

# POET Technologies

## Questions and recommendations to the company

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This document comprises a collection of questions from shareholders and possibly other interested parties to POET Technologies.

Status: open for editing

### *Technical hints for editing*

- Please keep your questions short. One or two lines should do it.
  - If you want to edit anonymously, please make sure you signed off from your Google account or use a “private” window for editing.
  - Preferably use [Ctrl]+Z to undo your most recent edits you want to have undone.
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## Questions and suggestions



### Questions

I put together the following questions to the POET Technologies management and would like to read answers to them in the status report the company has announced to issue on 2016-11-28. I don't really expect answers to all of these questions, but it might be telling which questions – or which *classes* of questions –

- will be answered,
- will not be answered with a reason being given,
- will explicitly not be answered without a reason being given,
- will be silently dropped to the floor.

## Technology and operations

### Photodetector

1. What is the current status of the photodetector development/commercialization? The company has [announced](#) to demonstrate this prototype by the end of 2016. Does this still hold? Or is the photodetector's commercialization hampered by delays, too?
2. What are the company's revenue and profit projections from the photodetector in 2016 and in the two following years?

### Integrated VCSEL transceiver

1. What is the current status of the integrated VCSEL transceiver development and commercialization? In the conference call on 2015-09-30, the company has [announced](#):
  - *In the second quarter of 2016, demonstrate integrated 10 Gbps transmit-and-receive component that incorporates the FETs, VCSELs, and the detectors integrated together.*
  - *In the fourth quarter of 2016, provide functional prototypes to the market.*

Recently, however, shareholders had to understand that there are certain delays.

According to Suresh's letter that has been distributed via IR and is included [in this blog post](#) for reference, *"there has been no meaningful change to the timeline for the commercialization of POET's integrated laser technology"*.

- "Meaningful" or "not meaningful" is an unclear and subjective term. Can you please quantify what that "not meaningful" delay mean in form of a certain period of time, i.e. what is the extent of the delay in number of days, weeks, months, or years?
  - The [investor presentation as of October 2016](#) assumes commercialization of the POET optical engine in 2018. What are the milestones between now and then? How is each milestone characterized? When is each milestone expected to occur? How will POET keep its shareholders updated promptly regarding reaching, missing, or updating these milestones?
2. What is your estimate on when the first fully-functional prototype of the integrated VCSEL transceiver will be demonstrated? Please specify optimistic time, pessimistic time, and most likely time!

### Other products

1. On which other products that are based on the POET technology, if any, is the company currently working?

### Optical engine

1. What is an Optical Engine? There seems to be no precise definition of what an "optical engine" is. Other companies are using the term "optical engine" e.g. for a laser unit, for a transceiver unit, or for spectrometer light sources and detectors. So what is POET's definition of an optical engine?

2. Is an optical engine the same as an integrated VCSEL transceiver? If not, what are the differences?

## Delays

1. Could you please provide a comprehensive list of sources of delays or potential delays in developing and/or commercializing the POET platform in a foundry environment? As far as is currently known or assumed, there's
  - the epitaxy service provider (EpiWorks?),
  - the US Chamber of Commerce (export permits), and
  - the foundry service provider (Wavetek).
2. Is the list above correct and complete? If not, how does it correctly look like?
3. The CEO letter as of 2016-11-02 says: *"We believe that investments in the **development of multiple sources for our epitaxial wafers** and in **capital equipment** will allow us to **accelerate the cycles of learning** that are needed to produce prototype devices that meet distinct specifications."*
  - What are possible sources for POET's epitaxial wafers? What are the steps that have to be done for the development of these sources?
  - What are costs and lead times until having developed sources for epitaxial wafers?
  - What is the current state of the development of these sources? When will these developments bear fruit?
  - What is the "capital equipment" POET is going to invest in? How will it be used?
  - What are the costs of the "capital equipment"?
  - What is the lead time before the "capital equipment" can actually be used? What are target dates for ordering, installing, configuring and actually putting into use the new equipment? What is the current state?
  - How will the "capital equipment" accelerate the cycles of learning? How does a typical learning cycle look like?
4. Which kind of services is POET going to take, or has taken, in-house? Which kind of services does POET have to commission to third parties?
5. What impacts did the Anadigics and Epiworks acquisitions by II-IV have had on the company's timelines, if any?

## Locations

1. Which kind of activities are actually carried out in Toronto, San José, and Singapore, respectively?
2. How many staff are working in Toronto, San José, and Singapore, respectively?

## New products

1. POET [announced](#) to plan *"to announce several new products in the second half of the year, which is expected to support continued growth into 2017."* What exactly are these new products?
2. Do they include any POET-platform-based products? If yes, what are these products?

3. Are there variations of the POET epitaxial stack required for specific applications or is one stack utilized for all devices?

### **DenseLight ramp-up**

1. What exactly will be done for the DenseLight ramp-up? A detailed answer will be very appreciated! For example, at the Town Hall Meeting the company announced to go for 3 inch or 4 inch wafers. What has been decided regarding the size? What kind of equipment will be installed? What will be decommissioned? How will the equipment fleet look like after the ramp-up?
2. When exactly will the DenseLight ramp-up start and when will it be completed?
3. What will DenseLight's revenues and profits be, following the ramp-up?

