



Aspen Aerogels Inc.

Fourth Quarter 2016 Earnings Conference Call

February 23, 2017

C O R P O R A T E P A R T I C I P A N T S

Don Young, *President and Chief Executive Officer*

John Fairbanks, *Chief Financial Officer and Treasurer*

Gregg Landes, *Vice President, Finance*

C O N F E R E N C E C A L L P A R T I C I P A N T S

Eric Stine, *Craig-Hallum*

John Quealy, *Canaccord Genuity*

Sean Hannon, *Needham & Company*

David for Ben Kallo, *Robert W. Baird & Company*

Sean Meakim, *JP Morgan*

P R E S E N T A T I O N

Operator:

Good afternoon. My name is Maryama and I will be your conference operator today. At this time I would like to welcome everyone to the Aspen Aerogel's Q4 2016 Earnings call. All lines have been placed on mute to prevent any background noise. After the speakers' remarks there will be a question and answer session. If you would like to ask a question during this time, please press star followed by the number one on your telephone keypad. If you would like to withdraw your question, press the pound key. Thank you.

I would now like to turn the call over to Gregg Landes, Vice President of Finance. You may begin your conference.

Gregg Landes:

Good afternoon. Thank you for joining us for the Aspen Aerogel's conference call. I'm Gregg Landes, Aspen's Vice President of Finance. There are a couple of housekeeping items that I would like to address before turning the call over to Don Young, Aspen's CEO, and John Fairbanks, Aspen's CFO. The press release announcing Aspen's financial results and business developments as well as reconciliation of Management's use of non-GAAP financial measures as compared to the most applicable

GAAP measures is available on the Investors section of Aspen's website, www.aerogel.com. Included in the press release is a summary statement of operations, a summary balance sheet and a summary of key financial and operating statistics for the quarter and year ended December 31, 2016. In addition, the Investors section of Aspen's website will contain an archived version of this webcast for approximately one year.

Please also note that our discussion today will include forward-looking statements, including any statements regarding outlook, expectations, beliefs, projections, estimates, targets, prospects, business plans, and any other statement that is not a historical fact, and such statements are subject to risks and uncertainties. Aspen Aerogels' actual results may differ materially from those expressed in forward-looking statements. A list of factors that could affect the Company's actual results can be found in Aspen's press release issued today and are discussed in more detail in the reports Aspen files with the SEC, particularly in the Company's most recent Annual Report on Form 10-K. The Company's press release issued today and filings with the SEC can also be found in the Investors section of Aspen's website.

The forward-looking statements made today represents the Company's views as of today, February 23, 2017. Aspen Aerogels disclaims any obligation to update these forward-looking statements to reflect future events or circumstances.

During this call, we will refer to non-GAAP financial measures, including Adjusted EBITDA. These financial measures are not prepared in accordance with US Generally Accepted Accounting Principles, or GAAP. These non-GAAP financial measures are not intended to be considered in isolation or as a substitute for results prepared in accordance with GAAP. The definitions of and reconciliations of these non-GAAP financial measures to the most directly comparable GAAP financial measures and a discussion of why we present these non-GAAP financial measures is also available in today's press release.

I will now turn the call over to Don Young, President and CEO of Aspen Aerogels.

Don Young:

Thanks Gregg. Good afternoon. Thank you for joining us for our Q4 and fiscal year 2016 earnings call. I will provide comments about the business and our performance, and John Fairbanks, our CFO, will present financial details for the fourth quarter, the year 2016 and our guidance for 2017. We will conclude the call with a Q&A session.

I plan to cover three topics in my prepared remarks. First, I'll provide a recap of 2016; second, I'll discuss the current commercial environment, our outlook, our market outlook for 2017 and our goals for the year. Third, I'll review our strategy of leveraging our Aerogel technology platform.

There is no question that the year 2016 was challenging for us. After achieving a compound annual growth rate of 30% for the seven years from 2008 through 2015, we faced significant market headwinds in 2016. While a solid upstream business led to record 2015 revenue, we expected that it would not be a strong contributor in 2016. We were right. Subsea, the primary component of our upstream revenue declined from a record \$24 million in 2015 to \$4 million in 2016. With oil prices declining by more than 50% during the second half of 2014, the upstream flywheel finally came to a stop for us by the beginning of 2016, reflective of the late cycle nature of insulation to our end users. The \$20 million year-over-year subsea revenue gap proved difficult to fill and our overall product revenue declined in 2016 by \$5 million or 4%.

While we expected the weakness in the upstream market, we did not fully anticipate the extent of the softness in the downstream market, particularly activity levels in refineries and petrochemical plants.

