

00:41:38 Alaa Mohd: Greetings from Frankfurt Germany

00:41:50 Scott Hoppe: Scott with Sabreez in Newburyport, Massachusetts

00:42:02 Kuzeyhan Ozdemir: Good morning from Washington DC.

00:42:05 Aaron Proujansky: Hello from Ithaca, NY!

00:42:13 Cassie Coravos: Hi everyone! I'm Cassie -calling in from Detroit!

00:42:14 Juan Bravin: Warm regards from Mendoza, Argentina

00:42:41 Ali-Planete Greenleaves: Hello from Montreal, Canada

00:43:01 Ryan Hoover (CTO): www.bit.ly/cto2021qf

00:43:22 Ryan Hoover (CTO): <https://www.bit.ly/cto2021qf>

00:43:46 Daniel Karpf: Hello from C. E, CENTURY ENTERPRISES

00:48:46 Beth Zonis (CTO): Here's the link to the microsite with lots of information! www.bit.ly/cto2021qf

00:49:01 Beth Zonis (CTO): <http://bit.ly/cto2021qf>

00:53:25 Amy Perlmutter: Greetings from Cambridge Massachusetts!

00:53:59 Richard Fennelly: Greetings from northern Wetchester County, NY.

00:55:35 Scott Hoppe: Oh yeah. I want this.

00:59:01 Cindi Thompson: Very cool

00:59:27 Ken Hayes (CTO HQ): All - if you have questions of Revamp Moto, please put in this chat. <http://www.revampmoto.in/>

00:59:37 Brian Bauer: The VW Thing of electric bikes

01:08:04 Rajesh Solanki: What is your distribution strategy for B2C especially? How will you compete with tmore visible and known brands like Hero, Bajaj, Ola and others

01:15:48 Beth Zonis (CTO): Any other questions?

01:16:10 Raj, Energos Inc.: thx

01:20:30 Richard Fu/Agrivolution: I see a big problem with the whole global EV push. Lithium is a finite resource. How are we going to deal with electrification when the reserves are gone? The Li price in 2012 was \$4,212 per metric ton. In 2018, it was \$16,500 per metric ton.

01:21:57 Beth Zonis (CTO): Richard, One of our 2021 finalists, Princeton NuEnergy has a solution for that! They're recycling li-ion batteries!

01:23:39 Richard Fu/Agrivolution: Hi Beth. Yes, it is great. But, as I understood from their presentation, they are focusing on the cathode materials (Ni, Co). Is there anyone recycling Li?

01:24:31 Beth Zonis (CTO): Richard, That's a question for Chao! He has been researching this.

01:25:21 Ken Hayes (CTO HQ): Presenting now: CIRCUL'EGG: <https://circulegg.fr/>

01:25:42 Eric Douglas: What is the timeline for availability in the US?

01:25:54 Yifei Wang: Richard, Chao said the current cost benefit analysis of Li doesn't make economic sense still. There needs to be a breakthrough in technology there. Lithium is still relatively cheap compared to cobalt and nickel

01:25:55 Amy Perlmutter: I love the CIRCUL'EGG, great idea. But is there any concern that this is helping to improve the economics of agribusiness that doesn't treat chickens well?

01:27:16 Beth Zonis (CTO): Thank you for your questions about the startups that are pitching!

01:28:29 Beth Zonis (CTO): Thank you, Yifei! Sounds like we need policies to incentivize reduction of li-ion disposal.

01:35:41 Scott Witt: What are the current prices for these materials in the market? Can the firm charge premium prices based on their differentiators?

01:36:00 Yuwei Bai: Since you have several different directions to go, which one would you focus on? or which one has a bigger market share?

01:36:42 alec massé: Hi Justine, splendid presentation. I was wondering if you could further touch on the adhesive and paper manufacturing industries. What benefit can repurposed egg shell bring to those markets?

01:38:09 Chuck Digate: Congratulations on a great idea and your progress to date. What are your plans to penetrate other markets such as the USA?

01:41:52 Thomas BRUNO: Congratulations Justine !

