



INNOVATION TRIP - Vancouver & Seattle 2023

VON CLEANTECH BIS
mRNA UND VON MARKEN
BIS IMMOBILIEN

Stand: 9. Oktober 2023



Day 1 | Sunday, October 8th

Arrival in Seattle

Hotel: PALIHOTEL Seattle

- Location in Seattle's Downtown near the famous Pike Place Market and the Elliott Bay waterfront.
- Just a nine-minute walk from Capital Grille

Dinner: Capital Grille and meeting with Josh Davis, Vice President of Global Trade & Investment of Greater Seattle Partners

- Greater Seattle is one of the most vibrant and innovative regions in the world. In partnership with the public and private sectors, Greater Seattle Partners drives investment and quality jobs into the region to create and sustain opportunity and prosperity for all. We do this by telling the story globally of our talent, pioneering spirit, unique communities and quality of life.

Sunday, 7 p.m.

Greater Seattle Partners

Josh Davis, Vice President of
Global Trade & Investment

Greater Seattle Partners

- GSP is a public-private economic development corporation working to ensure that every person in the region has an opportunity to prosper.
- GSP was founded as a public-private sector initiative to establish a leading regional economic development organization in the greater Seattle region. Formed under the leadership of Challenge Seattle, an alliance of CEOs from 17 of the region's largest employers, GSP is the culmination of efforts to support broad-based economic growth throughout the region and establish a bold vision for greater Seattle's future.
- GSP incorporates the strengths and expertise of past organizations by leveraging knowledge, experience and connections in the region to support business and attract investment.



Day 2 | Monday, October 9th

Transfer

8.15 a.m.	Departure from Palihotel	<u>4625 Union Bay Pl NE, Seattle, WA 98105, USA</u>
9.00 a.m.	<u>The University of Washington Clean Energy Institute</u>	
11.00 a.m.	Visit of <u>Global Innovation Exchange</u>	<u>12280 NE District Wy, Bellevue, WA 98005, USA</u>
12.30 p.m.	Lunch @ <u>Microsoft Cafes</u>	<u>3940 159th Ave NE, Redmond, WA 98052, USA</u>
2.00 p.m.	Smart Manufacturing - Ulrich Homann	<u>3940 159th Ave NE, Redmond, WA 98052, USA</u>
3.00 p.m.	AI - Christian Liensberger	<u>3940 159th Ave NE, Redmond, WA 98052, USA</u>
5.00 p.m.	<u>Ascend</u>	<u>2101 N 34th St, Seattle, WA 98103, Vereinigte Staaten</u>
7.00 p.m.	Dinner @ <u>Cutters Crabhouse</u>	<u>2001 Western Ave, Seattle, WA 98121, USA</u>

Monday, 9 a.m.



CLEAN ENERGY
INSTITUTE

UNIVERSITY of WASHINGTON



The University of Washington Clean Energy Institute

- Accelerating the development, scale-up, and adoption of new technologies in solar harvesting, energy storage, and system integration
- offers customized training and use of instruments for fabricating prototypes, testing devices and modules, and integrating systems
- active gathering space for cleantech innovators and investors



Prototype



Analyze



Train



GLOBAL INNOVATION EXCHANGE



Monday, 11 a.m.

Visit of Global Innovation Exchange

- university-industry nexus for interdisciplinary education in technology innovation
- In partnership with corporate, government and non-profit organizations, GIX delivers transformational learning experiences through world-class graduate and professional development programs
- **Mission:** GIX inspires innovators to solve real-world challenges through the responsible application of advanced technologies
- **Vision:** GIX aims to increase the capacity of innovative leaders to create value, transform organizations, and improve the world

Monday, 2 p.m.



- 28 years at Microsoft
- Corporate Vice President
- Cloud and AI business
- Part of the senior engineering leadership team

Smart Manufacturing - Ulrich Homann

- Responsible for the customer-led innovation efforts across the cloud and enterprise platform portfolio engaging with the most complex and innovative customers and partners across the globe



Microsoft

The Advantages of Smart Manufacturing



Automated
Data



Predictive
Maintenance



Significant Cost
Reductions



Enhanced
Productivity

Monday, 3 p.m.