## **Financial and financing**

### **Financial**

1. What is the present burn rate? How is it projected for the next two years?
2. Will the current capital resources be sufficient until the company gets cashflow-positive?
3. Which measures is the company taking to avoid another cash injection?
4. Why did the company hire Thomas R. Mika? What exactly is the gap he has to fill?
5. POET has reported and continues to report that NRE is anticipated in 2017. Could you please elaborate on the sources of that NRE, the timelines and the kind of value that is anticipated?
6. What is the exact percentage of the decrease in management salaries and for how long?
7. What PR efforts are underway? Did the Rodman deal provide access to analyst coverage? If so when can we expect to see a research report released?
8. Please explain the business model in terms of NRE or other forms of financial support or other collaboration efforts. Does POET continue to be in communications with partners on technical matters? Is POET currently directing efforts toward product development specifically to meet the needs of partners/customers?

### **Financing (public offering)**

1. Which lessons have been learned from the public offering? How does the company evaluate the course and the results of the public offering in retrospect? What went well? What went differently than expected – i.e. bad –, and why?
2. Which alternatives to a public offering resp. to a public offering with this kind of conditions have been evaluated, e.g. a loan or a rights issue to shareholders? Why have these alternatives been dismissed?
3. Why did the company not cancel the public offering when the share price dropped and it became clear that it would deteriorate even further?
4. Who advised the company on how to raise capital?
5. Why has the financing been done in such a hurry?
6. Why did POET take exactly those CAD 11,651,040 net proceeds? Why not more? Why not less?

7. Will management and Board of Directors begin to invest in shares of POET Technologies when allowed to do so under securities rules?

## **Miscellaneous**

### **Communication**

1. What is the company's view on its own communication to or with shareholders? What do you think are your communication's strengths and weaknesses?
2. Assuming the company's communication has some weak points:
  - What does POET Technologies do to improve its communications?
  - How could POET's investor relations firm help?
3. The necessity of the capital raise has been explained afterwards only. The company should have sought shareholders' understanding for that move beforehand.
4. Why did POET Technologies not communicate and explain the various delays earlier?
5. Why did POET Technologies not communicate and explain the reasons for the equity raise before the public offering, but only afterwards?

**Do the members of the POET Technologies management and board of directors intend to communicate their confidence in the technology and in the company by buying significant POET stock, e.g. using a management stock purchase plan?**

### **A\*STAR IMRE**

1. What is the current status of POET's joint R&D project with Singapore's A\*STAR IMRE?
2. What are the outcomes so far? Do they exceed, meet, or disappoint your expectations?

### **Luxmux**

1. Which role does the Luxmux deal play in the company's overall strategy?
2. What are the reasons for not announcing the terms of the Luxmux deal?
3. How much revenue and how much profit is POET going to make out of the Luxmux deal in 2016 and the following two years?

### **TRAB**

1. Does the TRAB still exist?
2. What are past outcomes of the TRAB's work?
3. Who are the TRAB members?

### **SBIR**

1. Could you please elaborate on the current investigation regarding the SBIR grants?

## **Recommendations**

## Communication

1. Please use a clear and specific language that doesn't leave room for interpretation!  
Examples:
  - Instead of pledging to invest in "capital equipment" please describe the specific kinds of equipment and what it will be good for.
  - Instead of describing a delay as "not meaningful", please tell us what the exact extend of the delay is.
2. Please fulfill your promise to keep shareholders updated! Currently shareholders don't feel updated, but rather surprised, and negatively.
3. Please communicate in a way investors can understand. In the past, news releases etc. were hard to understand, were lacking details, or were unspecific.
4. Please avoid unspecific and misleading phrases like "expect results", "soon", "up and to the right", etc.
5. Please communicate consistently! When on one hand Suresh Venkatesan claims that the delays regarding the integrated VCSEL transceiver are "not meaningful" while on the other hand these delays a) sometimes extend to months and b) required a financing with an extremely "meaningful" impact on the share price, this is extremely inconsistent, raising serious irritations and severe doubts in the company's communications!
6. Please implement means to measure the effectiveness of the company's communication.
7. Please establish a fine-grained and detailed plan with timed and measurable milestones, so that investors are able to track where we are.
8. Please get a **slasher** on board, someone who is **paid to be negative**, paid to find the needle in the haystack, paid to scrutinize (with a negative tilt) every move you intend to make and every news release or other piece of communication prior to a release. Of course, management should **listen** to him, take any objections seriously and release news only if the slasher is satisfied. The slasher does not need to be technically versed. On the contrary, it might be better if he his not, because this way he would be able to spot all the tech lingo. If a news release satisfies the slasher, chances are it might also satisfy the market. Management might think about firing him when he ceases to find anything to beef about.
9. If there are reasons where the company is unable to provide answers to shareholders on meaningful and significant developments or commercialization efforts instead of completely ignoring the need to keep shareholders updated on such matters, please provide rationale for the need to restricted public disclosure. Many people question that there are even NDA's in place. A confirmation of this and the extent to which that impacts disclosure would go a long way to help us understand the silence.
10. Please make an effort to provide the shareholders with a tutorial to explain what makes the POET platform unique, how it differs from other compound semiconductor technologies. You could answer the question what is expected in terms of integrating the technologies of Denselight and BB Photonics into the POET platform. Video rich content preferred!

11. The POET white paper on the integrated VCSEL transceiver was removed from the website. Please provide an equivalent replacement or rational why that white paper was removed.
12. The Corporate Overview is completely outdated, see for example the following bullet point on the “Management” slide: “TBA in 2015 VP, Product Development”.