While not nearly as dramatic as the declines in the upstream, the downstream market showed weakness, particularly during the second half of the year. We observed that whenever asset owners had a chance to delay projects or to defer maintenance they often delayed or deferred. In the US market, for example, our distributors indicated that insulation sales in our core refinery and petrochemical segments declined industry-wide by as much as 20% in 2016. This environment made growth difficult for us in the important US market, although we were able to mitigate substantially the negative macro trends by continuing to take market share, and by realizing our price increases.

The positive surprise in 2016 was the significant surge in volume from the South Asia Petrochemical Project. As a reminder, we delivered product to the project in 2014 and 2015 at a rate of approximately \$14 million per year. That annual rate more than doubled in 2016 to more than \$29 million and comprised approximately 25% of our total 2016 revenue.

On the one hand, the project shows the scope and scale of a large global project for Aspen. On the other hand, with the project coming to an end and the facility transitioning to maintenance mode, we expect our 2017 revenue related to this account to be approximately \$5 million. This leaves us with another substantial revenue hole to fill in 2017. We will discuss this challenge further in our 2017 market outlook.

The final point regarding 2016 relates to key catalysts that we defined entering the year. There were three: Plant 2, market diversity and technology development. In September, we received approval from our Board of Directors for both our Plant 2 project and for the related debt financing proposal which we received from a leading financial investor earlier that month. However, based on our staged gate decision making process, we decided and announced in early November to temporarily pause our development of Plant 2 in order to better pace the project against our assessment of demand for the 2018 to 2020 timeframe. This timing adjustment better aligns the debt and spending related to Plant 2 construction with our demand forecast based on the current energy market. We believe it is prudent to maintain a strong debt-free financial position in this market environment while we execute our strategy. We also believe we made the right decision at that time and we remain ready and eager to restart the Plant 2 project as our core markets strengthen and as our adjacent and new markets continue to grow and absorb increased capacity.

In the interim, it is important to remember that we have annual revenue capacity from our East Providence facility and from inventory of more than \$145 million, which allows for substantial growth above our current revenue run rate.

Market diversity is core to our strategy of leveraging our Aerogel technology platform and we made solid progress during 2016. While we still have substantial room to grow in our core markets - refinery, petrochemical and subsea - we also have important opportunities in adjacent markets. We define an adjacent market as a market where our value proposition is similar to that of our core markets and where we can use largely the same products, distribution channels and contractors. Our first efforts have focused on LNG and district energy. During 2016, we won three substantial LNG orders and we believe that these wins demonstrate the important long-term role we will play in the LNG market.

It is important to understand how we believe we will grow the LNG business over time and how the LNG experience is likely indicative of adoption cycles for other parts of our business. From 2013 through 2015, we did small scale maintenance work on approximately 20 LNG facilities around the world. Engineering firms and owners gained experience with and confidence in our Cryogel products. This work led eventually to inclusion into project specifications. From there, we were able to win increasing scope in ongoing LNG projects, again, as engineering firms and owners gained confidence in our products. Our three LNG orders in 2016 are good examples of initial wins with order sizes ranging from \$2 million to \$4 million. The next step is to leverage these wins into greater scope in major expansion and greenfield projects.

A typical range of available scope of an LNG project is between \$4 million and \$8 million with a significant project reaching as high as \$20 million. We have now earned the credibility to compete for these projects with a proven solution that provides a strong ROI for our end users. The key point here is appreciating the progression from maintenance work to small scope project work and on to larger scope project work. We believe this progression applies to many of our end markets with the most significant recent example being the South Asia Petrochemical Project to which we delivered approximately \$60 million of Pyrogel over the past four years.

District energy, where steam is generated centrally and distributed through a tunneled system to a complex of buildings is an adjacent market where the thin profile and hydrophobic nature of Pyrogel are winning characteristics. After introducing our products to the district energy market in 2015, we more than doubled our revenue in 2016 as we continue to build a portfolio of successful projects. In addition, we remain on track to launch in the second half of 2017 products specifically designed for the large and attractive power industry, an end market that consumes more than \$1 billion of insulation per year.

The LNG, district energy and power markets are examples of our progress thus far in targeting and developing high value adjacent markets to supplement our core refinery, petrochemical and subsea work.

Again, there is no question that the market environment in 2016 was challenging and our financial performance was impacted. However, we remain focused on executing our plan. We believe we are well positioned to return to a solid growth trajectory as the energy market strengthens and as we have continued success developing our adjacent and new markets.

