

Filed by Entegris, Inc.
pursuant to Rule 425 under the Securities Act of 1933
and deemed filed pursuant to Rule 14a-12
under the Securities Exchange Act of 1934

Subject Company: Versum Materials, Inc.
Commission File No.: 1-37664
Date: February 5, 2019



05-Feb-2019

Entegris, Inc. (ENTG)

Q4 2018 Earnings Call

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CORPORATE PARTICIPANTS

Bill Seymour
Vice President, Investor Relations, Entegris, Inc.

Gregory B. Graves
Executive Vice President & Chief Financial Officer, Entegris, Inc.

Bertrand Loy
President, Chief Executive Officer & Director, Entegris, Inc.

OTHER PARTICIPANTS

Toshiya Hari
Analyst, Goldman Sachs & Co. LLC

Chris Kapsch
Analyst, Loop Capital Markets LLC

Sidney Ho
Analyst, Deutsche Bank Securities, Inc.

Amanda M. Scarnati
Analyst, Citigroup Global Markets, Inc.

Jacob Schowalter
Analyst, Seaport Global Securities LLC

Patrick J Ho
Analyst, Stifel, Nicolaus & Co., Inc.

Duffy Fischer
Analyst, Barclays Capital, Inc.

MANAGEMENT DISCUSSION SECTION

Operator: Good day, everyone, and welcome to Entegris's™ Fourth Quarter 2018 Earnings Call. Today's™ call is being recorded. At this time, for opening remarks and introductions, I™d like to turn the call over to Bill Seymour, Vice President of Investor Relations. Please go ahead, sir.

Bill Seymour
Vice President, Investor Relations, Entegris, Inc.

Good morning, everyone. Earlier today, we announced the financial results for our fourth quarter and full-year 2018. Before we begin, I would like to remind listeners that our comments today will include some forward-looking statements. These statements involve a number of risks and uncertainties, which are outlined in detail in our reports in filings with the SEC. Please refer to the information on the disclaimer slide of this presentation. On this call, we will also refer to non-GAAP financial measures as defined by the SEC and Reg G. You can find a reconciliation table in today's™ press release, as well as on our website.

On the call today are Bertrand Loy, our CEO and Greg Graves, our CFO.

I™ll hand it over to Bertrand.

Bertrand Loy
President, Chief Executive Officer & Director, Entegris, Inc.

Thank you, Bill. I will make some comments on our fourth quarter and full-year performance, and then Greg will follow with more details on our financial results and provide guidance for the first quarter of 2019. Weâ€™ll then open the line for questions.

Let me start by covering Q4 and the full-year of 2018. Our fourth quarter capped off a record year for Entegris. During the quarter, sales were up 1% sequentially and grew 15% versus Q4 2017, above our guidance. This performance, especially in the second half of the year, showcase the strength of our execution and the resilience of our unit-driven business model.

For all of 2018, we grew sales 15%. Organic sales grew approximately 10%, once again, outpacing our markets and in line with our expectations. Microcontamination led the way with 12% organic growth, as the increasing need for purity drove strong demand for our advanced filtration across the whole range of products.

In addition, SAES Pure Gas, which we acquired last June, was a meaningful contributor to growth in the second half of the year for Microcontamination. The other two divisions also performed strongly in line with our expectations. The AMH business grew 11% and SCEM grew 9% for the year. Consistent with our objective, we grew our bottom-line significantly faster than the rate of our top-line in 2018. Indeed, our adjusted EBITDA and non-GAAP EPS grew by 22% and 31%, respectively.

During the year, our capital allocation decisions led to additional value creation for our shareholders. First, we acquired three companies: PSS; SAES Pure Gas; and Flex Concepts. PSS and SAES, which are equipment businesses, grew sales in the second half over the first half of the year, as demand for these products benefited from the need for greater process control and the need for greater purity in process gases. These two businesses also finished the year with strong backlogs, positioning them well for strong performance in 2019.