01:45:17 Ken Hayes (CTO HQ): Presenting now: Earthchain
<https://www.earthchain.ch/>

01:52:50 Chloe Soroquere: Tres bonne présentation, Justine! Felicitations.

01:54:20 Deborah Knuckey: Curious how this works for charges from retailers that sell a wide range of things - e.g. a \$100 charge from Target. Could be electronics, plastic bags or organic food.

01:56:25 Suchit Kulkarni: How carbon scoring engine is going to handle scope 3 emissions for different products? And uncertainties associated with varying upstream/downstream supply chains even for same product?

02:11:32 Earthchain - Dan Graf: @Deborah Knuckey : "Curious how this works for charges from retailers that sell a wide range of things - e.g. a \$100 charge from Target. Could be electronics, plastic bags or organic food." - the way Doconomy and others do it only uses Merchant Category Code and financial amount, which gives a rather fuzzy estimate but which I still think has some value. You're right though, at that level you can't discriminate between \$50 of carrots from \$50 of air-freighted Argentinian beef. For that reason, our real focus is retail where the Level 3 data lives - the line items and for e-commerce, the shipping. We'll soon release plugins to the major e-commerce storefronts to get that in place in an "easy" way. We are then approaching retailers, terminal vendors and acquiring institutions to target that side of the payments space.

02:14:17 Deborah Knuckey: Thanks

02:14:22 Scott Witt: Loick is a God in Sailing

02:14:30 Earthchain - Dan Graf: @Suchit Kulkarni - "How carbon scoring engine is going to handle scope 3 emissions for different products? And uncertainties associated with varying upstream/downstream supply chains even for same product?" - when we work on the retail side, we start with a

matrix of product characteristics we can obtain from stock inventories that refine our scores, and modifying co-efficients which allow us to tweak based on an individual retailers other sustainability credentials. Our aim is to automate with the matrix, then refine with subject matter expertise over time. I'm not gonna specifically say "AI" here but that may also be employed to a certain extent to help refine estimates in some areas.

02:16:10 Scott Witt: And then use it for the LA Olympics

02:17:46 Suchit Kulkarni: Thank you. All the best @Dan

02:18:22 Ken Hayes (CTO HQ): Company presenting now: FinX - <https://finxmoters.com/>

02:22:44 Beth Zonis (CTO): Any questions for FinX?

02:24:55 Scott Witt: IF the propulsion unit is immersed in sea water for long periods of time, how will it respond to marine life that likes to grow on surfaces?

02:26:55 Yifei Wang: are there any publications about the science behind this propulsion system?

02:29:37 Talley Cain (CTO): <http://bit.ly/cto2021gf>

02:32:14 Beth Zonis (CTO): Thank you to the audience for your active participation!

02:34:34 Earthchain - Dan Graf: Regarding the question about IP, if anyone can recommend a good US attorney who can represent us (UK based) to file on USPTO we'd be really interested - for the US we do want to register trademarks - and perhaps that's an opportunity where we can get the advice as I referred to in my answer

02:39:53 Revamp Moto - Jayesh Tope: How is the purity of hydrogen maintained, Since impurities will add to emission of sodium or potassium? Also how is the pressure generated to store hydrogen efficiently?

02:40:50 Revamp Moto - Jayesh Tope: Please provide information on volumetric efficiency.

02:43:27 Richard Fu/Agrivolution: @SYLFEN The efficiency should be compared against HHV instead of LHV. But, more importantly, how are you obtaining the heat required to operate it? I assume the thermal requirement is not taken into the efficiency reported.

02:58:24 SYLFEN - Nicolas Bardi: Answer to Revamp Moto: we work with a high temperature solid state technology : so there is no sodium or potassium impurities. A risk exist on the air side, which we need to protect with a ceramic coating. The storage needs compression. Today we do it with quite classical hydrogen compressors. But if someone has a more efficient electrochemical compression device (or other better technology) we'd be glad to use it !

03:00:25 Cindi Thompson: yikes

03:07:59 Deborah Knuckey: Can the growth medium be used for other cell-cultured food, e.g. Gourmey's lab-grown fois gras or Just's lab-grown chicken?

