still innovations that Air Liquide brings directly to the market, to the end-user. But more often than not now, we are collaborating with the top three customers as well as the toolmakers together through joint partnership agreements to help enable the materials that these customers need to build their next generation of chips.

This requires a long-term view. We are players in this space because we have been pushing since 2005 really intensely to enter into this space. Air Liquide now has a significant position of credibility within this particular marketplace.

And as customers continue to consolidate, it is pretty clear that smaller players and players without the infrastructure of critical mass are not able to compete like this in the way the big customers expect. So, in fact, the way we operate from an R&D perspective is also creating quite a barrier to entry for other competitors coming in.

Summary

So those are a couple of examples of how we are innovating in the core technology line with carrier gases, how we are involving and advancing with electronic materials. Obviously, in Electronics, there are other battlefields that we could play and we could talk about, but I think the clear message I want to give is that we have a significant innovation effort that is driving our business, which in turn is leading to longer-term sustainable growth and profitability for the electronics market.

So with that, I will hand over to Pierre-Etienne who is going to talk about advanced businesses and technologies.

Advanced Business and Technologies

Pierre-Etienne Franc
Vice-President aB&T, Air Liquide

aB&T innovation strategy - Core

So as it has been said at the start, innovation sometimes is not enough, especially when you want to open new markets. And especially when those are highly challenging, or disruptive, and open new frontiers, new customers, new usage for technologies, or new business models.

In such cases, you require agility, audacity, risk-taking and the taste for the unknown. It requires basically entrepreneurship. And this is what advanced business and technology is all about. It is a network of companies which try to deliver entrepreneurship in innovation by mastering science, entrepreneurship and investment capabilities.

Legitimacy

I am going to go for a couple of examples of that with you now. Entrepreneurship requires a pioneering spirit and the set of skills and legitimacy to effectively reach new markets. When we speak about industrial gases, legitimacy comes from technology and especially from technologies for advanced markets.

Staying at the top of advanced markets requirements is the condition to be legitimate to try to open new markets. This is a base rule. This is the science part of Air Liquide. This is the core activities of aB&T and I will give you a couple of examples.

Successes in science markets have started in the field of advanced materials, advanced cryogenics, on managing and dealing with the two lightest molecules in Earth – helium and hydrogen – also the trickiest to manage, but which are critical enablers for the markets of the future.

Space

We started with space. We continued to supply regularly the Ariane launcher with reservoir and also with the liquid ergols, hydrogen and oxygen, and those industries are of course one of the most demanding in terms of reliability and performance.

From those, we learned to manipulate hydrogen in many forms on many conditioning materials, liquefaction, pressure, the type of materials you need in reservoir for high propulsion technologies.

Aeronautics

We continued those with aeronautics where we learned to master very lightweight, compact designs for the supply of oxygen on board for pilots or for smoke hoods for crew members or in generating systems for reservoirs using high-end permeation technologies that we get from the US, from a company called MEDAL.

Those permeation technologies are going to be very useful for the markets of the future as well. Our legitimacy there is so undisputed that Solar Impulse is asking us to help them on their challenge to fly the next transatlantic plane that they are going to build.

Large science projects

We also began the unchallenged reference high-tech cryogenic partners for large science project. You heard about the LHC, which allowed the discovery of the Higgs boson. We were a part of that, supplying helium for superconductivity. We are also going to supply the next big project which is the fusion for energy ITER project for superconductivity. And we also present in many of the key cryo-cooling technologies for satellites. One of the most well known is the Planck Discovery of the Earth's light, a couple of thousands years after the Big Bang.

So with all the set of references, we believe we have a strong base to effectively move into entrepreneurship, I would say, adjacent businesses. And I am going to illustrate those, especially energy transition.

Energy transition

Energy transition as you know has many aspects. You will play with those later on this afternoon. I will guide you for a game that you are going to play. You will discover in that game that in most cases from carbon capture and storage to biomass gasification, Air Liquide solutions are very wide and can play a strong role in energy transition.

But in certain cases, the market is already there, and we just need to capture it. One of them is called biogas. I am going to give you a couple of examples on biogas. As you know, a valorisation of waste can take several forms.

Basically there is the biological one and the thermochemical one. I am going to speak a little more on the biological one. Biogas generation is basically going for methanisation process, which is part of the biological root.

Out of a stream of either a landfill or a methanisation plant, you can valorise the main components out of manual crop sewage proceeds or municipal waste. Many countries have understood that upgrading into biomethane, is a very good way to progressively reduce their dependency in energy importing, natural gas imports. As part of the global fight for energy independence, biogas valorisation is one of the solutions.

New technologies

Among the technologies we use to do that, membrane technology is one of the key differentiating ones, leading the show. It happens that our expertise there is very strong, thanks to MEDAL, a company that we have in the US that was started as a joint-venture with DuPont 30 years ago, which is now fully owned by Air Liquide.

Today, we have 30 references of membranes which are installed in many different landfills that represent more than 40% of the volume of upgraded biogas in America and it represents the biomethane production of 10 terawatt hours per year, which is mostly coming from large landfill gases.

Potential for biogas

What we want to do is to move to a new business model, to go from membrane supply to full scheme, which is a way basically to increase tenfold the size of the market we are looking at. Also, in certain cases, to even go into managing the upgrading directly ourselves by developing a kind of an over-the-fence model, LI type so that we serve the molecule downstream for green chemistry or clean transportation.

Today with the current typical feed-in tariff that you find in European countries to support those kinds of developments, the equivalent of €100 million of equipment over a couple or many sites, should represent molecule sales of around €200 million.

The figures that you have here represent the total upgrading capability of 2.5 terawatt hours. You need to know that the French potential on its own is 10 terawatt hours. The German one is 15, the Nordics is 10. In all Europe, it is 60 terawatt hours which is at stake for 2020. In the US, it is more than that. In China, we are still counting. So the potential for biogas is extremely huge.

Of course it requires innovative business models to attract customers from green chemistry and it also it opens completely new markets for us with offtakes from players in the food industry, which we did not know so much in the past. So it is a completely new avenue for growth in the future.

Investments

Then let us speak about investment. Some of the markets of tomorrow need to be created and they will not come if we do not push them. Their shape and potential is highly dependent on our ability to detect future trends and to connect and move up with the stakeholders of a given market.

One of those of course is linked to green mobility, clean cities and energy transition. It is everything about hydrogen energy and this is one that you have heard about a lot, and we are going to give you a couple of updates on the subject.

So, as you all know, the hydrogen energy possibilities are very large. There are a couple of starter markets. One of them has started very well in the US with the equipment of 3,000 forklifts, substituting battery technology by hydrogen technology. We supply in the Americas around 500 of those. And we have started in Europe a joint venture development with Plug Power, the leading fuel cell supplier for forklifts to try to develop the market in the European countries. As a result, we are going to start a couple of platforms in a couple of weeks.

H2 mobility market

Our current ambition of course, long term, is to reach out to H2 mobility markets. And of course that requires solving the chicken and egg dilemma, putting in stations so that you can buy cars, having cars so that you fill your stations which is the obvious issue that we have to solve.

So we are currently investing in several demonstration stations and participating or animating the setup of broader deployment initiatives or consortia which take the form of either public-private partnerships or private consortia which is all the stakeholders together: car manufacturers, oil and gas players, utility players and industrial gas suppliers.

We are also looking beyond that, testing the ability to even supply hydrogen at the pump. And you have seen or you will see or you have heard about the couple of stations that we have invested in and are in the process of starting up in the coming months or years which are going to be owned and operated by us.