AI -

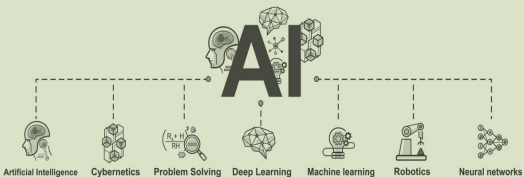
Christian Liensberger

- 14 years at Microsoft
- Product Leader & Technical Advisor at Microsoft
- AI business

- Responsible for product vision & direction of Microsoft Start - Microsoft's new personalized interest & content feed, with billions of visitors each year



Microsoft



Monday, 5 p.m.

Ascend

Ascend

- Ascend is the most active pre-seed VC Fund in the Pacific Northwest
- Primarily investing in AI/ML, Data and SAAS

AI2 INCUBATOR

Their goals:

- Create the best product possible
- Build the best team possible
- Raise the capital you need to grow

AI2 Incubator

- They cofound startups with entrepreneurs that use revolutionary AI models to create products that people love
- Their process works for all entrepreneurs, but there is variance in how long it takes to build a healthy business
- Each founder's journey with them is unique and can range from 4 to 18 months

Day 3 | Tuesday, October 10th

8.45 a.m.	Departure from the Palihotel	<u>1301 5th Ave, Seattle, WA 98101, USA</u>
9.00 a.m.	<u>CleanTech Alliance</u>	15th floor - Microsoft Room B
10.30 a.m.	Amazon	<u>2205 7th Ave, Seattle, WA 98121, USA</u>
1.30 p.m.	Lunch @ Amazon Go Store	
3.00 p.m.	<u>MTM Robotics</u> - Airbus Robotics Comapny	<u>11015 47th Ave W, Mukilteo, WA 98275, USA</u>
5.00 p.m.	Transfer to Vancouver <u>Hotel Loden</u>	<u>1177 Melville St, Vancouver, BC V6E 0A3, Kanada</u>
7.00 p.m.	Dinner @ <u>Tableau</u> In the Hotel	<u>1181 Melville St, Vancouver, BC V6E 0A3, Kanada</u>

Tuesday, 9 a.m.



Meeting in 15th floor in Microsoft Room B

CleanTech Alliance - Mel Clark



- President and CEO at CleanTech Alliance

- CleanTech Alliance represents over 1000 member organizations and is the largest clean-tech trade association in the United States
- The Alliance facilitates the generation and growth of cleantech companies and jobs through networking events, entrepreneur programs, workforce development, and our BUILT Cluster - leading Joint Innovation Projects to decarbonize the built environment.
- Mission: Engage our members and the cleantech industry through a variety of programs including networking events, public policy advocacy, commercialization, business development, and other business services
- Vision: Our vision is to unite the cleantech industry and make connections that make a difference so that we have a greener future.

11 min. walk
from hotel



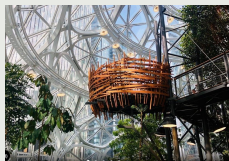
Alphazirkel
- AWS Manufacturing Innovation

Tuesday, 10.30 a.m.

Amazon - The Spheres

Most unique workspace

- The Spheres are a result of innovative thinking
- a direct link to nature
- Home to more than 40,000 plants from the cloud forest regions of over 30 countries



10:30 am 11:30 am
Smart Manufacturing (part 1)
Michel Putnik

11:30 am 12:30 pm
GenAI
Joseph Rosing

12:30 pm 1:30 pm
Supply Chain
Michel Putnik

1:30 pm
Closing, Survey + Getting
Lunch in Amazon Go Store
Michel Putnik

Lunch @ 1.30 p.m.



Background:

How did Amazon become one of the leading retailers worldwide? How did a book seller become one of the biggest Cloud providers?

The background lies in Amazon's Culture of Innovation: Working Backwards from the customer, using the PRFAQ mechanism (a fictitious press release (PR) describing the outcome of a specific initiative that includes the frequently asked questions (FAQ).) to define problem statements and outcomes, and determining the speed of action with the help of One-Way or Two-Way door decisions.

As Amazon prides itself on being one of the most customer-centric companies globally, we believe that growth happens together with our customers. Thus today, we would like to share our insights in current trends for Manufacturing Businesses, including the rise of generative AI for optimization of manufacturing processes and supply chains and afterwards, we will see one of Amazon's innovations live, namely shopping without cash register queues in the Amazon Go store.