Second, we further strengthened our capital structure and increased our financial flexibility as we refinanced our term loan in November and established a new revolver which is currently undrawn.

Finally, during the fourth quarter and through January of this year, reflecting our confidence in our business and long-term outlook, we repurchased over 6 million shares of our stock. Looking back on 2018, I am proud of how our team navigated the second half industry headwinds. It really demonstrates the value and resilience of our model.

Putting short-term macro concerns aside, we continue to believe that secular semiconductor demand will continue to be attractive. Enabled by technologies like IoT, 5G and AI, our society will continue to need more chips.

In addition to positive underlying industry growth drivers, Entegris is the beneficiary of two key intersecting themes. The first one is increased device complexity which leads to greater importance of materials. And the second is increased purity requirements and the resulting need for greater and more advanced filtration and purification solutions.

At its core, our value proposition is about helping our customers achieve higher yields and new levels of device reliability and performance. Entegris is uniquely positioned to achieve this with our combination of global scale, world-class technical capabilities and operational excellence.

Looking ahead to 2019, I would like to provide some perspectives on the industry environment and how we see it impacting our business. The secular demand drivers for unit-driven growth remain intact. As a result, we expect MSI to continue to grow in 2019. We also expect to see the impact of technology node transitions and the

resulting positive impact to our business of increasing materials intensity and purity requirements. These growth drivers are expected to more than offset short-term softness in capital spending. Putting it all together, we expect for 2019 to be another record year for Entegris. And we expect our sales in 2019 to be up approximately 5%.

I will now turn the call to Greg for the financial detail. Greg?

Gregory B. Graves
Executive Vice President & Chief Financial Officer, Entegris, Inc.

Thank you, Bertrand. We had many reasons to be pleased with our fourth quarter and full-year performance and execution, which reflected record levels of sales, EBITDA and free cash flow. Q4 sales of \$402 million grew 15% from a year ago. Sales grew 1% sequentially, driven by healthy growth in our unit-driven sales.

As expected, capital-driven sales were down sequentially, with the notable exception of SAES Pure Gas which was up for the quarter. Q4 GAAP diluted earnings per share was \$0.57. On a non-GAAP basis, EPS was \$0.47, up 12% from Q4 2017.

Moving on to gross margin, gross margin included the negative impact of \$3.4 million inventory write-up associated with the SAES Pure Gas acquisition. Our non-GAAP gross margins of 45.7% was down 100 basis points from last year. The decline in gross margin was driven primarily, as expected, by the addition of the SAES Pure Gas to the portfolio. We expect gross margin to be approximately 46% on a non-GAAP basis in Q1.

GAAP operating expenses of \$108.4 million included \$17 million of amortization of intangible assets and \$1.3 million of integration costs associated with the purchase of SAES Pure Gas. Non-GAAP operating expenses in Q4 were \$90 million, in line with our guidance. We expect non-GAAP operating expenses to be approximately \$92 million in the first quarter. Non-GAAP operating income was \$93.5 million or 23.3% of revenue.

Our GAAP tax rate was 5% for the full-year 2018, reflecting a one-time benefit from reorganization that allowed us to harvest certain legacy tax benefits. Excluding these impacts, our non-GAAP tax rate was 19% for the full-year and 21% in Q4. For 2019, we are expecting our non-GAAP tax rate to be 20% to 22%.

Adjusted EBITDA for the quarter was \$110 million or 27% of revenue. For 2018, we generated \$436 million in adjusted EBITDA which is 28% of revenue and represents a 22% increase over the prior year.

Turning to our performance by division, Q4 sales of \$134 million for Specialty Chemicals and Engineered Materials, or SCEM, grew 7% from a year ago. The quarterly sales growth was driven primarily by graphite materials and specialty gases. Adjusted operating margin for SCEM was 21.7%, down from the same period last year. The decline in operating margin was driven primarily by continued investments in manufacturing and logistics to support growth in addition to less favorable product mix.