Looking forward to 2017, we are assuming for our planning purposes that condition in our upstream and downstream energy end markets will be about on par with 2016. That is to say no meaningful upstream activity and frugal downstream spending by our refining and petrochemical end users. In light of the approximately \$24 million hole left by the successful completion of our South Asia Petrochemical Project, we are projecting a decline in our product revenue in 2017 of between \$5 million and \$15 million. While there is recent industry sentiment suggesting the potential for increased activity in the energy markets in 2017, we believe planning for a slower, more conservative recovery is prudent, especially given the aforementioned late cycle nature of our products.

Our goal for 2017 is to build momentum each quarter by gaining share in our core refinery and petrochemical end markets by demonstrating value and growth in our LNG, district energy and power adjacent markets, and by taking a partnered approach in the development of new markets including building materials.

The interesting element to our 2017 revenue projections is that it is comprised nearly entirely of singles and doubles and contains no significant project work. Excluding our subsea and South Asia project work, our base revenue has grown from \$72 million in 2014 to \$81 million in 2015 to \$82 million in the down market of 2016. We project continued growth in this base revenue to between \$90 million and \$100 million, representing a significant component of our 2017 guidance range.

Just to complete the picture with respect to our 2017 guidance, in addition to the \$90 million to \$100 million of base business, we expect that approximately \$10 million of revenue will be derived from a combination of our ongoing subsea and South Asia project work.

The growth in base revenue in 2017 is driven by steady gains in market penetrations across all regions, growth in the district energy and power segments, and our price increases. Accordingly, we believe that we are unlikely to have a significant project-driven revenue gap going into 2018. And, given our record of gaining share in our core business, and of developing our adjacent markets, we believe we are positioned to resume a revenue growth trajectory in 2018.

Our long-term strategy is the third subject today. Our strategy is to leverage our Aerogel technology platform. Our initial success came in the subsea, refinery and petrochemical areas where substantial growth opportunities still remain. We believe that we will resume significant growth in these core markets as activity levels in the energy sector increase. During the downturn in the energy market, we have continued to invest in our R&D and sales and marketing efforts, and those investments have resulted in strong technical and commercial positions in our core and adjacent markets and in several promising opportunities in potential new markets.

With respect to potential new markets, another element to our strategy is to utilize partnerships to diversify our end markets and thus our sources of revenue. Our goal is to leverage our Aerogel technology platform to create Aerogel enhanced products to enter new markets using a partnered approach. Our BASF agreements, for example, position us for success in the building materials market. The commercial, technical and financial characteristics of the BASF agreements are important components for future relationships with other world-class companies.

On a related note, we commissioned during the third quarter of 2016 a full-scale pilot line at our East Providence facility which is dedicated to creating next generation products and to improving operational excellence in our production facility. The pilot line is an important asset for research and development as we leverage our Aerogel technology platform with category-leading global partners to create next generation Aerogel products for existing and new markets.

Overall, we are confident that the strength of our technology and the ROI that we bring to our end users across multiple markets will enable solid performance for our company for years to come. We will maintain our commitments to grow profitably, to prudently scale up our operations and to remain financially strong. We are well positioned to leverage the anticipated recovery in the energy sector and to continue to develop valuable, adjacent and new markets. We have a strong team of people and we are confident in our ability to execute our strategy and to realize our vision for the Company.

Now, I'll turn the call over to John for a review of our financial results. John?

John Fairbanks:

Good afternoon. Thanks, Don. I'd like to start by running through our reported financial results for the fourth quarter and fiscal 2016 at a summary level. Fourth quarter total revenue declined 26% to \$27.6 million versus a record \$37.4 million in 2015. Fourth quarter net loss was \$5.7 million or \$0.25 per share versus net income of \$1.6 million or \$0.07 per share last year. Fourth quarter Adjusted EBITDA was negative \$2.1 million compared to positive \$5.4 million a year ago. We define Adjusted EBITDA as net income or loss before interest, taxes, depreciation, amortization, stock-based compensation expense, and other items that we do not believe are indicative of our core operating performance.

Patent enforcement costs had a significant impact on both our net loss and Adjusted EBITDA during the fourth quarter this year. We incurred \$1.9 million of patent enforcement costs during the quarter versus \$100,000 in the fourth quarter of last year.

For the full year, total revenue declined 4% to \$117.7 million. Net loss was \$12 million or \$0.52 per share in 2016 versus a net loss of \$6.4 million or \$0.28 per share last year. Adjusted EBITDA for the year was \$3.9 million, down from \$9.1 million in 2015.

Patent enforcement costs again had a disproportionate impact on both our net loss and Adjusted EBITDA during 2016. We incurred \$3.6 million of patent enforcement costs during the year versus \$200,000 in 2015.