Shaping growth initiatives

Since we have been talking about it, a couple of things have changed in the hydrogen mobility market. Some of you might have tested the Hyundai fuel-cell cars. Those ones are not exactly the same as the one you saw before.

They are the first series, they are the first cars which are on sale which are being produced by a dedicated production line. Hyundai is leading the show. Toyota and Honda have announced their production in series by 2015. Daimler, Nissan and Ford will follow in 2017. Everybody expects BMW to be there by 2020, but it appears they will be there before. So the car OEM has started production.

On the other side, a couple of countries have significantly decided to support the deployment of infrastructure. Japan with 100 stations to be developed by 2015; Germany, 2017, 100 stations, then 400. Also you might have heard about the European strategy which is significantly pushing technology both by renewing the platforms supporting the sector, which is a €1-billion platform. Also, of course, by having proposed a regulation to promote the use of alternative fuels, which includes hydrogen which is a new very important news.

So here we try to be a partner of the system. If the industrial gas players do not start it, it will not move. This is our role and we invest a lot in that.

So from the Core to Transformational activities, we try to shape many growth initiatives. I could have quoted a couple of other ones. We have only selected two. We also have our own investment arm with ALIAD, the strategic venture capital firm which allows us to get technologies outside of Air Liquide if we need them.

Concluding remarks

In the end, entrepreneurship is the ability to take risks, to seize opportunities and grow them when they are good or to be capable of dropping some if they are not. In the end, some initiatives will fail. We believe that some of them will change the shape of our Group. And to finish I think that Benoît at the start said that innovation is a combination of science, entrepreneurship and investment. We believe that aB&T is part of the solution for that. Thank you.

Q&A

François Darchis: So on innovation, we did not want to give you the full picture because it would have been too long and too exhaustive. So myself and the colleagues, we can answer other questions on other aspect of innovation structure that we put in place since last year.

Jean-François Meymandi(UBS): I have a question on biogas. We have seen a quite steep development of the biogas industry in Germany beginning of 2000, which has obviously failed big time. And, at the same time, you were speaking about feed-in tariffs which if anything just come down all the time and are even potentially revised afterwards.

It seems to be on cost, it has not been great so far. On your side, how is your value proposition to take cost of biogas down, so ultimately you do not rely on feed-in tariff? Is it just an opportunistic investment into feed-in tariff or is it technology game? I just did not understand from your presentation too much.

Ole Hoefelmann: Yes. I will talk a little bit about the opportunity we have in the US because you are right. One of the things we want to avoid is building a long-term business on subsidies or government mandates. So we recently acquired an asset in Atlanta where we are running and operating a landfill gas purification site and then selling to another customer on a long-term agreement.

That customer is the one that then is today playing, if you want, the market with regard to green energy and additional subsidies or government tariffs that he can benefit from.

Our objective is to develop a solution that can grow in the green market, but can compete directly with natural gas, depending on the state of the market. We do not want to build something that will rely long-term on subsidies.

And we have the expertise. We have seen from the assets that we are looking at that we run things better. We understand reliability better. The art is in running really the landfill, and we have partners that help us in that, to the optimisation of that. But our model is really around understanding the process. Often, we can show that what we design is reliable.

Pierre-Etienne Franc: There are three elements. First, we need to develop a number of sites to effectively industrialise solutions and get skidded solutions for the upgrading part which allow a decrease in the cost of equipment by around 40%.

The membrane technology is extremely efficient in terms of energy and in terms of selectivity which gives a better upgrading capability. The second element is that the larger the site is, the closer you are to normal market price. So we need to try to capture the best sites in terms of size.

And third, subsidies will be needed to start. So we of course count on subsidies to start. We cannot develop a complete new scheme of methanisation plus upgrading with no subsidies. That does not work of course.

In Germany, there is a feed-in tariff which is for use of biogas, just for cogeneration. It is not a feed-in tariff for biogas to methane. So it is a different situation. It is still very attractive, as far as we know.

You have got size in the Americas for landfill sites which are several thousand cubic metres per hour. And you also have sites with only 100 cubic metres per hour. Those smaller sites are probably going to be captured more through sale of equipment than investment. We will try to select investment where the sites have the biggest potential to grow.

Please also take into account the fact that we are also doing that because we believe long term that we need to have blue hydrogen sources and this will be part of that. We will be able to swap those biogas sources with a large SMR to provide mobility customers with the clean hydrogen capabilities.

Markus Mayer (Kepler Cheuvreux): I have three questions. First one, over the last years, you always had around 1.7% R&D cost in terms of sales. Do you think that this is also a good run rate going forward or is this roughly €300 million cost reach to a level where you have sufficient fire power for innovations?

Second question is on the innovation rate which means per cent of products which are not older than five years, can you give us here a kind of ballpark number what you currently have or expect over the next years?

And lastly, on innovations. Innovation is only good enough to open your market for you or do innovation and innovative products also give you then a pricing power in these different markets?

Francois Darchis: Okay, on the R&D, I would like Olivier to give you some benchmark and something about the necessary funds to be effective in innovation.

Olivier Delabroy: As we said, innovation expenses are around 1.7% of the sales. In fact, it has been quite stable if you look in the past few years. By innovation, we mean R&D spending plus all the expenses to put this innovation on the market, be it a patent, or some marketing expense and so on, which is a usual definition of innovation.

Today, it puts us in a leading position compared to the spend of our competitors. I think beyond the money, you have to look at the portfolio. The Air Liquide technology portfolio is one of the most extensive if not the most extensive compared to other competitors.

I think you have seen this morning that it runs from Large Industries, to engineering, all the cryo, the production of syngas, and all kinds of materials, syngas to fuel and chemicals, healthcare, new opportunities in the biogas, electronics and so on.

So the range of our portfolio is quite extensive, and in every key aspect of this portfolio, Air Liquide has either a leading position or we are really competing head to head to acquire this leading position. So to me, this level of innovation is at the right level today to fuel our ambitions.

Beyond again the portfolio, one last message is also what Francois has highlighted, our innovation network. You have the R&D network which is very well connected to the ecosystem in Europe, in the US and in Asia, which gives us strong intimacy with our customers.

You have those new initiatives that we are launching, aB&T for the business and also the investment part and iLab, this new initiative which is on top of the classical, scientific and technology expertise where we want to explore new business opportunities, long term, 10, 15, 20 years. Those last initiatives are very differentiating compared to what we see for instance in our competitors. So today we have a very powerful system.

Your second question is how we measure the efficiency of the system in sales, because some companies do that, but not to my knowledge in our immediate competitors. Some people call that Vitality index also. So today again, we do not communicate on such index. We may one day, we never say never. This kind of index measures the capacity to transfer R&D to operations. And back to my message, the R&D network is very well embedded with the operations today. Just one example, we organise basin hubs. In every hub of the Group, you have a large R&D centre. We are creating satellites.

And just one example to illustrate this intimacy. In Korea, we opened 18 months ago a small satellite on electronics. It is a small centre, a small team in a university. It gives us, versus Samsung of Korea, for instance, an immediate leading edge because now not only are we a global player, but also a local player.

So this intimacy with the customers and the operations to me is at quite a strong level.

Francois Darchis: I would like you, Diana, to explain a little on the healthcare business, new markets and new products.

Diana Shillag: Maybe first of all, to answer your question whether innovation is only on new markets, no, it is not. Of course, we do innovation as well related to our core business to add additional value to our core business.

One example was shown earlier this morning by Pascal Vinet, the Takeo oxygen cylinder for hospitals. That is actually where we brought a very fundamental innovation to the market. The added value was strongly perceived by our customers, the hospitals, and they actually accepted a price increase and increase in the rent of the cylinder. So that gave us additional turnover for that Takeo oxygen cylinder.