Q4 sales of \$158 million from Microcontamination Control, or MC, were up 37% from last year. Excluding the favorable impact of SAES, MC sales were up 9% in the fourth quarter. The strong organic growth was driven by strong demand for wet, etch, and clean, and photofiltration, offset in part by weakness in gas filtration. Adjusted operating margin for MC was 32.7%, down 130 basis points from last year, but up sequentially. The decline from last year was due primarily to the addition of SAES to the portfolio. We would expect that MC margins will benefit as SAES synergies are realized throughout 2019.

Q4 sales of Advanced Materials Handling, or AMH, of \$110 million were flat from last year. The positive sales drivers for the quarter were growth in liquid packaging and the impact of the PSS acquisition. These positive

factors were offset, as expected, by softness in capital-driven businesses such as fluid handling and the impact from the Q3 divestiture of a small non-core cleaning business. Adjusted operating margin for AMH of 15.7% decreased 90 basis points from last year. As our most capital-driven business, the profitability of AMH has been the most negatively impacted by the softness in the industry environment. To address this, going into 2019, we are implementing further cost savings initiatives focused on operational efficiencies, primarily in manufacturing.

Cash flow from operation through the year was \$313 million and free cash flow was \$202 million. Our cash balance increased to \$187 million from the third quarter, reflecting the impact of the new term loan offset in part by cash used for share repurchases. Uses of cash during the quarter included CapEx of \$35 million. For the full-year, we invested \$110 million in CapEx. We expect to spend approximately \$110 million in 2019 related to ongoing investments to support our new product introductions and growth in advanced deposition, filtration, wafer handling and specialty gas solutions.

Consistent with our capital allocation strategy, we used \$10 million for our quarterly dividend in the quarter. For the fourth quarter and through the end of January, we repurchased a total of 6.6 million shares for approximately \$179 million or an average price of approximately \$27. As a result of the proposed merger with Versum, we've suspended our buyback program. We expect their share count to be approximately 137 million diluted shares for both Q1 and the full-year 2019.

Another important item to note for your modeling, with the increase in the size of our term loan, we are expecting interest expense to increase in 2019 to approximately \$10 million per quarter, assuming interest rates remain at their current levels.

Turning to our outlook for Q1, we expect sales to be approximately at the same level as the fourth quarter of 2018. We also expect non-GAAP EPS to be at approximately the same level as the fourth quarter.

In summary, we are pleased with our operating and financial performance in 2018. Our business continues to be positioned well and generate significant cash flow which gives us great flexibility going into 2019.

I'll now turn it back to Bertrand for some closing comments.

Bertrand Loy
President, Chief Executive Officer & Director, Entegris, Inc.

Thank you, Greg. Last week we announced that Entegris agreed to combine with Versum Materials in a \$9 billion merger of equals. This is truly a unique transaction that will bring together two highly complementary and diversified portfolios to create a premier specialty materials company. We believe this combination is a natural fit that will provide significant benefits to our customers, our employees and our investors. We are pleased with the enthusiastic response we have received so far for this announcement. We intend to submit the HSR filing as soon as this week and the S-4 proxy statement by early next month.

In conclusion, I am pleased with the resilience of our unit-driven business model and our record results in 2018. We are very well-positioned for another record performance in 2019.

Finally, before turning to the Q&A, I want to express my appreciation to the Entegris teams around the world for their dedication and the quality of their work. Entegris's success is a direct result of their efforts and the service they provide our customers. To all of them, thank you.

Operator, we will now take questions.

QUESTION AND ANSWER SECTION

Operator: Thank you. [Operator Instructions] Weâ€™ll take our first question from Toshiya Hari at Goldman Sachs.

Toshiya Hari
Analyst, Goldman Sachs & Co. LLC

Q

Hi. Good morning, guys. Congrats on the results and congrats again on the announced merger. Bertrand, youâ€™re guiding 2019 revenue to grow, I think, you said 5% year-over-year. I was hoping you could provide a little bit more color on 2019 perhaps by segment. And also if you can share some of the underlying assumptions you are making around MSI growth and CapEx. That would be helpful.