The speakers:

Michel Putnik (WW Leader for Supply Chain, Smart Products & Services, Manufacturing), has a background of nearly 28 years in the software industry (including SAP, Acando, Lotus Development). In 2017, after 11 years at Microsoft as Platform Specialist and Business Development Director for Manufacturing, he joined AWS 6.5 years ago and has since been focusing on enhancing operational efficiency, increased innovation and growth for manufacturing customers globally. His current interest lies in improving manufacturing processes and complex supply chains with the help of AI solutions.

Joseph Rosing (WW GTM Leader, Industrial Manufacturing) has more than 17 years' experience in automation solutions for industrial manufacturing. After starting his career at Rockwell Automation, he took on different roles including Plant Manager in Twinsburg, Production Manager & Marketing Manager in Singapore. After 12 years he then moved to Uptake, where he led the Product and Solutions Marketing area focusing on products to deliver predictive insights for heavy equipment in Construction, Mining, and Agriculture. For the past 3.5 years he has been driving the development and worldwide adoption of new solutions delivering valuable insights for manufacturing businesses at AWS. One of his current focus areas is the use of generative AI for manufacturing.

Joseph Rosing, jrosing@amazon.com, +1-414-378-5248

Michel Putnik, mputnik@amazon.com, +1-425-533-3965

It is important to note that for using the Amazon Go store, every participant will need an Amazon account / share the account of another participant. To enter at the gate of the Amazon Go store you will need to present either the Amazon App or a Credit Card.

Tuesday, 3.00 p.m.



AirBus Robotics - MTM Robotics

Where Innovation Meets Reality

- MTM Robotics (an Airbus Robotics Company) is a trusted global provider of high-quality automation systems, software systems, and engineering services for the aerospace and aircraft manufacturing industries
- Since 2003, MTM Robotics has successfully worked to innovate technologies for building airplanes faster and cheaper
- In 2018 MTM received the Prestigious Airbus Innovation Award for proactive innovation, working closely with and developing automated solutions for factory automation



Key Figures

Less than

15

kgs of weight per module

Less than

2

minutes to assemble by a trained operator

Less than

10

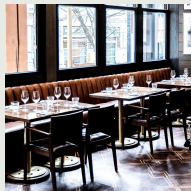
seconds take to take travel time

Tuesday, 5 p.m.

Transfer to Vancouver to [Hotel Loden](#)

CENTRAL.QUIET.BEAUTIFUL.

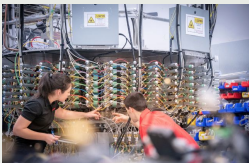
- A luxury award-winning boutique hotel, recognized locally and globally, the Loden prides itself in its signature service, high-end amenities and being a central, quiet oasis within the city.
- As a 77-room boutique hotel, the Loden prides itself in its Loden signature service, personalized amenities, and being a central, quiet, beautiful oasis in the city
- Received awards as the prestigious Top 500 Best Hotels in the world by Travel + Leisure 2021 & 2022 as well as holding the #1 position of the Best Hotels in Vancouver and #2 in Canada by TripAdvisor 2023
- Tableau Bar Bistro is the award-winning French restaurant adjoined to the lobby of Loden Hotel.



Day 4 | Wednesday, October 11th

8.00 a.m.	Departure from the Loden Hotel	
8:30 a.m.	General Fusion	6020 Russ Baker Way, Richmond, BC V7B 1B4, Canada
11.15 a.m.	Arca	33 W 8th Ave., Vancouver, BC V5Y 1M8, Canada
12.30 p.m.	The University of British Columbia	2355 E Mall, Vancouver, BC V6T 1Z4, Canada
5.00 p.m.	Transfer to Hotel	
6.00 p.m.	Meeting with Alexandra Weipert and Alexander Hecht	Hotel Conference Room 2nd Floor
7.30 p.m.	Dinner @ Bacaro Zu Gast: Alexandra Weipert und Alexander Hecht	1029 w cordova st vancouver, bc v6c 0b9

general fusion



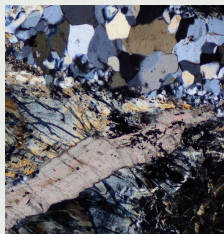
Wednesday, 8.30 a.m.