03:13:07 J-J.A. Colantonio: great name/brand, btw

03:14:21 Jessica Smothermon (CTO HQ): Yes!

03:16:33 Bud Dunbar: the problem with natural fish farms is that they require strip mining the oceans for feed fish like anchovies. If you could use your tech for the feed fish instead of for human consumption, we can grow larger fish in RAS fish farms that do not pollute. The feed is the important thing right now.

03:18:14 Jessica Smothermon (CTO HQ): I'll be a taste tester!

03:18:29 Scott Witt: Pricing! -- a critical factor for these important innovations

03:18:49 Cindi Thompson: My cat will be a taste tester. 😊

03:19:07 Deborah Knuckey: @Bud - note that there are farmed fish companies moving to vegan feeds that don't strip mine:
<https://www.maxbrimelow.com/post/bay-nature-the-vegan-trout>

03:19:11 MAHADEVAN VISHWANATHAN: Its a super Innovation Great business model

03:19:44 Earthchain - Dan Graf: Congratulations everybody, loved it all - well done !

03:20:11 Beth Zonis (CTO): Excellent presentations today! Nice job!

03:20:22 Revamp Moto - Jayesh Tope: Thank you Everyone for your time.

03:21:30 Umami Meats - Mihir Pershad: @Bud Dunbar - the feed is definitely a challenge with fish farms, but high animal densities and low genetic diversity also create a prime ground for disease spread on those farms as well. And if we can make the fish with our technology, it's likely going to be more efficient to make it for human consumption rather than feeding it to other fish!

03:22:22 Umami Meats - Mihir Pershad: @Scott - definitely! We are starting with premium seafood products to ensure we can achieve price parity relatively early, as we also believe it will be essential to consumer acceptance

03:25:31 Richard Fu/Agrivolution: Wonderful presentations from all of them!

03:33:55 Cindi Thompson: Yes, we need to emerge with rebirth/positivity to solve the climate crisis!!

03:41:41 Ken Hayes (CTO HQ): All - Tom will take questions shortly - please put them in this chat.

03:43:09 Scott Hoppe: "See it, like it, want it, get it." Arianna Grande

03:45:24 Coil Cleaning Consortium: Richard Fennelly: Tom: what strategies work if the potential customer doesn't even know that they have a problem for which you have a solution?

03:47:58 Ken Hayes (CTO HQ): I need to show this video to my daughter, who just started her first professional job!

03:49:10 Veer Shah: How do you convince both your direct customer and your end user (as they often might be different)?

03:54:21 Rick Kjellberg: Tom, I've seen similar approaches that emphasize the customer/investor as the hero, NOT the company. Is it fair to say that this approach is about the hero (company) creating the new hero (customer/investor)?

03:54:53 Whsiper Energy Systems - Forest Guider: Often in stories there is a second act dead spot that is hard to avoid, with startups, that's often post prototype. How can we create a hero in our investor to help avoid these difficult transition times?

03:55:26 Philip Morkel: When the problem the target countries have is existential. Millions of potential casualties one day in the next 60 years. We alone can fix it 😞 properly. How do we navigate such a severe problem and solution in such a campaign?

03:57:52 William Landry: Great question Rick

03:57:54 Scott Witt: 'Product-led Growth' as Hero's Journey

03:59:26 William Landry: Great podcast that reinforces this featuring Nancy Duarte on the Starting Greatness podcast, hosted by Mike Maples Junior

04:00:52 Whsiper Energy Systems - Forest Guider: That's great advice. Thank you.

04:01:09 Rick Kjellberg: (From the Star Wars perspective, the customer I think is Luke Skywalker, and the company is Obi-wan Kenobi, the old mentor/guide through the story). Interesting take on the idea of it being circular, too. Thanks, Thom!

04:02:41 Scott Witt: Need to consider the difference between the journey for an Early Adopter vs Late Majority customers

04:08:13 Beth Zonis (CTO): Thank you, Tom! Great insights!

04:10:40 Tamara - Joule, Inc: 🙌 Tom

04:13:25 Scott Witt:

<https://rmi.org/climate-techs-four-valleys-of-death-and-why-we-must-build-a-bridge/>

04:14:45 Bettina Grab (CTO / Alder & Co.): Thanks Scott!