And then, I guess, the third part of my first question, in the past, I think, youâ€™ve highlighted the focus areas or growth areas within your portfolio. If you can maybe run through a couple of areas that youâ€™re particularly excited about in terms of contribution to growth this year, that would be helpful. Thank you.

Bertrand Loy
President, Chief Executive Officer & Director, Entegris, Inc.

A

Well, good morning, Toshiya. Thank you for the question. So, let me start maybe with some general considerations around the industry environment. Itâ€™s probably fair to say that we expect the industry to be fairly choppy for the next quarters. Specifically, we expect wafer starts to be up only modestly, so in other words, below the secular growth trend line for wafer start. And we expect the industry CapEx to be down in the mid-teens in 2019.

Having said all of that, we expect more NAND chips to be produced at 64 layers and 96 layers in 2019 versus last year. And obviously we expect to benefit from that. We expect from the greater materials intensity and the need for more advanced purification solutions at those more complex geometries.

The other thing that should play in our favor in 2019 is that we expect a number of important node transitions in the logic and foundry segment. So those would be the primary driver. And if I look at 2019, in the context of a fairly muted industry environment, I think that our guidance points to the great resilience of our business model and on the quality of our execution. So feeling pretty good about that.

Trying to understand, more trying to explain maybe where the growth is going to come from, well, you should expect growth to mostly come from Microcontamination and SCEM. As you know, those two divisions have the least exposure to CapEx, number one. But also, those are the two divisions where we have invested the most in the past three years. And as a result of that, this is where we see probably the most excitement in terms of upcoming growth opportunities for 2019 and frankly -and beyond.

Toshiya Hari
Analyst, Goldman Sachs & Co. LLC

Q

Great. And then as a quick follow-up, you guys talked about the synergies around SAES contributing in â€” to margins I suppose, in the second half. You guys also talked a little bit about potential cost reductions in your AMH business, just given the tough backdrop. If you can elaborate on those two dynamics and how we should think about margins into late 2019 and 2020, that would be helpful. Thank you.

Gregory B. Graves
Executive Vice President & Chief Financial Officer, Entegris, Inc.

A

Hi, Toshiya, it's Greg. So first of all, with regard to the AMH business, first of all, when we look at that business full-year-over-fill-year, 200-basis-point improvement in the operating margin. We're not "I'm not defending the business, I'm just saying, optically when you look at the last couple of quarters, it feels sort of worse than the full-year performance was. As we think about- as we move into 2019, we've made some significant reorganizations within the manufacturing environment, within the major facilities within AMH that we think will have a positive impact on the operating margin of that business going forward.

With regard to SAES, the SAES synergies, we'll start to see some of those synergies beginning in Q1. The first big move was, we closed a facility in San Diego at the end of 2018, and then we'll see the balance of those as we move through 2019. Recall, we talked about total synergies in the \$4 million to \$5 million range, so it'll have an impact, but it's not going to be a really significant impact. So we ended the year just short of [ph] 33 (21:11) in MC, we'd expect that to trend up as we move through 2019, closer to that [ph] 34 (21:20) range.

Toshiya Hari
Analyst, Goldman Sachs & Co. LLC

Q

Very helpful. Thank you so much.

Operator: We'll take our next question from Sidney Ho at Deutsche Bank.

Sidney Ho
Analyst, Deutsche Bank Securities, Inc.

Q

Great, thank you very much. Following at Toshiya's question on the revenue [indiscernible] (21:36) in 2019, how should we think about the first half, first and second half of the year? I think, historically, you have been more first half weighted. I guess another way of asking this is that you annualized Q1 guidance, you're already up 4% year-over-year, so versus your guidance of about 5%, do you think the yield will be relatively flat throughout the year?

Bertrand Loy
President, Chief Executive Officer & Director, Entegris, Inc.