Now, in more general terms, when you speak about healthcare innovation, what are the battlefields of the future. Well, it clearly is the rise of chronic diseases and the associated cost. Now our role is to develop cost effective solutions that bring value to the patient, to the physician, but as well to the payer, and we need to take all of that into account.

We believe that these new technologies, eHealth, as we call them, is one key enabler to better manage diseases in the future. Nevertheless, today I have not yet seen one business model in operation that really generates additional sales for a player. There are a lot of small pilots in place that try to demonstrate this additional value. We believe it is the business model of the future and we are taking an active part in developing it.

Francois Darchis: I would like to complement one thing about innovation. We have to have in mind that innovation is not equal only to new products or new markets, back to the schematic about core. If we are in business, still after one hundred years of existence and more, is that we have been able to permanently revisit our processes, the way we do business, to reduce cost and to have a good offer?

You spoke about pricing. We had an example with Chris about the nitrogen generators. We have been an inventor of generators for more than 50 years, but we are still decreasing the cost every year because we are able to invent a new device inside the column to have better load following, to get to the highest purity and so on and so on. Again, innovation is also to keep the business alive and as I said the core, we cannot lose it. I will even say it out again. We cannot lose it.

If we are not good at the core, if we are not competitive, we just cannot imagine that we will be able to build on our core business, so it is a combination. And when we look at the spending of innovation, still a big part of the spending today is in the core. But we are now by all the different new vehicles that we have launched have the capacity to expand the territory of the fight, I would say.

Markus Mayer: Can I have a clarification question? Again, on my first questions, I would like a clarification. So again, this 1.7% of revenues, you have explained it but not yet answered whether it is a good ballpark number going forward? And again, on this innovation rate, so here I think you do not give any kind of guidance or explanation.

Francois Darchis: About basically the spending of innovation, obviously we would be pleased to spend more, but it is not the point. The point is again, and you said that, Olivier, it is more

about, I would say, leveraging as much as we can the network of operations of countries that we have today. So there is more to gain in having all our countries, having the network of R&D, the business plan aligned to get the maximum value from innovation. It is not about putting more money in.

The point of putting more money in is that at one point you tend to go in some areas which are not as well connected to our business. So we feel like we have a good balance between what we spend, what we create, and how we develop.

There is another big point which is not in the 1.7% is that we are, as you know, an investment company. We invest. And I would say a big part of our investment today is to have some innovation embedded. So I would say that we have an additional level of spending which is to integrate innovation in our normal capex.

So we have a good balance again between the capex that we have and the 1.7% of spending every year.

Rakesh Patel (Goldman Sachs): I wondered if you could give us a few more details about the Aliad venture capital business that you have. If you could give us perhaps a few examples of what it is doing, what Air Liquide is getting out of it, and also how big it is now and how big you expect it to be in the next five to ten years?

Pierre-Etienne Franc: We created ALIAD in order to avoid reinventing the wheel and to go and look for partners by taking minority position in technologies that we believe are instrumental to grow or advance our new businesses. We only do deals with players that are accompanied with joint development agreements or business partnerships so that there is a clear connection with the business.

Today, ALIAD has invested in three companies and two funds. There will be a detailed presentation of that in the workshop this afternoon. But basically the target, is really to move when we want because it is really a dedicated entity, not an FCP, or a public fund. So the target is to have €100 million portfolio by 2017.

One typical example of what we did recently was HYDREXIA which is a solid hydrogen storage technology which has an interest for IM supply chain in the future. And we are going to look at targets in both IM, R&D, healthcare, LI fields. This capital arm is really for the benefit of the whole Group.

Francois Darchis: Diana, you are a strong supporter of ALIAD, so maybe you could tell us why.

Diana Shillag: Definitely. Well, what we are looking at is new technologies that could come as well from outside. As Olivier explained, open innovation is really the source for us as well. We believe that we need to be connected with the outside, with the different leading ecosystems. We have screened 15 different start-ups together with ALIAD where we have looked at their potential interest for Air Liquide.

So far, we have not yet invested but our ambition clearly is that next year we will invest and take a participation in healthcare. We have a few very interesting prospects in the candidates in our pipeline today and we expect to move forward on that very fast.

Markus Diebel (JP Morgan): A very basic question on hydrogen cars. I mean, others get excited about electric vehicles, which are still at a very early stage. But could you maybe share with us a little bit what the car manufacturers are actually telling you about the growth prospects there in terms of are there any cost differences? I mean what determines that maybe hydrogen has an edge over other forms of green cars? Maybe if you just give us some general view on that.

Pierre-Etienne Franc: So basically, if you want to decarbonise transport, you need to move to electric mobility. And if you want to go to electric mobility, except if you decide to stay within city walls, you have no choice than to find long range. Long range is given by hydrogen and fuel-cell.

The efficiency is a lot better than a classic engine, so the total well to wheel efficiency is better even if hydrogen is done with a classic SMR. Furthermore, hydrogen can be produced using renewable energy or doing electrolysis from renewable electricity. It then allows us to connect energy and transport and so it solves some of the storage issues.

The total cost of ownership of a fuel-cell car today is of course a lot more expensive than a classic car or even than an entry car because it is the first series that are starting. You need to take as an example the start-up of the Prius. The Toyota Prius started, I think, in 1997. It took them seven years of losses to reach enough to breakeven.

Today, the hybrid technology is 50% of car sales in Japan and only 5% but increasing every year in European countries, also in the States. So fuel-cell vehicles will not in two years become a massive sell. It is going to go slowly.

Toyota and the key car manufacturers are conscious of that. And what they say is that on their roadmap, they know that if they reach 100,000 volumes, their TCO, their total cost of ownership, will be competitive to classic cars.

Then on the hydrogen side, the cost of production of hydrogen, delivering it to a station is competitive to a diesel cost. So the competitiveness of hydrogen is not an issue. If you want to make it blue as we call it with no CO₂ emissions, you have a small premium of 10% to 15%, but in the total cost of ownership of having a car and running it is not an issue.

So the issue is not the cost-competitiveness. The issue is to solve the chicken and egg between infrastructure and car. This is where, and again, we need a couple of minutes. But we are trying to develop dedicated infrastructure initiatives in a some countries which are very willing to push that – Japan, Germany, California, the Nordic countries where there are some subsidies to help start the infrastructure. And when the infrastructure is there, then the market will start.

Francois Darchis: So I think we can stop at this point. You will see during the break and after the lunch, a lot of posters about iLab, about ALIAD, about all those new innovation initiatives. There will be a game on the energy transition so it will be, also other opportunities and the lunch of course, to ask more question about innovation. Thank you.

[LUNCH BREAK]

Outlook

Benoît Potier and Fabienne Lecorvaisier
CEO and CFO, Air Liquide

Introduction

Fabienne Lecorvaisier: So thank you everyone for participating in the workshops. We are now entering the last session of the day. We will start with a wrap up of what you have heard this morning and then Benoît and I will try to give you some perspective beyond 2015 in terms of growth, in terms of new business opportunities, investments and of course sustainability of the performance and then we will end up by the Q&A session.

So, as discussed this morning, we are constantly trying to anticipate the challenges of our markets. We have leadership positions in three of our four business lines. The three major trends that we have identified reinforce those leadership positions. In Large Industries we have the industrial clusters, in Healthcare, in European countries in particular, and in electronics in booming Asian markets, and this definitely comforts us in our ability to grow above the market level.

We will, of course, continue to enhance our existing business models, supported by our business lines expertise to deliver further growth but we also believe that thanks to our various initiatives and to our renewed innovation process, growth will be boosted by new market opportunities which are just emerging right now. You have heard about those opportunities: we can mention examples – large energy projects, biogas, hydrogen mobility, e-health.