I'll now provide additional detail on the components of our results. First, I'll discuss revenue. Fourth quarter total revenue was comprised of product revenue of \$27.2 million and Research Services revenue of \$435,000. For the year, product revenue was \$115.5 million and Research Services revenue was \$2.2 million. During the fourth quarter product revenue decreased by \$9.4 million or 26% versus last year's record level of \$36.6 million. This decline was driven by a significant decrease in subsidy revenue and continued weakness in the global downstream market, offset in part by strong growth in shipments to the multi-year South Asia Petrochemical Project. In our view, the root cause of weak demand for our product continues to be constrained capital investment and low activity levels in our core energy markets.

During the quarter, shipments decrease 10% to 10.6 million square feet of Aerogel blankets while our average selling price decreased by 17% to \$2.55 per square foot. This decrease in average selling price reflected a year-over-year decline in the mix of our higher priced subsidy product in combination with an increase in revenue from the South Asia Petrochemical Project, which is characterized by project-based pricing established in 2013 and a high mix of lower priced 5 millimeter product.

For the year, product revenue decreased by \$5 million or 4% versus 2015. This decrease was driven by a \$20 million decline in our subsidy revenue year-over-year offset in part by strong growth in shipments to the South Asia Petrochemical Project. Revenue from the South Asia Petrochemical Project doubled versus 2015 levels to more than \$29 million and comprised approximately 25% of our product revenue.

For 2016, total blanket shipments increased by 5% to 44.3 million square feet, while our average selling price decreased by 8% versus a year ago, \$2.61 per square foot. Again, decrease in average selling price reflected the year-over-year decline and the mix of our higher priced subsidy product in combination with the increase in revenue from the lower priced South Asia Petrochemical Project.

Looking forward, we anticipate the continued constrained capital investment and low activity levels in our energy markets and the conclusion of the South Asia Petrochemical Project will lead to a decline in product revenue in 2017. As a result, we expect product revenue during 2017 of between \$100 million and \$110 million versus the \$115.5 million generated during 2016.

We expect our average selling price for the full year 2017 to increase to \$2.75 per square foot plus or minus \$0.10 due to the expected reduction in the mix of the lower priced South Asia Petrochemical Project revenue and the impact of our 2017 price increase. This average selling price expectation is included in our 2017 annual revenue guidance.

I'll now turn to our Research Services revenue. Our Research Services revenue is related to contract research performed principally for government agencies. In spite of a \$300,000 decline in the fourth quarter of 2016, Research Services revenue increased by 13% during the full year to \$2.2 million. For 2017 we project that Research Services revenue will approximate \$1.75 million. This estimate is also included in our 2017 revenue guidance.

Next I'll turn to gross profit. Our gross profit of \$3.7 million and our gross margin of 13% during the fourth quarter represented a significant decrease from record levels in the fourth quarter of 2015. This decline in gross profit was driven by the 10% decline in shipment volume year-over-year, the unfavorable shift in mix from higher margin subsidy revenue to the lower margin South Asia Petrochemical Project revenue, and a relative decrease in capacity utilization and manufacturing productivity during the fourth quarter this year from record levels last year.

For the year, our gross margin of 20% was unchanged from 2015. However, gross profit dollars decreased by 5% to \$23.3 million, due principally to the decline in revenue during the year. Again, this revenue decline was due to the shift in mix from higher priced subsidy revenue to the lower priced South Asia Petrochemical Project business.

Our gross profit and gross margin are highly dependent on product revenue and associated capacity utilization levels. Due to the high proportion of fixed costs in our manufacturing operation, we project that the percentage decrease in gross profit and gross margin during 2017 will exceed the expected percentage decrease in revenue during the year. As a reminder, our variable contribution margin is approximately 45%. As a result, a decrease in revenue and capacity utilization will lead to a disproportionate decrease in both gross profit and gross margin. Accordingly, we expect gross margins to decline to the mid-teens for 2017. This gross margin expectation is included in our 2017 guidance.

I'd like to emphasize that we have not seen any significant change to the economics of our business. Our value proposition remains strong and our product pricing, material costs and manufacturing expenses are relatively stable. The projected decrease in gross margin in 2017 is principally a function of the expected decline in revenue volumes and capacity utilization.

Next I'll discuss operating expenses. Fourth quarter operating expenses grew by \$1.3 million or 16% to \$9.4 million. This growth in operating expense was driven by a \$1.8 million increase in patent enforcement costs offset in part by a \$500,000 year-over-year reduction in all other operating expenses during the quarter. For the year, operating expenses grew by \$3.6 million or 12% to \$34.5 million. This increase in operating expenses was the result of a \$3.3 million increase in patent enforcement costs and \$1.2 million for increased investment in sales personnel and marketing programs, offset by a \$900,000 year-over-year reduction in all other operating expenses, principally associated with a decrease incentive compensation.