A

So, Sidney, based on the information currently available, we'd expect the back-end of the year to be up versus the first half of the year and it's going to be a function of two things. One is, a little bit more favorable CapEx environment in the back-end of the year. But more importantly, a bigger impact from the node transitions that I was describing both in advanced memory and advanced logic and foundry.

Sidney Ho
Analyst, Deutsche Bank Securities, Inc.

Q

Okay. That's helpful. My follow-up question is on the operating expenses side. You guys have done a pretty good job in the past and you "I think you guys just talk about the SAES side of things, there are some synergies. How should we think about the OpEx level maybe after Q1?

Gregory B. Graves
Executive Vice President & Chief Financial Officer, Entegris, Inc.

A

This is Greg. So as we think through the balance of the year, depending on how the industry environment unfolds, I would expect them to be relatively flat, maybe with a slight upward bias as we move through the year.



Sidney Ho
Analyst, Deutsche Bank Securities, Inc.

Q

All right. And maybe just to follow to that, how should we think about gross margin as well as the year progresses?

Gregory B. Graves
Executive Vice President & Chief Financial Officer, Entegris, Inc.

A

I think about it in sort of that "the 46% range, as volumes increase, we should see some modest improvement through the year.

Sidney Ho
Analyst, Deutsche Bank Securities, Inc.

Q

Okay, great. Thank you.

Operator: Moving on to Mike Harrison at Seaport Global Securities.

Jacob Schowalter
Analyst, Seaport Global Securities LLC

Q

Good morning. This is Jacob on for Mike.

Bertrand Loy
President, Chief Executive Officer & Director, Entegris, Inc.

A

Hi, Jacob.

Jacob Schowalter
Analyst, Seaport Global Securities LLC

Q

Digging a little deeper into SAES, sort of what are the expectations for that business in 2019 and maybe if you could comment what the book-to-bill was in Q4 and sort of how that's shaping up? I know you said backlog was strong, but maybe a little more detail.

Bertrand Loy
President, Chief Executive Officer & Director, Entegris, Inc.

A

Yeah. So, Jacob, we don't provide specific backlog information by product line. So I will not do that except that I'm going to try to nonetheless help you with your question. So if you think about the velocity of that business, as we exit 2019, Q4 for SAES was "I mean, we exceeded \$30 million of revenue, so that was up from the high \$20 million in Q3.

And if you look at 2019 on a full-year basis, we expect 2019 to be up versus 2018, and that is obviously in the context of a down industry CapEx environment. So that speaks again to the very unique value proposition that we are able to deliver with those large gas purification systems that talks to the need for much greater purity levels for all array of process gases going into the advanced labs. And based on the lead time that we have for those systems that we have a pretty good visibility for what to expect going into 2019. So we feel pretty good about the outlook for that business.

Jacob Schowalter
Analyst, Seaport Global Securities LLC

Q

Okay. That's very helpful. And then maybe looking at SCEM margins, so you guys called out the investments in manufacturing and logistics and then unfavorable product mix. Maybe relative to Q4, could you sort of frame how big of an impact each of those were and sort of expectations for the investments in manufacturing and logistics, is that going to carry over into the next couple quarters?

Gregory B. Graves
Executive Vice President & Chief Financial Officer, Entegris, Inc.

A

So let me just comment on the investments are primarily around our Specialty Materials business where we're investing in graphite capacity, we're investing in ramping a new facility, as well we've made meaningful investments in some of our coatings capabilities. And I would say the volumes need to catch up with the investment. That would be kind of the two primary areas where we've made investment. And like I said, the investment is ahead of the revenue per se.

Jacob Schowalter
Analyst, Seaport Global Securities LLC

Q

Okay. Thank you very much.

Operator: Moving on now to a question from Duffy Fischer at Barclays.

Duffy Fischer
Analyst, Barclays Capital, Inc.

Q

Yes. Good morning. You talked a little bit about the increased interest expense. But if we obviously go through an estimate in EBITDA number, can you walk us through the puts and takes on EBITDA down to free cash flow? You mentioned the [indiscernible] (26:51), what do you think kind of working capital does and then what are the capital expenses look like?