Major projects

Benoît Potier: If we go a little bit deeper, not only in our business lines but also our technologies, on the left part of the slide you have more or less the historical development of the Group. At the top of the slide you have the different technologies. Clearly we have the separation units, no surprise, and the long journey where we went from air gases to hydrogen to Hyco to more standardised plants. The difference that we see in the future is more related to our ability to manage major projects, because as you have understood in the future, we will have more and more major projects. Those major projects are more related to technology, to engineering, but if we combine that – and I think that is a major characteristic of the future – if we match that with the Large Industries business model, we think that with the existing experience that we have, we should be able to develop projects that are either in the energy conversion field – and clearly most of the major projects that we have are related to converting a form of energy into valuable products – CTX for instance, from coal to something. But that would also be from natural gas to something or other forms of energy – and also by combining the technologies with the existing OTF model we should be able to develop a sort of OTF Plus. OTF stands for, as you know, Over the Fence, which is our model of contracting long term with our customers. We think, when we look at the experience we have on the left and the new schemes on the right, that we are able to actually create new business with OTF Plus and energy conversion.

Industrial Merchant

If we look at the third line which is more Industrial Merchant, we come from a time when the name of the game was more building a Large Industries plant, piggy-back a liquid plant on that and sell this liquid in the merchant market. But that is probably 20 years ago, and this scheme is probably no more valid in the new economy. So we thought about designing standalone plants which were efficient and allowing us to address pockets of markets in the world. We thought about developing new technologies in small cylinders, which we did, and we are testing, for instance, the new Albee offer. But in the future, if we think about services and what we introduced this morning, which is the advanced businesses and technologies model, this sort of combination of technology and new business, we think this will bring new opportunities for Industrial Merchant.

Electronics sector

In the electronics sector, the name of the game was carrier gases. This is the old time. This is 20 or 15 years ago. Progressively we introduced the Electronic Speciality Gases – ESG – but they become also progressively a sort of commodity. Not all products but some products like NF3 became more commodity-like, so their added value was disappearing. So we introduced other forms of product through chemicals, but more recently the ALOHA product range, which is a brand new high value range of products which allows us to penetrate into the largest accounts like Intel and Samsung. The recent acquisition of Voltaix is actually a move in the right direction to bring our electronics business to a next level which is high quality and high premium products.

Healthcare

And finally, in the healthcare sector, we came from hospital to respiratory in home to hygiene to a very large home business today and with, in the pipeline as you know, future therapies in R&D. So all those new ideas, new components of the offer, will actually bring additional growth to the sort of business-as-usual approach that we have developed so far. And I think, taking that into account, it is possible then to quantify the growth as we can see it, for the next phase which is Horizon 2020.

Growth forecasts

Fabienne Lecorvaisier: So coming back to the continued development of our existing models, we first foresee a slight growth acceleration beyond 2015. The market should be stronger. Our current investment decisions will deliver and therefore our forecast in terms of annual average growth is in the 6% to 9% range providing of course normal market conditions, not excluding major foreign exchange effect.

We do not really expect major change in the evolution of the base business, but we are confident in a stronger contribution of our development initiatives. The relatively strong investment of the 2010–2015 period will also allow us to deliver this growth with a slightly lower level of capital expenditure, which should be for the period in the €10-billion range, including industrial capital expenditures and bolt-on acquisitions.

So just for you to know, those forecast are based on estimates that we have done on the market average growth for each of our businesses. They are summarised on this chart and it is important to note that they are a little bit more aggressive than what we have experienced in previous cycles. So where does it take us in terms of sales?

Maps of the future

Geographic weights

Benoît Potier: So, interesting question. We would like to show you four maps describing the future a little bit. The first map is the sales Horizon 2020 and we can just look at the progression between 2010 – which is what we had, 2015 and then 2020. So what do we see? First of all we see a big Europe. So Europe in 2020 will be still big but if you count the number of small squares – which you would not, I can do that for you – you would see that Europe will be below 50%. So that is, I think, one important element.

The second is that if we look at the different weights beside Europe, we have two major shifts. One is Americas and the other is developing Asia. The size of the two is more or less equivalent. So Americas – North America, actually – will weigh as developing Asia. Then you have four small ships around – or boats around – and the size of those boats are more or less equivalent. So that is a first conclusion.

The second conclusion, if I look at the colours, we will still be dominant in Europe in healthcare. So healthcare in Europe will weigh more than Industrial Merchant. This is very important but it means that if you think about Air Liquide in 2020 in Europe, you should think as a company which is first in Large Industries and healthcare, and only second in Industrial Merchant. This is a completely different view of what we were five, ten or 15 years ago. The balance between the three is more or less good, and I would say that the loser in this game is clearly electronics because there is only two squares and this is the result of a clear move from Europe to Asia. So Europe will be strong – less than 50%, quite well-balanced between the three business lines.

If I look at the East, developing Asia, Eastern Europe and Middle East will be the zones where sales in Large Industries will be growing faster and this is clearly the trend that we have observed in the recent past. If I look at this part of the world also, electronics will have more than 60% located in Asia. The remaining part will be in America. And finally, when I look at America, we will have a good balance between Large Industries, with a lot of new opportunities, and Industrial Merchant.

Investments

Now I would like to look at the second map which is investments. What does it require in terms of investment to reach this level of sales? First of all, we can see a significant blue colour in Europe, so we are going to invest and continue to invest in European healthcare.

The second conclusion is that in Large Industries clearly, as a result of the sales, the investment will be more in the Eastern part of the world.

The third conclusion is that the Industrial Merchant will be quite well spread over the world, between North America, which is substantial, but also in the other part of the world and if you take South America as an example, we think we have more opportunities in IM and healthcare than in Large Industries.

Now, I should also add as Fabienne said earlier, that we intend to invest €10 billion in this period whereas we invested €12 billion in the 2010/15 period. It means that part of the investments that have been paid already – or will be paid between 2010 and 2015 – are

actually investments employed – capital employed, but not yet deployed. We will get part of this benefit in the second period.

Reorganisation of markets

How do we get organised to reach that map? That is the next map. We need to realign our organisation's to our markets and we have already decided to create one base and three hubs in the whole world. Let us talk first about Europe. In Europe the name of the game in 2013 was to realign our IM and welding businesses to the market. We have started realigning and what we have as an objective is to make each and every entity in the world competitive if we compare it to the benchmark of the Group. So we have been restructuring part of our European business. We will continue as necessary and when necessary on an entity by entity level.

The second thing is we have defined a new approach. Paris will be the base. Houston, Frankfurt and Shanghai will be the hubs. What is a hub? A hub is a place where you will have group functions – be it corporate functions or business functions – that will be at the Group level and not at the zone level. What we expect from that organisation is a better input from the market dynamics. So what is happening in the US or North America should be heard and captured in North America, not necessarily with a North American view, but with a world view. And this is the meaning of those waves that you can see. We think that in the new world there will be zones of influence in the world and we will be better placed being in the US to actually be part of this influence zone from the US, same in Germany and same in Shanghai, to actually be in the development and be in the flows – be it the energy flows, the investment flows, the finance flows or the trade flows – out of these zones.

I give you one or two examples. When there is a project developed by a US company in the Middle East, everything is decided in the US. There is nothing decided in Paris. And if we do not have the Group's view out of Houston, we miss the point. If there is a Chinese investment in oil industry in the Middle East, this is done in China. This is not done in Europe – we need to be in Shanghai to capture that sort of flow and new idea. And same applies for Germany, same applies for Paris. So we have decided to make our organisation evolve. If you count the number of small people, you can see that one symbol represents 2,500 employees. If you count the number of small people you would reach 62,500 people in 2020 and if you do the maths, it will give you approximately 3% per year.