Looking forward, our 2017 guidance includes our expectation that operating expenses will increase by approximately 8% year-over-year. This projected operating expense increase reflects a planned increase in our research and development spending and sales personnel, combined with a budgeted expense increase for incentive compensation and patent enforcement actions.

Next, I'll discuss our balance sheet and cash flow. We ended 2016 with \$18.1 million of cash and minimal debt, net current assets of \$50.2 million, and shareholders' equity of \$115.6 million. In addition, our \$20 million revolving credit facility remains untapped. We recently extended the term of the facility through January 2018.

I'll now provide our initial guidance for 2017. Total revenue is expected to range between \$102 million and \$112 million, net loss is expected to range between \$18.2 million and \$21.2 million, Adjusted EBITDA is expected to range between a loss of \$2 million and a loss of \$5.4 million, EPS is expected to range between a loss of \$0.78 and a loss of \$0.91 per share. This EPS guidance assumes a weighted average of 23.4 million shares outstanding for the year. The 2017 outlook also assumes depreciation and amortization of between \$10.6 million and \$10.8 million, stock-based compensation of between \$5 million and \$5.2 million, and interest expense of \$200,000. In addition, this initial financial outlook includes between \$3.9 million and \$4.4 million of costs and expenses associated with our patent enforcement actions for the year. These patent enforcement costs will be front-loaded. We expect to incur 60% of the projected costs in the first quarter of 2017, with the remainder spread over the final three quarters of the year.

During 2017, we will focus on controlling capital expenditures to maintain a strong balance sheet and financial flexibility. Our 2017 capital budget of approximately \$7.3 million is comprised of \$2 million of new projects to be initiated during the year and \$5.3 million in final expenditures for the pilot line, for equipment in support of the new power market product, and for other projects approved and initiated during 2016. We expect capital expenditures will be front-loaded during the year, with \$6.2 million of spending projected for the first half of 2017. During the second half of the year, we plan to constrain capital expenditures to a level slightly greater than \$0.5 million per quarter.

Turning to cash at an aggregate level, we expect to use cash during the first half of 2017 to fund front-loaded operating losses, patent enforcement expenses and capital expenditures. During the second half of the year, we expect to generate cash due to projected improvements in operating performance, anticipated declines in patent enforcement costs, and our efforts to constrain new capital spending during the year. Within the context of the range of our 2017 guidance, we expect to exit 2017 with between \$10 million and \$14 million of cash on hand.

While we don't plan to provide specific quarterly guidance on a routine basis, we think it's important from time to time to provide our investors with a general view to our expectations during the year.

During 2017, our financial performance in the first quarter is expected to deviate from recent quarterly trends and to reflect the new floor for the Company. As noted earlier in my comments, we expect revenue of between \$102 million and \$112 million for the full year. Within the scope of this annual guidance, we expect revenue of between \$20 million and \$24 million during the first quarter with growth expected from this base throughout the year.

As I also noted earlier in my comments, we expect gross margins in the mid-teens for the full year. However, given the differentials in quarterly revenue projections during the year, we expect gross margins of approximately 13% during the first quarter, and into the second quarter as well, with improvements into the high teens expected during the second half of the year.

We also expect operating expense levels to be significantly higher in the first quarter of 2017, due to patent enforcement-related expenses of between \$2.3 million and \$2.6 million during the period. Accordingly, we're projecting a first quarter Adjusted EBITDA loss of approximately \$4 million, with improvement anticipated on a quarterly basis throughout the remainder of the year. This projected improvement reflects our general expectations of increasing revenue levels, improving gross margins and decreasing IP enforcement costs over the final three quarters of the year.

As always, project work and product mix can create quarterly variability. We will update our annual guidance at the time of each earnings release during 2017, or as otherwise necessary.

I'll now turn the call back to Maryama for Q&A. Maryama?

Operator:

At this time, I would like to remind everyone in order to ask a question, please press star, followed by the number one on your telephone keypad. We'll pause for a brief moment to compile the Q&A roster.

Your first question comes from Eric Stine with Craig-Hallum. Your line is open.

Eric Stine:

Hi, Don. Hi, John. Maybe we could just start on LNG. You laid out kind of how things have transpired and the penetration you've made over time, but based on kind of lessons learned in some of your more mature segments, any thoughts on when you would expect to see involvement in some of these larger projects, the \$20 million plus type of opportunities?

Don Young:

Well, not in 2017, Eric, I can tell you that.

Eric Stine:

Okay.