Gregory B. Graves
Executive Vice President & Chief Financial Officer, Entegris, Inc.

A

So capital, like so we'd expect obviously our EBITDA to be in line with our target model, which is at the revenue levels that we're talking about for the year are in that 28%, 29% of revenue. So, our commitment is always to flow at least for \$0.40 of every incremental dollars of revenue through the EBITDA line.

From a CapEx perspective, sort of \$110 million in CapEx for 2019. For taxes, which also between come into play between the EBITDA and the free cash flow line, we talked about 20% to 22%.

And then, working capital, one of our focuses this year, I mean, our inventory, as we come through this year through 2018, did creep up a bit and our turns slowed a bit. That's a focus area as we move into 2019, is improving on the inventory side of the house. Receivables, I mean, always tend to be right around 50 days. So, those are the primary components of cash flow. And does that answer your question, Duffy?

Duffy Fischer
Analyst, Barclays Capital, Inc.

Q

Yeah. You bet. Thanks. And then just one housecleaning, of the shares you bought back, how many did you buyback in Q4 versus so far in Q1?

Gregory B. Graves
Executive Vice President & Chief Financial Officer, Entegris, Inc.

A

So we said we bought back 6 million shares. I don't have the exact breakdown, but the majority of that buyback, probably 4.5 million of it roughly would have been in Q4. So when we think "when you think about the share count for Q1, as well as the balance of 2019, you should think about 138 million shares.

Duffy Fischer
Analyst, Barclays Capital, Inc.

Q

Great. Thanks, guys.

Operator: [Operator Instructions] That having been said, we'll move on to Chris Kapsch at Loop Capital Markets.

Chris Kapsch
Analyst, Loop Capital Markets LLC

Q

Yeah. Just a follow-up on that, the share buyback and just capital allocation in general. I think you touched on this a bit last week when the merger was announced. But "so you've suspended the buyback. Is the intent there that that would be suspended until closing of the deal? Just because given the pro forma leverage of I think a little over 1 times and given the free cash flow, the reliable free cash flow of both your portfolio as well as Versum's, I'm guessing that you would be interested in resuming buybacks given your copious free cash flow for the "even on a pro forma basis. So can you just provide color on what the thinking is post-merger?"

Bertrand Loy
President, Chief Executive Officer & Director, Entegris, Inc.

A

So, Chris, you're correct. What you heard us said today is that we're suspending the buyback until closing, at which time we will have to re-engage with our new board and discuss and review all of the available capital allocation options, buyback being one of the many options we will be considering. And you're right in your assessment that the combined company would be a company with a very strong balance sheet, about 1 time leverage, but also a very profitable company. So I'm anxious to have those discussions with the new board. I'm sure it will be a very productive discussion, but it's too early for us to elaborate on the choices that we will be making after closing.

Chris Kapsch
Analyst, Loop Capital Markets LLC

Q

Okay, fair enough. And then, you did mention that in terms of the sensitivity to a weaker CapEx environment, your businesses felt some of that, but you did mention SAES as being the exception, and I think that maybe even surprise you a little bit. So I'm just wondering if you have a sense for what it is about the business and its backlog right now that's kind of shrugging off the softer overall macro and market backdrop, is it part of the secular story there or is it demand for those products across legacy and mature nodes as well?

Bertrand Loy
President, Chief Executive Officer & Director, Entegris, Inc.

A

Yeah. No. Thank you for asking the question. And if you recall, we've had described in many occasions now that we have a number of what we call CapEx products that behave slightly differently than the industry CapEx. So I talked about the gas purification business. But another example would be our FOUN business. Both of those businesses actually grew sequentially in Q4. And the reason for that is that the demand for all of those products is really driven by the need for cleaner process conditions, and those requirements are not going to stop anytime soon.