So we do not intend to actually grow significantly the base, what we want to have is the perfect fit between the number of people, the talents we have and the different locations that we put in place in the whole world.

Innovation

Finally, the last map is the innovation map. This morning you have been exposed to the core business, the adjacent business and the transformational business. What we intend to do – this will be a differentiation I think, same as organisation by the way – we intend to have a core business represented in terms of innovation in the major zones. That is the blue symbols. You will find it North, South America, Europe, Middle East and Africa and Asia. The second symbol is adjacent; it is linked to the advanced business and technology network. We think that essentially it will be in Europe, partly in America and also partly in Asia but more in Japan than in China. So we intend to have three major poles in adjacent business in those

three zones. And for the transformational business, it is even further away. Most of the jobs will be made in Europe but we also want to have a sort of small group somewhere in America and somewhere in Japan. So that is the way we are going to organise our innovation to get a global reach at the end.

Boost to sales

Now before we close the growth pattern, I would just like to add that if we look at those three trends that we introduced this morning, each of them is related to something that is going to happen that may generate a booster in terms of sales. If we take energy transition, the industry globalisation, it will definitely relate to energy transition and out of that, through the major projects or through the renewables or through biogas or CCS technologies, we will be able to develop a business that is not really a business-as-usual type of approach and may become a booster in the future. By the way, a booster should be €1 billion of sales when it has reached its cruising altitude.

eHealth

In the second trend, we think that eHealth is going to be the winning new market for a lot of medical services or medical provider service companies. And it might become, at a point in time, also a winner. You remember that we have one million patients and we are going to illustrate that in a minute.

Digitisation and mobility

And finally, mobilisation and digitalisation, it is all related to internet-based offers because all of our offers in the future will probably be through internet, that is number one. And second of course, mobility is going to be a big driver in the future.

So we have more or less in reserve different boosters, each one that could represent €1 billion in sales. I cannot tell you that in 2020 all of them will be at €1 billion but I am pretty sure that through those boosters we will be able also to prepare the long-term future of the Group. Now how do we finance that? I would like Fabienne to come back on that, and then we'll take one or two examples.

Cash model

Fabienne Lecorvaisier: So we also wanted, during this wrap up, to re-emphasise that our development initiatives and investments are backed up and controlled through our cash model which has not changed so just to remind you how it works. Imagine that we sell €100 of gas, this generates cash flow of approximately €19, €10 coming from net profit and €9 corresponding to depreciation and amortisation.

You know that over time we have a strong pay-out policy with a pay-out ratio between 45% and 50%, that is probably not going to change. So out of our €10 of net result, we distribute €5 of dividends to our shareholders and we contribute €5 to equity. Having contributed €5 to equity, we can increase debt while maintaining our balance sheet ratio. We have taken here the assumption of a gearing of 60% and together with the depreciation that allows us to spend €17 of capital expenditures. You know that we need approximately €4 of non-growth capex, or maintenance capex, to keep our current capacities available and then the result of that is that we have €13 which are free for generating growth. So assuming that our capital intensity remains at the current level at 1.8 or so, that enables us to generate €7 of new

sales, or 7% of growth, if you will. So what does that mean? It just confirms that we can sustain 6 to 8% average growth while preserving our balance sheet ratios.

Of course we want to accelerate growth further through more significant acquisitions, then we could increase debt and stretch the balance sheet a little bit more which should not be a problem given our current leverage remains quite low compared to the rest of the industry. So, now moving to the examples.

Generating growth

Benoît Potier: Financially, we can generate this growth. Now what are we talking about? Two examples.

Hydrogen energy

First one of course is hydrogen energy. I do not have to introduce the subject; I think you have been flooded with hydrogen today. There is one or two points I would like to make. First of all it is not limited to cars. Do not think that hydrogen energy will work because the car industry's going to use it. It is not limited to cars; we are already selling solutions to customers in the fork-lift application. We think that hydrogen may play a role in storing energy – so as an energy storage, and this is a huge need for the world. And also it is related to mobility – and mobility means car but it also means your smartphone, your PC, your tablet and everything that needs energy while you are moving. So our strategy is clearly to identify the niche markets that can pay themselves today so that we can pay or cover part of the development costs in hydrogen to minimise the cost to the company to develop the big market.

What is this big market? The big market is the car industry and if only 1% of the fleet were converted to hydrogen, that would represent, as you know, €15 billion market.

We cannot even dream about 10% because 10% would be €100 billion and €100 billion means two times the industrial gas market worldwide. So my message is just it is so huge that we cannot ignore it, and this is why Air Liquide has been deeply involved in hydrogen technologies and hydrogen fuel cells in the past ten years, and will continue doing that.

So I would like just to show you a small film that is reality.

[FILM]

'Air Liquide has opened a hydrogen filling station to the public in Dusseldorf in Germany and today Britta will show us how it functions. Britta lives in Dusseldorf and drives a hydrogen electric car that has a 500km range. As she is driving home she realises she needs to fill up her car. The Air Liquide station is accessible as it is in the city of Dusseldorf and filling up a hydrogen electric car is a simple, easy and clean operation.

Britta starts by identifying herself with the card, confirms her need to fill up and connects the high pressure nozzle to the car. Pressing start launches the pump and during the three short minutes that it takes to fill the car up, Britta checks the latest Air Liquide news on hydrogen by scanning the Air Liquide QI code on the wall. Once the car is full, she simply puts the nozzle back, collects her receipts and drives away. This hydrogen station is a reality. It is also a perfect example of the innovations of tomorrow that Air Liquide makes available today.'

[END OF FILM]

Benoît Potier: So as simple as that. You go to Dusseldorf and you have your hydrogen.

Healthcare

Okay, another example which is related to the healthcare market. We serve today one million patients – you heard about. This base is actually gold. This is gold because this is where the data about the health of the patient is actually generated. In the future those will be able to connect the patient and the data related to his health to doctors, to insurers and to service providers who will actually have in their hands the ability to improve the whole system in terms of health but also in terms of cost. So starting from this very simple remark, we have designed, built, and we are implementing today a programme around a small device called Nowapi – maybe you have heard about it – that is just connecting patients to the system and the interesting thing is that we are introducing this technology in France and as a result of that, we got from the French authorities a reimbursement tariff which was higher than the standard one. So this is a very interesting evaluation of the data by an authority – the French authority – and if we think about that, this will be the future. So that is why I think that eHealth and our patient base – which is only one million out of 25 at minimum in the world – is clearly a big asset in the future. And I would like just to also introduce a film showing this technology.

[FILM]

'Lyon, France. In the sleep disorder units of the South Lyon Hospital, nurses are getting a patient ready for the night. She probably suffers from sleep apnoea but to make sure of this, she will sleep with sensors that will record her sleep pattern. Doctor Gourmand will then read and analyse this data and prescribe the best treatment for her.

Christian has already had his sleep monitored at the hospital a couple of weeks before. Nicolas, an Air Liquide healthcare employee, visits today to train Christian on the device that the doctor has prescribed. This is a personalised treatment which is a pressurised device that will help him breathe properly during his sleep and avoid any apnoea during the night. Attached to this equipment is an Air Liquide telemonitoring device that will send daily all the data concerning Christian's sleep to both Nicolas and Dr. Gourmand.

Nicolas usually chooses to receive this digital data on his tablet. Once Christian goes to sleep, the device records his sleep pattern and in the morning, this data are collected and accessible by the Air Liquide healthcare employee and by Dr. Gourmand for analysis. Christian's treatment is well adapted to his needs. Air Liquide is at the heart of the relation between doctors and their patients. It is also a perfect example of innovations of tomorrow that Air Liquide makes available today.'