04:19:32 Ken Hayes (CTO HQ): Mel and Bettina run the Alder & Co marketing agency: <https://www.alderagency.com/>

04:29:36 Bettina Grab (CTO / Alder & Co.):
<https://www.linkedin.com/in/bettinagrab/>

<https://www.linkedin.com/in/melanieadamson/>

04:30:21 James Liao: Does CTO help entrepreneurs to connect to the customers?

04:30:32 Raj, Energos Inc.: How do we handle a pivot or a considerable change of problem understanding from a brand positioning nov?

04:30:56 Raj, Energos Inc.: How do we handle a pivot or a considerable change of problem understanding from a brand positioning POV?

04:34:05 Raj, Energos Inc.: thx

04:34:39 Bettina Grab (CTO / Alder & Co.): Tofu - the online community for marketing in climate <https://tofu4climate.substack.com/>

04:47:35 Tom White: can we see tanya's work?

04:47:40 Bruno Mejean: what are some of the dont's

04:47:48 Rafi Isaac: how do you make energy generation sexy?

04:48:03 Scott Hoppe: Rafi- www.sabreez.com

04:48:16 Tanya Barham: <http://communityenergylabs.com/>

04:48:36 Scott Witt: "Operationalizing your Brand" is a great strategy. Check out Denise Lee Yohn

04:48:54 Rafi Isaac: @Scott, thanks :)

04:49:08 Scott Witt: "What you do, is who you are" Ben Horowitz al6z

04:50:10 Rafi Isaac: True, but you need to mingle with those who don't. ;)

04:50:32 Whsiper Energy Systems - Forest Guider: Can you talk about authenticity. I feel consumers are so much more experienced and saturated with information these days - are there common success strategies or pitfalls you have seen?

04:50:38 Whsiper Energy Systems - Forest Guider: Thanks!

04:50:53 Beth Zonis (CTO): Donnel Baird of BlocPower and Steph Speirs of Solstice are Cleantech Open Northeast alumni who are great examples of diversity and inclusion - not only in terms of their teams, but also in terms of the solutions that they provide specifically to underserved communities.

04:50:54 Scott Witt: They care about Outcomes

04:50:59 Coil Cleaning Consortium: Richard Fennelly: We are trying to figure out how to make cooling equipment coil cleaning sexy ---- might the potential to cut total global electric demand by 4% do it????

04:51:15 Scott Witt: Functional & Emotional -- Jobs to Be Done

04:51:40 Rafi Isaac: Thanks Tanya!

04:52:30 Marcus Chee: How do you brand low carbon (climate change) advantage?

04:52:43 Tom White: Thank you Bettina, Melanie, and Tanya. Really great, tangible info.

04:53:08 Rafi Isaac: Let me rephrase: How do you make energy sexy to investors?

04:53:18 Rafi Isaac: Thanks Melanie!

04:53:51 Cindi Thompson: lol

04:54:50 Scott Witt: They don't want to be "delighted/entertained" they want to get on with their lives!

04:56:26 Rafi Isaac: Good point Bettina! Thanks :)

04:56:28 Raj, Energos Inc.: Gotta leave. Thanks a lot Bettina, Melanie and Tanya. Great learning!

04:56:30 Coil Cleaning Consortium: Richard Fennelly: New York City has given buildings energy grades.

04:57:31 Scott Witt: Also: they have Confidence/Trust that you'll deliver the promised results

04:57:47 Scott Witt: and they won't look like fools for choosing you

05:02:18 Whsiper Energy Systems - Forest Guider: Thank you so much!

05:02:30 Coil Cleaning Consortium: Richard Fennelly: Thank you!

05:02:32 Scott Witt: Great Topic -- thanks

05:02:45 Scott Hoppe: Great Presentation! Thank you all.

05:02:57 Michael Gould, WES: Thank you!!

05:02:58 Randy Taylor: Thank you all for the insightful and detailed conversation

05:03:20 Rafi Isaac: Thank you Tanya!