And as a result of that, you have actually less of a straight correlation between those, I mean, the revenue for those product platforms and the industry CapEx. But, I mean, the flip side of that would be some other product lines like gas filtration or our fluid handling businesses did decline sequentially because those products are more tied to WFE. So there was a stronger correlation there. So in other words, what we call CapEx in our product portfolio comes in many different shapes and forms and the demand pattern for those products are very different.

Chris Kapsch
Analyst, Loop Capital Markets LLC

Q

Got it. That's helpful. Thanks. And then just one last quick one on, in AMH, you mentioned while the industry has a little bit softer near-term backdrop, taking out some costs. Can you just tell us is there any order of magnitude in terms of what sort of take-outs you anticipate from those self-help actions? Thank you.

Gregory B. Graves
Executive Vice President & Chief Financial Officer, Entegris, Inc.

A

What I would say is, we expect, I mean, the operating margin in that business ended the full-year 2018 right around 18%. And we expect that to trend up through the year probably close to 100 basis points. But we're not looking for a marked shift in that business until volumes on the CapEx side of the industry come back around.

Chris Kapsch
Analyst, Loop Capital Markets LLC

Q

Okay. Thank you.

Operator: Taking our next question now from Amanda Scarnati at Citi.

Amanda M. Scarnati
Analyst, Citigroup Global Markets, Inc.

Q

Good morning. Just a quick question on kind of the utilization rates of your customers. We've been hearing a lot that they've been kind of coming down in the fourth quarter and into the first quarter. Can you just talk a little bit about how you expect to see that sort of stability in revenue in the fourth quarter the first quarter in that kind of industry backdrop of decreased utilization?

Bertrand Loy
President, Chief Executive Officer & Director, Entegris, Inc.

A

Yeah. So, Amanda, you're correct and that's part of the assumptions that we're using as we think about the Q1 industry conditions. We expect wafer start and fab utilization to be down modestly versus Q4 and probably slightly more so than usual seasonal pattern. So what will allow us to do better than that is, as I mentioned, is the secular drivers for solution sets and the need that the industry has to really to migrate to more advanced materials and more advanced filtration solutions as they start transitioning to more complex geometries.

So that's the theme that we've been developing now for a number of years. We will be the beneficiary of greater materials intensity and we'll be the beneficiary of greater need for purity. And that's going to help us increase the resilience of our business model versus many other industry participants.

Amanda M. Scarnati
Analyst, Citigroup Global Markets, Inc.

Q

Then under those assumptions, we would expect to see that the second half to be significantly stronger if no transitions continue as expected in the second half and utilization rates pop up, but you're still expecting sort of a 5% growth. Do we see sort of a big step down in the second quarter in terms of what revenue expectations would be or is it really just too early to tell what's going to happen in the full-year of 2019?

Bertrand Loy
President, Chief Executive Officer & Director, Entegris, Inc.

A

I think it's just a little bit too early. There's a lot of noise right now [ph] in the channels (36:06), Amanda. So I think, as always, we will be updating our annual guidance at every one of our earnings call. And when new information and better information becomes available, we'll update, if need be, our annual guidance.

Amanda M. Scarnati
Analyst, Citigroup Global Markets, Inc.

Q

And then can you just remind us what your current lead times are and how that changed at all over the last year?

Bertrand Loy
President, Chief Executive Officer & Director, Entegris, Inc.

A

Lead times had been relatively constant across product lines, so that's not going to be a big factor in general. Having said that, we have added capacity in our liquid filtration product lines. We are adding capacity as well in graphite, our FOUP platform and even our gas purification business. So we believe that we will be in better position in terms of fully capitalizing on customer demand in 2019.

Amanda M. Scarnati
Analyst, Citigroup Global Markets, Inc.

Q

Thank you.

Bertrand Loy
President, Chief Executive Officer & Director, Entegris, Inc.

A

Thank you.

Operator: We'll take our final question today from Patrick Ho at Stifel.

Patrick J Ho
Analyst, Stifel, Nicolaus & Co., Inc.