[END OF FILM]

Fabienne Lecorvaisier: So, following these two examples which are, I think, very illustrative of the way we want to prepare our future, I would like to summarise our vision beyond 2015.

Vision beyond 2015

Thanks to innovation and targeted investment, we will continue to deliver sales above market growth. Thanks to increased competitiveness we will be able to continue to improve our margins over the long term and finally, as stated this morning, we remain committed to a return on capital employed between 11% and 13%.

Responsibility

Benoît Potier: And before we close the session I would like just to add the responsibility view on this more financial view. Acting responsibility is now, I would say, fully embedded in our strategy and in three ways. First of all in the way we grow our people and run our operations. The second is in the way we invent solutions and address the world's key challenges and the third is the way we build trusted relationships with shareholders but also with stakeholders.

What I would like just to pass on as a very simple message is that we have been building this view on responsibility for a couple of years, we have introduced it into the management system, and you can see some of the objectives that we have like reducing environmental impact in general by energy consumption and emissions, in improving patient quality of life, etc. You have the examples of different programmes. All the actions have been taken; they are now embedded into the system and we have the key indicators in place to measure how Air Liquide behaves in terms of responsibility.

Just as a very simple example, we have decided to systematically include in the variable pay of all the employees that have variable pay today, a portion which is linked to responsibility. It can be safety, it can be customer satisfaction, it can be the way we run operations, it can be emissions. It depends on what you do and what is your mission in Air Liquide, but that is already a decision. So I wanted to come back to that because that was part of the ALMA 2015 objectives and it is also embedded into the Horizon 2020 objective.

Concluding remarks

Now I would just like to conclude and say that in brief, we saw several things this morning. Firstly, we saw the ALMA 2015 objectives and they will be essentially met in sales if we look at the relative gap between the market growth and our own growth. The main gaps clearly are as a result of the crisis and to a certain extent the foreign exchange. But if we compare the ability of Air Liquide to actually generate growth on top of a base, we have met the objective and we think we will continue. We have also met – that is the second point – the objective in terms of efficiency and actually we have exceeded these objectives because we will deliver €1.3 billion of efficiency overall over five years. We will be reaching the ROCE objective probably one or two years later, and the main reason as you have understood is that part of the capital has been employed but not yet deployed. In other words, we have built the plants but not started up some of those plants. It was either planned or it was the result of some delays from customers but the rate of failure amongst our customers is absolutely minimal. And if we look at the €12 billion that we will have invested over five years, a very small amount will be not producing what was expected at the beginning.

And finally, I will say that we will have met our objective in responsibility because now it is really introduced in the management system. If we look at the long-term ambition of the Group, it remains essentially in line with the ALMA 2015 objectives as Fabienne outlined it. And in addition, I would say that we believe that along the trends that we have described during the day, we will be able to generate even more as the boosters that we have described finally materialise either in the timeframe 2015–2020 or slightly after. But we are pretty confident that out of these trends will emerge new opportunities for Air Liquide.

We hope that today's presentation gave you the necessary comfort that Air Liquide is and will remain the leader in its industry, and we want to thank you all for your attention, for your presence, for your participation in the games and I am now, together with the management team, at your disposal to answer your questions. Thank you.

Q&A

Peter (Soc Gen): It is a quick question on the growth premium to 2020. You are looking at 1% to 2% ahead of the industry. You clearly have something of a geographical drag. You are very realistic on that with Western Europe, particularly in Industrial Merchant, so it infers that you have an even greater premium on your development initiatives and maybe that is 1% to 2%, 2% to 3%. I was just wondering where you are most confident on that, by division or line of business? Because obviously in Industrial Merchant, if we had the same discussion with the peers they would be saying a lot of the similar things in terms of the Industrial Merchant developments, so I am just wondering where you are most confident that that growth premium can come from?

Benoît Potier: I am going to answer and Jean-Pierre, maybe if you have one or two things to add. Essentially, Jean-Pierre because it will probably come out of Europe. The name of the game in merchant business so far has been capacity building and development of new applications. And it has been a sort of one after the other and again the new one and the other. In other words, if you look at 100 years of development, we start building capacities because we had an application. We sold this application and then we reinvented another application, built capacities and the like. In the recent past, the name of the game was put capacities in developing economies. That was very simple. This game is over. There is over capacity in some regions. There will be more needs in other regions but we probably, as an industry, need to better plan the capacities with the developing economies. If you remember this morning I showed you a sort of developing economies mature economies gap in growth before the crisis and after the crisis. When you have ten points of difference in the growth between existing geographies and new geographies, there is no hesitation. The strategy is simple: you go there, you build capacity and by the way at the time it took us less than two years to grow the capacities at 80%. This game is over. We now have a growth differential which is probably five points. There are zones, as I said, that are overcrowded with capacity, so we need to rethink the way we do merchant business. There will be, in the next five years, less investment in new capacities.

The name of the game is going to be loading existing ones, but not by just selling at any price, the capacities. So we need to transfer the know-how that we have in IM in Europe, in the US and in other more developed countries, to the emerging countries so that we are more selective in the way we load our plants and develop our applications. One example: China. China today has a lot of potential in new applications but a lack of knowledge in how to develop business with existing applications, so we have already decided to build an R&D which is a more technical centre in Shanghai to actually transfer more rapidly the applications to China and selectively develop the merchant in different regions. That is my first answer.

The second part of the answer is the new business. There will be still a vast majority of customers in the bulk business that are professionals that just want to buy liquid and the application equipment. If we think about the cylinder business, I think the cylinder business is going to be very different because the way we deal with the customer, the way we deliver our product, the way you can order it, the way you contract with the customer is going to change. And when we talk about digitalisation, we think that this digitalisation is going to affect the cylinder business first and in a big way.

In 2020 I think most of the customers will order their cylinders from the net and I am pretty convinced that the ones that will be prepared and have the systems and the marketing and the product itself – the packaging and the flexibility required – will be the winners. There is still a lot of things to do. We have started building this sort of new business, it will take time, but by 2020 – to be specifically answering your question – the digitalisation will have, I think, influenced significantly the way we sell our cylinders to our customers. Are we better prepared than others? I think we have an excellent base? I think Europe is going to be the workshop. You have seen the iLab people, you have seen the aB&T people. There are many people that you have not met with and will be imagining the future and creating the future of the IM business. So probably as a short-term investor or analyst, you should look at business as usual evolution for the first part of the period, but expect probably some disruptive technologies being introduced into the market and being in the market by 2020.

Jean-Pierre Duprieu: Difficult to add something to what Benoît said but actually I want just to enforce that. Basically we believe in Europe. Europe is a large continent with a big population and with big capabilities. So I am not going to say that Europe is going to be booming. We are going to have selected opportunities in LI, we will leverage on healthcare and in IM specifically we are busy realigning our organisation to the volume we had today, the short-term that Benoît's been mentioning. And in parallel to that, we think about the future and the future growth generation. Ultimately what we want is definitely to have European merchant which is growing more than IP. We cannot be satisfied with just a Europe growing at the level of European merchant, growing at the industrial production level.

Benoît Potier: Some of the technologies that we are thinking about have been worked on for about five years so we are trying to recreate the sort of barrier that was existing in the past to really consolidate our business and I think there will be hopefully good surprises in the IM business in the next five years.

Peter Mackey: I have asked this in a couple of different ways during the course of the day to various members of the management team –

Benoît Potier: You did not get the right answers yet.