General Fusion

**Clean Energy. Everywhere.
Forever.**

- In 2002, the founder, renowned Canadian physicist Dr. Michel Laberge, set out to develop a commercially viable approach to fusion energy. From the beginning, they focused on creating a practical energy solution to meet the urgent need for carbon-free electricity
- Transforming the process of energizing
- pursuing the fastest, most practical path to bringing fusion energy to market using Magnetized Target Fusion (MTF) technology
- on track to deliver zero-carbon energy to the grid by the early to mid-2030s with our proprietary technology
- solves engineering challenges facing commercial fusion practically and cost-effectively

Wednesday, 10.15 a.m.



Arca

Rocking CO2 for a livable planet.

- Arca is a leader in carbon mineralization
- The company captures CO2 from the air and transforms it into rock, where it is safely stored forever
- Arca works with producers of critical metals to decarbonize their mining operations and scale production of carbon-negative metals and minerals for the clean energy transition
- Arca is backed by Lower Carbon Capital and the Grantham Foundation.
- They won a \$1m USD XPRIZE Milestone Award for Carbon Dioxide Removal last year
- Recently they have been awarded another CAD \$1.25m.
- We have contracts in place with 6 mining companies and are preparing now for our first commercial deployment, which will be in Australia.
- Developing equipment to measure and optimize CO2 capture.
- Here is a video pitch, providing more explanation of the company.



Clean
Energy
Research
Centre

Wednesday, 12.30 p.m.

Lunch Delegation and early guests	[CHBE Room 202]	12:30
Welcome and Land acknowledgement Overview – University of BC Overview, Partnerships, Investment opportunities, Success examples, Sustainability, CLL, UBCs whole system approach etc. [15-20m]	<i>Office of the Vice President of Research and Innovation, <u>Iain Beag & Sabrina Hauser</u></i> <i>Applied Sciences Dean's office, <u>Kyra Lavardiere</u></i>	12:40 – 1:00 PM
German Delegation – Overview	<i>Albert Geiger & delegates</i>	1:00 – 1:15 PM
Clean Energy Research Center (CERC): <ul style="list-style-type: none"> • Bioenergy Systems & Biorefinery. Biorefining Research and Innovation Centre (BRIC) [20m] • Urban Energy Systems: Decarbonization, GHGs, and Air Quality [20m] • Data Analytics, Optimization & Control [20m] 	[CHBE Room 202] <i>Tony Bi</i> <i>Patrick Kirchen</i> <i>Bhushan Gopaluni</i>	1:15 – 1:35 PM 1:35 – 1:55 PM 1:55 – 2:15 PM
Coffee break & brief WALKING TOUR of CERC facilities	<i>Patrick Kirchen</i>	2:15 – 2:40 PM
Climate Venture Studio, entrepreneurship@UBC: Strategy to accelerate the launch and scaling for climate solutions to decrease timeframe to impact + Venture Pitch VulcanX	<i>e@UBC, Shannon Bard</i> <i>Omar Herrera</i>	2:40 – 3:00 PM 3:00 – 3:10 PM
Manufacturing Automation Laboratory, Fraunhofer Collaboration on Industrial Digital Transformation	<i>Yusuf Altintas</i>	3:10 – 3:30 PM
Advanced Materials Manufacturing Cluster, Composite Research Network, DLR@UBC Partnership [20m]	<i>Anoush Poursartip</i> [Group walks to SHED]	3:30 – 3:50 PM
WALKING TOUR of Smart Hydrogen Energy District (SHED)	<i>Omar Herrera or Kyra Lavardiere</i>	4:00 – 4:30 PM
End of Visit		4:30 PM

[more details here](#)

Wednesday, 5 p.m. - transfer to hotel

Wednesday, 6 p.m.