Q

Thank you very much and congrats on a nice quarter. Bertrand, you've talked at least in your prepared remarks and other times about the investments you're making in certain areas. I think this call, you talked about graphites and how that's starting to pay off for the company today. Can you give a little bit of color? And if you don't want to get super specific, I understand, but can you give a little bit of color of other areas of investments where over the next few years you'll start to see the benefits particularly on the top-line?

Bertrand Loy
President, Chief Executive Officer & Director, Entegris, Inc.

A

Well, I mean, I will repeat what Iâ€™ve said in many calls before. So, I â€™ you flagged graphite, but we have made significant investments in a number of filtration and purification technologies. Some of which have already hit the market, some have not, and the areas that weâ€™ve been targeting are wet, etch, and clean applications for both liquid filters and liquid purifiers. So that would be, I believe, a very significant growth driver going forward for us.

Weâ€™ve talked many times before around the investments that weâ€™ve made in advanced deposition materials. Thatâ€™s an area that we believe is poised to growth in the industry, and certainly one of the reasons weâ€™ve decided to combine with Versum, I think that joining forces around some of those advanced process materials is very critical to enable the industry technology roadmap. So we have made investments in the past few years and obviously weâ€™ll be accelerating those investments as we join forces with Versum.

So what I really like about our portfolio is the diversity and the breadth of the â€™ both opportunities that I see. Itâ€™s across the portfolio, itâ€™s across customer segments and, frankly, itâ€™s even across industries. Many of those growth opportunities are slightly on the periphery of the semiconductor application. So I feel good about the overall quality of the portfolio.

Patrick J Ho
Analyst, Stifel, Nicolaus & Co., Inc.

Q

Right. As my follow-up question in terms of the materials business and particularly, as you mentioned, the advanced materials side, you talk about process of record type of wins in the past. As we look at 2019 as a whole with some of those process of records turning into volume ramps, would you say this year is a little more weighted towards logic, and thatâ€™s where weâ€™ll see, I guess, some of the wins and memory is based a little more on recovery and the timing of that? Or are we going to see some, I guess, ramps on your end on the memory side as well?

Bertrand Loy
President, Chief Executive Officer & Director, Entegris, Inc.

A

If I think about the unit-driven part of our business, I would say itâ€™s both. So obviously a couple of really important node transitions in our logic and foundry customers. But what will be happening on the 3D NAND segment is also very exciting. I mean, as you know, the greater number of layers on 3D NAND chips, the greater the material intensity; and the more challenging the aspect ratios, the greater the opportunity for advance contamination control solutions. So if you think about what we expect in 2019, we expect about 60% of the NAND wafers to be produced at 64 layers and above, that number was only 40% in 2018.

So even if wafer starts are essentially flat for NAND memory fabs, I would expect the material intensity to play in our favor. And that will be true in 2019 and obviously we expect that to continue to be true in 2020 and 2021 as well. So the drivers will be both logic and memory, in other words.

Patrick J Ho
Analyst, Stifel, Nicolaus & Co., Inc.

Q

Right. Thank you very much.

Bertrand Loy
President, Chief Executive Officer & Director, Entegris, Inc.

A

Thank you.

Operator: And with that, ladies and gentlemen, we will conclude today's call. Thank you very much for joining us. Have a good day. You may now disconnect.

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Participants in the Solicitation

Entegris, Versum Materials and certain of their respective directors and executive officers may be deemed to be participants in the solicitation of proxies in respect of the proposed transaction. Information about the directors and executive officers of Entegris is set forth in Entegris’s proxy statement for its 2018 annual meeting of shareholders, which was filed with the SEC on March 28, 2018, and Entegris’s Annual Report on Form 10-K for the fiscal year ended December 31, 2017, which was filed with the SEC on February 15, 2018. Information about the directors and executive officers of Versum Materials is set forth in its proxy statement for its 2019 annual meeting of shareholders, which was filed with the SEC on December 20, 2018, and Versum

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