Peter Mackey: Exactly. You said very clearly that in the 16 to 20 period, you are going to be benefitting from the top-lying growth that you have set the stage for with the capex programme of the current five year period. I have been struggling to understand the capex number that you are talking about for that 16 to 20 period, not for the growth rates that you are talking about over that period, but for the growth rates beyond 2020. If I assume that there is a couple of billion of M&A, there is a lot of healthcare investments included in that ten billion, that is largely M&A, so let's say you are talking about eight billion of capex over that five-year period. You are talking about less than 10% of gases sales. If I take that very

convenient sales/cash flow capex growth chart that Fabienne provided us, that would suggest underlying organic growth of 3% or 4% driven by that level of capex. Is that the sort of thing we should be thinking about as the very long-term view at Air Liquide, or at the moment is your focus about return on capital? If you see return on capital beginning to pick up, can we start to expect that ten billion capex going up again?

Benoît Potier: I am sure Fabienne will be well-placed to answer the question, but before she starts, I just want to say one word. Yes, we care about return on capital employed, but we know the model by heart. We know very well – we had a discussion over lunch, with some of you around my table – about the very simple thing. If you look at the balance sheet of Air Liquide, you have part of the capex which we did in the past which is now at zero, and part of the capex which is brand new capex, the one that we have invested very recently. The art of managing industrial gas company is the art of balancing zero capex with recent capex. We decide on this balance. If we want to grow faster, we will put more capex, more recent capex, but we will depress ROCE. If we stop investing, if we decided that the growth should be 4%, then we will reduce the recent capex, and we would benefit from the old capex which is fully depreciated. We will change the balance and we will increase the return on capital employed immediately. We think that being at 12, 12/13, is the right level for the type of risk that we take in the business. We would not increase the 13, 12/13, to 15. We prefer to then grow more and invest a little bit more so that by balancing those two portions of assets, we generate more growth and keep the return at 12. Now what happened to us during 2010–15, is that we decided investments that have not yet produced, so we have this overhang of capex which is still there. It will produce in the second period, but we think that we need now as a result of that to be a little bit more careful in the way we spend our capex for the 2016–20 period. So, yes we care about ROCE, and yes it is a matter of balancing capital on the one hand and growth.

Fabienne Lecorvaisier: First, thank you for asking the question a second time. I will give you the same answer. First of all, to clarify for the 2015–2020 period, what we have assumed is bolt-on acquisition in the 200 million plus a year, so it is more 9 billion for the industrial capex. Then as we showed this morning, we believe that between 2010–2015, we have clearly invested in advance with those projects which are not started yet on the construction period, so you should probably look more at the average of the ten years, 2010–2020, and look at the global picture, and take into account the extended cycles and what we are going to invest in the next five years. We will produce beyond 2020, because our timeline is now more in the four years for the large project. So yes, we are focusing on our return on capital employed. We believe those capex are sufficient to provide for further growth.

Benoît Potier: If I may add, because as you were not convinced with the first answer, she said the same, so you must not be convinced the second time.

Fabienne Lecorvaisier: Nearly the same.

Benoît Potier: Nearly. Okay. A bit more specific. You have to remember that the capex to sales ratio is one global ratio, but it covers very different ratios by line of business. The Large Industries, the highest capital intensive business, HC the lower capital intensity, we intend to grow the healthcare business, so there will be a mix effect in the capex to sales that you also need to take into account before you predict the next period.

Jean-François Meymandi (UBS): We spoke about your best opportunities. Except biogas, which we spoke earlier on today, which ones are your main risks, or what are the main tasks you need to achieve to get to your targets? That is the first one. What gives you the most work? The second one, on the value creation, you have this great chart on page 26 of when you have the presentation showing your cost of capital and your return on capital, and that a 5% cost of capital might be what it is today. If it goes up, to which degree have you locked on your new project a return on capital that was lower, and how can we avoid a squeeze on returns on the other side?

Benoît Potier: It is always difficult to talk about the best target in terms of growth. I understand from your remark that you love biogas. That is one, of course. The issue with biogas is, we deal with a totally different world. The agricultural world is more linked to how you manage a region, how you manage land. What are the sort of compromises you make between food, waste? How do you measure the emissions or the equivalent emissions? There are many issues, we are just starting, but I think the potential market is billions, as you saw this morning, and thanks to the acquisition we made years ago in the membrane technology, we have the best membrane to separate natural gas from CO₂ and nitrogen – so we can convert very easily and cost effectively this landfill biogas into methane, and sell it to the world. That is really something which is interesting. This is the beginning, it is early, there will be an acceptance issue, and I do not know how quickly we can develop this market. But that is a very interesting one.

The hydrogen energy is the one that is probably the flag, today. We have been working on this hydrogen as vector of energy for about ten years. We have been able to cover part of our cost through sales, which is good news for the company of course. We are reaching a point where we think the car companies are going to either adopt this technology, and then it will be a big, big market, or test it and finally reject it. It is too early to say but, if you look at what happened in the past two years, and in particular recently in the Tokyo motor show, where Toyota really showed this first fuel cell, new concept car – they have put hundreds of people on the fuel cell technologies, for years and years. If you visit their website, you will see that they have started 30 years ago, and now they are the most advanced. But there are many other car manufacturers that could really introduce a fuel cell technology into the market. We will see, but I think for us, if it happens, we need to be in. If it does not happen, the cost for Air Liquide would have been limited, and we still think that there is room for hydrogen energy for other markets, other segments. That is probably the flagship.

That is the most disruptive market because it is for us a brand new market. We sell absolutely zero today to this segment, and even if 1% of the fleet is converted, which is nothing – just a happy few that can afford buying hydrogen cars, and yes it is good, yes I have my refuelling station at about 50 kilometres, that is my contribution to the environment – even that would present a huge amount of money. I would answer your question by telling you, hydrogen energy is the number one. Biogas is a little bit late. Everything linked to health is more a natural continuation of what we are doing, adding on value to the system. Service, technologies, dialogue, new ways of caring for people, that is normal, that is a continuation of what we do. That is the first question.

Second question, ROCE versus WACC. Interestingly, you asked what happens if the WACC goes up. During lunch, we had a discussion about what happens if it goes down. So we do not

know, but it might change. If it goes down, we will have pressure from customers, saying: 'Look, you can get financing now at a very cheap rate, so your cost of capital has decreased, so your return should decrease.' That is the type of discussions we had in the past, and we may indeed have if it goes down. If it goes up, it will be up to Air Liquide and the finance team actually to get the best financing. By the way we are happy to have been upgraded to A-plus yesterday evening. I think it is a nice "coup de chapeau" from S&P. But it will be our job to get the best financing and the best cost of capital. I do not think that if it is just a temporary situation, we will get more return from customers. I think the 12-13 is more or less the market price for the risk. We had in the past customers telling us: 'There is no way we would accept Air Liquide making a 15% return on this investment, because it is way too high compared to what we get.' There is a sort of limit, a market limit, which is 12-13, and there is a pressure if WACC goes down not to give too much to customers. We think 12-13 is the right level. By the way, this is what we have had for the past 20 years. It will not change.

Heidi (Exane): We talked a lot about growth opportunities today. I wondered if you could comment on operating leverage. Should we expect any changes there? Maybe in IM, since you have a lot of realignment going on in the business?

Pierre Dufour: Yes, operating leverage comes from two ways. The first way would be by managing this very well-known now three-way equation that we talk about all the time: Inflation, Pricing and Efficiency. That is what has been giving us most of the operating leverage over the last many years. We continue to manage this equation, we continue to have an internal objective to retain a portion of the net efficiency that we have, covering increase costs by pricing and part of it by efficiency, and retaining a portion of the efficiency in the P&L. We seem to be able to do that in a very consistent manner, so that gives us operating leverage. Today, that is the main source of leverage. We also have another source of operating leverage, which is to do productivity from existing assets. That is very clear in healthcare. That is Healthcare's business model; they have an existing asset base which in this case is people, mostly, infrastructure with people. As they increase volume, they get operating leverage from this operation which helps them to compensate for the tariff decreases that they have regularly.

