

Sune Mathiesen

Sounds great. Thank you.

Operator

And our next question today comes from Rob Brown of Lake Street Capital Markets. Please go ahead.

Rob Brown

Hi, Sune. On the closed-loop scrubber market what's sort of the penetration rate of new orders at this point and how do you see that playing out into 2020?

Sune Mathiesen

So, what we're missing at this stage is feedback from the scrubber manufacturers. Our sense of what is going on is that we see a larger part of scrubber installations being closed-loop now. We have seen, especially China, has been very aggressive in legislation. They've come out and said they want to implement further legislation and ban open-loop discharge, but also implement new legislation and discharge limits on PAH, on oils, and so forth.

We think this is a trend. We think we'll see more and more ports around the world ban open-loop discharge and we think eventually we'll see a global ban against the open-loop discharge. And I think a lot of ship owners are seeing this right now and our sense right now is that a larger proportion of the scrubber installations and especially planned scrubber installations are closed-loop versus open-loop.

Rob Brown

Okay, great. Then on the power plant market, you talked about a couple projects you've won and some activity this year that leads into next year. But what's sort of the average kind of revenue per project and what markets are you seeing activity in?

Sune Mathiesen

So, we started back home in Denmark a few years back on power plants and it was really good to see that we got traction. We did a number of power plants in Denmark so far, and we kind of expanded our view into Europe. We recently completed a \$1.1 million installation in Finland, and we plan to expand into Germany, Sweden, Finland, and Norway. So, let's say countries near to Denmark will be the first countries we are targeting. We're booking orders right now and again we think it would be a more meaningful part of our revenue in 2020.

Rob Brown

Okay, great. Thanks for the color. And then lastly on the framework agreement, the third framework agreement that you're working on, where are you at in terms of order flow there and thinking on how that ramps?

Sune Mathiesen

Still early stages. We said for a while that we think this will turn into meaningful revenue from beginning of 2020, and that should still be true.

Rob Brown

Okay, thank you. I'll turn it over.

Operator

And, ladies and gentlemen, as a reminder, if you would like to ask a question, please press star, then one at this time.

Today's next question comes from Liam Burke of B. Riley FBR. Please go ahead.

Liam Burke

Thank you. Hi, Sune. How are you today?

Sune Mathiesen

Doing well. How are you today?

Liam Burke

Fine. Thank you. You talked about the scrubber market. You talked about legislation. Do you view, you don't have to give me a specific number, but do you view the overall demand for scrubbers changing either upward or downward to the original base case you made when you entered the filtration market?

Sune Mathiesen

Really unchanged. We had high expectations for scrubber adoption. We predicted about 20% uptick in scrubbers by 2025. And so far, that prediction has been pretty accurate. So, we had high ambitions and so far they proved correct.

Liam Burke

Okay, and you mentioned orders getting back to the power plant. You didn't mention countries, different countries but in terms of orders you have in the pipeline now, have you gone beyond Denmark and into other countries in Europe? Or, are you still just in Denmark on the order backlog?

Sune Mathiesen

No. We are looking to expand into Europe and have expanded into Europe and we're kind of working the countries close to home, which makes a lot of sense for us right now. As we expand our presence in the power plant business, we will add further countries further away from home.

Liam Burke

Alright. Thank you, Sune.

Operator

Our next question today is a follow-up from Robert McCarthy of Stephens. Please go ahead.

Robert McCarthy

Yes. Thank you for taking another couple of rounds here. But I guess the question I would have is, obviously you've highlighted some import opportunity. Has that been driven by just maybe a change in how people are thinking about the market in compliance? How do you think about that opportunity? Is there any way to size it in terms of content per port and how you would think about doing that in the context of kind of your thesis around the propensity for closed-loop adoption overall?

Sune Mathiesen

Yes. Thank you very much for that question and it's actually a very exciting opportunity for us. So, by the end of this year we'll have 4,000 open-loop scrubbers either installed or on order, which is obviously



a huge potential market for us for open-loop conversions or to sell them an in-port solution. And what we would be selling is a small filtration system that they can run while in port and it will allow them to run the auxiliary engines while in port and provide power for the ship. So that is a sizeable opportunity. In terms of dollars, we estimate around to \$200,000 to \$250,000 per installation, and you have about 4,000 of them out there potentially, so huge potential.

Robert McCarthy

Great. And then as a follow-up on the power plant opportunity, have you seen in terms of revenue trends even more sequential strength 1Q versus 2Q or anything you can give us about what you've seen in terms of the near-term revenue trends at power?

Sune Mathiesen

Yes. Again, it's early stages. And we're booking orders within our order book, we are pleased with our progress. We've been doing it for a couple of years. We know have a well-functioning product for the power plant market and now we are expanding beyond Denmark. And so it's still not, let's say a big part of our business, but as we move into 2020, we think it will be a meaningful part of our business.

Robert McCarthy

And finally, on NOx, I mean could you just paint the catalyst scenario around that, no pun intended. Will we expect to see IMO coming out with a similar kind of ban there? Would you expect local jurisdictions or local governments to put in effect that ban? How should the regulatory wave kind of occur so that we will be under the balls of our feet waiting for kind of the commercial response to the regulation? How do we think about that?

Sune Mathiesen

We think that NOx reduction is the next big mandate in the marine business. We have seen this mandate for sulfur reduction, [indiscernible] reduction which is IMO 2020. We think there will be a mandate for NOx reduction as well sometime in the future. In the meantime, there are environmental protection zones in place and there you already have to install NOx reduction products. So there is an existing market for NOx reduction in the marine business and we think that in the near future we will see open mandate for that as well.

Robert McCarthy

Thanks for taking my questions.

Operator

And ladies and gentlemen, this concludes our question-and-answer session. I'd like to turn the conference back to Sune Mathiesen for any closing remarks.



CONCLUSION

Sune Mathiesen

Thank you very much. And thanks to everyone joining us today on the call. We look forward to speaking with you again on our next conference call that should be in November. And thank you again, and I wish you all a good day.

Operator

And thank you, sir. Today's conference has now concluded. We thank you all for attending today's presentation. You may now disconnect your lines and have a wonderful day.