Don Young:

But I can—we have a team of people focused on this, on this segment, and as projects emerge in all regions, including in Asia, where a lot of the activity is taking place, we think we're in a very good place to compete for those projects. So, again, as I said in my notes, 2017 is, to use a baseball metaphor, is going to be made up of singles and doubles. I think that's interesting, that's a nice base of business, and avoiding, if you will, that revenue gap driven by one or two projects, as we experienced from the subsea '15 to '16, and from the South Asia projects '16 to '17. Again, I think it's going to be made up of smaller pieces of business and we'll get that growth from penetration across a much broader group of customers and a much broader number of segments.

Eric Stine:

Mm-hmm.

Don Young:

Again, to your LNG point, we think we've done the legwork, we've proved our value, and we're going to compete hard for projects as they come up around the world.

Eric Stine:

Just thinking about LNG, I mean is this inroads with EPC firms, is it with the project owners, or is it a combination of both?

Don Young:

It's really a combination of both. We've talked a little bit about the work that we did in Thailand, the PTT project this year. That was very much with the contractor and with the asset owner as well, very much of a joint effort. We performed well on that project. That's an area that is rich with opportunity, so that was an important one for us to perform well.

Eric Stine:

Yes, okay, thank you, and maybe the last one for me. Just turning to petrochem—and I this is, I guess, a little more of a longer term question, but thinking about other geographies, Saudi Aramco has been making a lot of noise in the last of couple of months that they are looking to remake themselves into a petrochemical power, and just curious, your historical involvement with Saudi Aramco, you know, whether it's the parent company or the joint venture, since I know those are kind of two different animals.

Don Young:

Yes. So, it has been not significant historically. Some of the joint work that they did with Shell, we were involved with here in the United States, in particular. Again, there's a little bit of history to this, Eric.

If you go back to the point in time when we were sold out, in 2014 and 2015, even the beginning of 2016, we were a little hesitant to open another region, i.e., the Middle East, because we were having enough trouble just delivering on the regions we had begun to penetrate. So, it was really about a year ago that we dedicated assets to the Middle East, not only Saudi Aramco, but across the region, and we are developing distributors and contractors and working with end users, again, across that region. You're

right, it is rich with opportunity, both directly there, but also some of the joint venture work outside of the region.

Eric Stine:

Okay, thanks for the details.

Don Young:

Thanks, Eric.

Operator:

Your next question comes from John Quealy with Canaccord. Your line is open.

John Quealy:

Hey, good afternoon, folks. Can you hear me all right?

Don Young:

I sure can, yes.

John Quealy:

Hey, guys. So, first, on that 90 to 100, give or take, base business, can you just talk about the visibility there, what you did to build that up? I imagine that's more bottoms-up, but just give us a sense of confidence in that sort of recurring business that we're expected to see in '17.

Don Young:

Yes. So, as I indicated in my script, that number has increased from the low 70s into the low 80s most recently, and as I said we're going to build it up into the \$90 million and \$100 million range. A little bit of it goes to sort of the progression story that I told about LNG, in a way, and how that relates, I think, to some of our other segments. We are penetrating these accounts, we're getting more and more activity at each facility, we're building relationships in new facilities. So, again, I think it's just a natural progression of us penetrating these accounts and being effective globally.

John mentioned an increase in investment in our sales and marketing organization, and we have more feet on the street, we're working our distributors harder, we're pushing those accounts hard, and, again, we think that we have a very good chance of growing that downstream business. The other components of that, of course, were to make progress in our district energy market. We're introducing the power product in the second half of the year, which will make a small but hopefully building contribution, and then, of course, we also put in place smaller price increases, but, nevertheless, price increases in the range of 2% or 3% here in 2017, which, as you know, the math will work for us in that way, as well.

John Quealy:

Okay, great. Then, the second question, on the patent/litigation costs, just bigger picture, can you just walk us through your strategy there? Is it aggressive enforcement and defense moving forward? Would you be open to settle with certain parties? How should we think about your philosophy around spending and the aggressiveness and where we are in the cycle around those costs? Obviously, pretty heavily weighted here in the first half.

Don Young:

Yes. So, a couple of thoughts. This Company has spent upwards of \$100 million in research and development developing this Aerogel technology platform, and it is valuable and it deserves to be protected, and that's what we're doing.

I would say that we are being aggressive here in the United States and in Europe, and we will continue to be aggressive. The dollars spent in 2016, John mentioned them, in the \$3.5 million to \$4 million range, and then heavy spending now. We're sort of in high season right now with the US effort, and so we expect, as John said, meaningful Q1 expenditures in that area. We think that we will prevail in these actions and that will, I think, send a strong message across the market.