In Merchant, there would be some similar impacts. As we ramp up our plants, we should be able to get a little bit more leverage on the production side. I must say that most of the leverage that we have is by managing properly our efficiency inflation and pricing equation. My personal prediction is that the leverage that we have been able to produce over the previous years will continue in the next years, at the same rate.

Jean-Pierre Duprieu: Specifically on Europe, we have a re-alignment plans going on in different countries in IM in Europe, in order to cope with the adjustment to the volume level that has not gone in Europe, or in IM, to the level it was in 2008. We are re-aligning that country-per-country, depending on the countries. We expect a payback on this in 18 months. We are going to have the operating leverage accordingly, in the next 18 months.

Benoît Potier: As a reference, if you are not aware of that, I think 35 or 40 years, the EBITDA to sales margin was 8%. We went from 8% to more than 25%. We are not shy. We know exactly where we are today, and we manage the Group so that year after year we generate this sort of operating leverage. I think what was said is clearly what we are doing at the monthly level, at the quarterly level, at the yearly level. On top of that, we also always

have a reflection on how can we minimise the cost of assets, the new assets, and generate value out of the heart of the business. This is really entrenched into the DNA of the Group. The margin ratio has been worked, year after year, and it is our intention to further improve it. That is one of the three major objectives that we have for 2020, around competitiveness.

To be honest, the crisis was a shock. If we look at where we are today in terms of volumes in the different regions and different business lines, fortunately we prepared ourselves for more efficiency, because it would have been very difficult to absorb, in some businesses, minus 15, minus 20 or minus 25 in volumes. Thanks to the competitiveness programmes and the efficiency programmes, we have been able to generate this sort of operational leverage.

Peter (Soc Gen): I have not had a chance to add up your little bars, but obviously 35 years ago the onsite model was just starting. The healthcare business was not there. If we look at the 2020 target, just a flavour of how you see the profitability coming from those two business lines. They have been a key driver in this transformation.

Fabienne Lecorvaisier: I have shown you this morning the margin evolution by business line, and you have seen that we had improvement over time except for Large Industries where it has stabilised due to the different mix between oxygen and hydrogen. The increase of hydrogen will continue for a while. We still have a number of projects ramping up and projects under construction, so we will still have this mix effect in the Large Industries.

In Industrial Merchant, as mentioned by Jean-Pierre, we have initiated a certain number of adjustment plans which are already delivering, so Industrial Merchant will certainly be the business line where we will have the most significant improvement in margins in the years to come.

If we talk about healthcare, as we have discussed extensively the pressure on tariffs coming from the various governments. You know also that we know how to manage that; we are compensating that by volumes, by local density and by synergies; however, it is more compensation that we can do that will increase in margin, and we are already at a very significant level. So, I do not think there is a lot of room to improve further in Healthcare.

Electronics is a little bit more volatile. As you know, in the electronics business 20%–30% of the business, depending from one year to another, can come from equipment and installation sales for which we have a margin level which is much lower than for the gases sales. So, in the expansion period we will have a more dynamic growth but as we will have more equipment and installation you are going to have a slight impact on the margin.

So all in all, globally we are committed to improve the margin. There will be a lot of elements, a lot of compensations, coming from the various business lines.

Benoît Potier: If I just add on to what Fabienne has said about how we manage our portfolio, I think we are, more than in the past, looking at the portfolio opportunities because we think that, as a result of the crisis, some of our businesses may not have the critical size any more, for instance, or may have been transformed in the way they have readapted to the new world.

So, we recently announced that we would be selling one of our hygiene businesses, which we have done now. That is an example of a decision we took not just on the basis of business – the business was good – but our ability to actually grow the business and internationalise the

business. In the Air Liquide network, when we compared that with the other business in the hygiene sector, a German company we had, and given the fact that it was a family business still run by a family, we thought that this company was actually better off being sold back to the family. We used the funds, actually, to reinvest more or less in the Voltaix business; it is not the same timing, but it is in the same half-year. We think that we have better opportunities in Voltaix, which is totally different, not in the business itself but in the way that we can add value to the business.

So, I think managing the margins in the future will be in the business lines mix, but also looking at the portfolio and deciding what is best for Air Liquide. Is it to keep and to grow, or is it to sell value and reinvest in more promising businesses?

Rakesh Patel (Goldman Sachs): Perhaps a more obtuse question to ask is what do you think peak margins are in your different business lines? Or what will customers be willing to accept? At what point do they stop and say, 'No, we think Air Liquide is making a bit too much money here?'

Benoît Potier: I think the only customers that are actually looking at margin are the Large Industries customers, because they know what it is all about. Either they invest or they contract long term. So, those are the ones that actually have a debate about returns and margin, though it is more returns than margin.

The other customers are just putting pressure on price, because there is a market situation for Merchant, because there is a tariff in the healthcare sector, because there is a need for lowering costs in electronics and introducing more powerful products to the market. There is always a commercial discussion, no doubt, but those who are really asking, 'Are you sure you are not making too much money? Can we talk about it?' are the Large Industries customers.

Now, this goes back to the previous question about value creation and return and WACC. So far we have been in this LI business for 40 years. We have been successful. The renewal rate is over 98%; over 98% of customers are actually renewing their contracts. To us, it is a very important key indicator. If we fell, that would mean something.

So, we can maintain this long-term view. We can manage that; it is the business developer's role every day to get the best deal for Air Liquide while being competitive for the customer. So, I have nothing really to add. The fact is that we need to improve our technologies, we need to increase the reliability even further and we need to have a very safe system. Sometimes our customers are asking us to sell them the industrial management system, so the way we manage the industrial system, with safety and reliability. We have not yet accepted; this is not for sale, this is the Air Liquide know-how that has been developed over time, but it is part of the value of our offers.

So, it is not a big issue for us, and I think we have the right answers. At the very end of the day, if you find a very tough customer, it would be a financial discussion. Are you better off on your balance sheet buying a plant and then having a total cost of ownership which is your balance sheet and a lack of experience in operating the business? Or are you better off not having this investment on your balance sheet and having an operating cost in the contract which is acceptable and competitive? This is typically owned or over-the-fence or self-producing; this is the type, and the ultimate decision is a financial decision for the customer. We know how to discuss those issues.

So, thank you very much. I think it was a pleasure for us. We have been a little bit long in coming back to you; the last Investor Day was in 2010. The next time horizon will be 2016-2020, and I think we cannot wait until the end of 2016 to come back to you, so we need to find the right date, probably more in a two-year than a three-year timeframe.

That will be the end of the ALMA programme. I think we have tried to share honestly and with a very high level of transparency where we are. The takeaway will be confidence and trust in the company, as well as the fact that there is more to come. In this new period, 2016–2020, there will probably be an improvement in the growth. Innovation will be very key, and we are well-prepared and really willing to win this battle. If we manage the balance sheet the way we have explained, there should not be any surprise in terms of the financial solidity of Air Liquide.

So, if you remember that, I think that will be nice, and if you have five more minutes, for those who have to leave, go and see the hydrogen car. And for those who have decided to stay you will be welcome to attend the cocktail. We have now about 500 people invited for this 100-year celebration. If you have time, please stay with us.

Thank you for being with us today and see you very soon at the roadshows. Thank you.

[END OF TRANSCRIPT]

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