So, that's our philosophy. We do not anticipate that this will be endless at these kinds of levels, but, again, we try to go out pre-emptively and aggressively to stem this early on.

John Quealy:

Okay, and then my last question, on the new product side and some of the new initiatives you've had, how should we think about '17 and milestones around, for example, BASF in Europe, or the new utility product launching in '17? Do you see an overflow this year in '17, or is this more of a seeding of the market, getting the channel ready and then '18 is when we expect some of the orders? Thanks, guys.

Don Young:

Yes, thank you, John. So, on the utility side, on the power product, we're really excited. We're right on schedule. We're installing equipment in our East Providence facility. We've got a team working accounts there. We would love—when we launch that product in the second half of the year, as we've been saying for a while, we'll launch it with a lead customer, if you will, a kind of a partner customer, and really come out of the gate hard. I'm not suggesting that there's going to be large volume in the second half of 2017, but we think we'll lay the groundwork for an interesting contribution in 2018. We're confident that we've got a winner there.

Second, on BASF, we're working very closely with BASF on a range of opportunities that improve our Company and build out that relationship. Again, there will be some contribution, steady contribution from the building materials segment, BASF and some of our other partners in that area, in 2017, but we really are thinking that 2018 and 2019 will be breakout years for those products.

Other questions, Maryama?

Operator:

Your next question comes from Sean Hannon with Needham & Company. Your line is open.

Sean Hannon:

Thanks. Can you hear me?

Don Young:

I sure can, Sean. How are you?

Sean Hannon:

Hi. Okay. So, it sounds like at this point now there's a rough expectation you should see some continued pickup into the back end of the year. If I recall correctly, in terms of your visibility, lead times—and that's something that's certainly improved, at least the lead times have improved. Your visibility has perhaps shrunk over the course of last 12, 18 months or so. So, I'm just trying to see if I can get a better understanding of what gives you that viewpoint that you can grow the back end of the year. Is that growth versus the first half completely incremental from some of these adjacencies, such as power, and so on and so forth, or how can we otherwise think about that? Thanks.

Don Young:

So, first, from a core market point of view, again, we have expanded our sales and marketing organization, we have—I think we're doing a good job penetrating these accounts, and getting more feet on the street, both our own and our distributors, and I would just say that in those core markets, we feel there's some buildup occurring, and so we've got a good chance—because these are smaller orders, right, these are containers and not project work, it's maintenance activities, you're right, we don't have visibility in the sense of purchase orders, but at activity levels, we're feeling that we're going to build momentum throughout 2017. Our goal is for each quarter to be better than the quarter before, and we feel we're well positioned to do that. That's on the core side.

Of course, the adjacent markets are going to be incremental contributors to that. District energy and power, building materials, these are areas where we think that we can put some growth on the boards here throughout the year, and, again, with power contributing in the second half the year. Again, not enormous numbers, but incrementally positive. That's why we're confident that the second half will be stronger than this first half.

Sean Hannon:

Mm-hmm, okay. Then, in terms of downstream energy, my understanding is that after a fairly prolonged period of pushouts, of turnarounds, due to otherwise favorable conditions, right, for the facilities to keep operating, that there's an expectation, and there's growing chatter, that turnarounds are going to start to become much more active this year. At least in the US, there's a pretty good expectation of a healthy uptick. So, I would suspect, from a maintenance standpoint, those are where you have some of your opportunities. I'm just trying to figure out if that's part of some of your thinking. In '17, is that a factor at all? Any color around that would also be helpful. Thanks.

Don Young:

So, Sean, as I said in my notes, sort of for our planning purposes, what we have said is that 2017 is going to look a lot like 2016.

Sean Hannon:

Right.

Don Young:

I don't mean to say further decreases in the US market, as I cited, but sort of flattish market. We certainly are listening for and pushing hard on the maintenance fees being a little richer this spring and this fall than it was in 2016. We've been doing the rain dance around that for a while, as a lot of companies like ours have been doing, and it's got to happen and we think there's a good chance. We're hearing the same things that you're hearing around the spring and the fall this year.

Sean Hannon:

Okay. So, it sounds like you're hopeful, but you're attempting to be conservative and pragmatic as it translates through to the numbers. Is that fair?

Don Young:

We're sort of operating under the premise that it's going to be—tomorrow is going to be a lot like yesterday, and we have to drive our numbers based on this current energy environment. We're not going to get bailed out by any big project or any—we're not counting on anything other than what's there today, and so our team needs to be effective penetrating these accounts and developing these adjacent markets and driving growth, and that's what we're doing and we're getting better at it with every day that passes. Again, that's why we think that building momentum one quarter after the other throughout 2017, and positioning ourselves for a growth spurt starting in 2018, that's what we're focused on here as a team.

Sean Hannon:

Great. Okay, thanks very much.

Don Young:

Thank you, Sean.

Operator:

Your next question comes from Ben Kallo with Baird. Your line is open.

David Cater:

Hi, guys. This is David Cater (phon) on for Ben Kallo. Thank you for taking the question. I just wanted to follow up on that last point, where you're not expecting tomorrow to be any better than today. How long can that strategy carry out and do you need, looking into 2018, 2019 and 2020, energy markets to rebound, and what if they don't?

Don Young:

So, we are operating in a large market here. Just in energy infrastructure alone, it's a market that is measured upwards of \$3 billion. Obviously, we have globally 3%, 4%, 5% of that market, maybe a little higher in some regions, a little lower in other regions. We have an enormous amount of opportunity with the opportunity we have before us today, even in the market that we're experiencing today, to continue to grow this company. Yes, we would grow more rapidly, there's no doubt, in a more friendly environment, but we think we can grow the Company even in the environment we're in, and that's at the core market.

We also know that we can develop these adjacent markets with success, district energy, the LNG market, the power industry. Those are sort of new opportunities for us to grow. Then, we talk about new markets and building materials and BASF is an example of that. I think, again, not so much for 2017 or 2018, but those new markets will contribute a little longer term. So, again, our ability to grow, penetrate our current accounts, get more market share, as we have been doing year in and year out, in good markets and bad, will enable us to be successful here.

David Cater:

Got it. Thank you for the color.

Don Young:

Thanks, David.

Operator:

Your next question comes from Sean Meakim with JP Morgan. Your line is open.

Sean Meakim:

Thanks.

Don Young:

Hey, Sean.

Sean Meakim:

So, Don, I wanted to talk about Plant 2 a little bit. Last quarter, we talked about the hurdle was something like a 25% increase in shipments over maybe a seven- or eight-quarter lead time. That's kind of the hurdle to get towards project sanction. Just given another quarter under your belt, updated guidance, a little more visibility, I'm just curious, your updated thoughts around the Plant 2 framework.

Don Young:

Yes. So, there are really a few factors that we're looking for to pull the trigger, so to speak, Sean, on that. Just to sort of restate, I think what I might have said last quarterly call is that from the time we pull the trigger, if you will, to the time we have that operational will be approximately seven quarters.

So, the factors that we're looking for, we would love to see these activity levels—you might have heard us talk about this base business kind of concept, the sort of singles and doubles. Boy, we really love that growth from that segment. We love our projects, but growing that base creates a little less whipsaw in our numbers. So, that activity in the downstream numbers will be important to us.

We'd love to see—and we're working the project pipeline all of the time. We're not anticipating any knockout-type projects in 2017, but we see lots of opportunities in the '18, '19 and '20 area. So, as those become a little closer in and we gain a little more visibility, and we work our way into those specifications and become lead participants in those projects, we'll have some visibility on that, and that will give us more confidence, as well, to pull that trigger.

The third area, I think, is this notion of diversity that we have, you know. Continuing to have things like district energy, LNG, power, building materials, and potentially some other segments, absorb more and more of our capacity on the increment, that, too, will give us confidence.

So, you know, I think those three things, more activity downstream, some projects on the horizon that we're in the driver's seat on, and more diversity, I think some combination of those three things will make it relatively easy to pull that trigger. I think the hard thing would be if we had another \$60 million project sitting out there, like the South Asia project that we're just completing, without growth in the base business and that diversification that we're talking about. I think that's a much harder decision to make, and so we're really focused on those three elements that I described.

Sean Meakim:

Okay, that's fair. Then, just thinking about—you gave us a little more on BASF. I'm just curious if there's any updates on additional partnerships in the pipeline.

Don Young:

Nothing that we're able to announce now. We're working on projects, or new markets, let me say, and a lot of that work starts on the technology side, on the research and development side, this idea of enhancing products using our Aerogel technology, where we're a component in a system. These are some of the—without wanting to show our hand too much, these are some of the ideas that we have and some of the discussions that we're having, and we're in the midst of proving out some of that technology, to demonstrate that we've got something that is special and unique and protected.

Sean Meakim:

Okay, great. Thanks.

Don Young:

Thanks, Sean.

Operator:

There are no further questions at this time. I will now turn the call back over to Don Young.

Don Young:

Thank you, Maryama, I appreciate your help. Again, thank you for joining us today, we appreciate your interest in Aspen Aerogels. We look forward to reporting our first quarter 2017 results to you in early May. Have a good evening. Thank you.

John Fairbanks:

Thank you.

Operator:

This concludes this today's conference call. You may now disconnect.