Meeting at the Loden
Hotel (Conference Room,
2nd Floor)

Alexandra Weipert

- Managing Partner of ProCanada Consulting Inc.
- Licensed Canadian Immigration Consultant and accredited member of the College of Immigration and Citizenship Consultants (CICC)

Alexander Jecht

- Alexander Jecht has more than 30 years of experience in the financial industry
- For many years, he held senior management positions at European financial services providers (including INTERHYP, UBS and Julius Baer)



9 min. walk
from hotel

Day 5 | Thursday, October 12th

8.30 a.m.	Breakfast and Panache VC - Chris Neumann	Tableau Hotel Restaurant
10.00 a.m.	Meeting with Trade & Invest in British Columbia	Suite 730 999 Canada Place, Vancouver, BC V6C 3E1
12.30 p.m.	Hans Fast - Fastmark	397 W 7th Ave, Vancouver, BC V5Y 1M2, Canada
1.00 p.m.	Council	
2.30 p.m.	Lunch @ Seasons in the Park	W 33rd Ave, Vancouver, BC V5Y 2M4, Kanada
3.00 p.m.	Hans Hammer - East 10th	East 10th Ave
5.30 p.m.	Perkins&Will	1220 Homer Street Vancouver, British Columbia V6B 2Y5
7.30 p.m.	Dinner @ Blue Water Café	1095 Hamilton St, Vancouver, BC V6B 5T4, Canada

Thursday, 8.30 a.m.



Panache VC - Chris Neumann

Panache VC

- Panache VC is Canada's leading nationwide pre-seed venture fund
- Takes a unique, thoughtful, and diversity-driven approach to its portfolio of early-stage investments in Canadian startups

Chris Neumann

- Chris Neumann is Partner at Panache VC
- Chris is the founder of Commonwealth Ventures and DataHero
- He was the first employee at Aster Data and a Venture Partner at 500 Startups
- Chris is a Visiting Lecturer at the Beedie School of Business at Simon Fraser University, and received his MS in Computer Science from Stanford University

Working breakfast @ hotel

Thursday, 10 a.m.



Trade and Invest B.C.

They work with international enterprises to help them build strong connections to the resources, skills and businesses that make British Columbia (B.C.) the natural place to work, live and invest.

Their experienced and educated team of trade and investment professionals have access to a global network of representatives in China, Japan, Korea, SE Asia, India, Europe, and the United States



Thursday, 12.30 p.m.

Visiting Fastmark

Hans Fast

- Founder of Fastmark Development
- Managing over a dozen different real estate projects and working for some of Vancouver's most reputable developers, he is always willing to go the extra mile

Thursday, 1.00 p.m.

Visit of a City Council

More details TBA



 **Fastmark**



Thursday, 3.00 p.m.

Project “East 10th”

- The project is in close proximity to the newly constructed Broadway Subway Line
- The development of the multi-family residential tower falls under the urban design brief of the Broadway Plan, a large-scale land use plan to enhance the entire neighborhood and redensify the land

Hans Hammer

- Chairman of the Board of Hammer AG and managing partner of Hammer Real GmbH
- Numerous of successful project developments with a volume of over EUR 1.5 billion



Thursday, 5.00 p.m.



Perkins&Will

Perkins&Will is a global design practice founded in 1935. As of 2022, Perkins&Will had 28 offices and over 2,500 employees. In the same year, Perkins&Will generated \$572.47 million in earnings, making it the second largest architecture firm by revenue in the United States. Phil Harrison has been the firm's CEO since 2006.

Perkins&Will goal is to design places that make a positive difference in the world. That's why people are at the heart of everything they do.

Cillian Collins, Senior Architect, will present a selection of Perkins&Will projects. The City of Vancouver is also joining: Sean Pander (Green and Resilient Buildings Manager)

Agenda:

5-5.30 pm:

- PW office meet+greet / studio intro

5.30-5.35 pm

- Welcome/Land Acknowledgement

5.35-5.50 pm

- Delegation summary of their trip

5.50-6.30 pm

- Perkins&Will overview
- Greater Vancouver projects overview
- Sustainability trends
- Innovation/Research

6.30-7.00 pm

- RAICO overview

7.00 pm

- chat/questions/discussion

Tag 6 | Freitag, October 13th

8.00 a.m.	Acton Capital - Hannes Blum	Hotel Loden
10.00 a.m.	Cellcentric	5250 Riverbend Dr #303, Burnaby, BC V3N 0G2

Friday, 8.00 a.m.

A C T O N

Acton Capital

Growth. Driven by reason.

- Since 1999, the Acton team supports digital pioneers on their way to market leadership
- Acton Capital is a leading growth-stage Venture Capital investor in Europe and beyond
- Investing with a clear focus on tech-enabled business models throughout Europe and North America
- Committed to sustainable growth

Hannes Blum

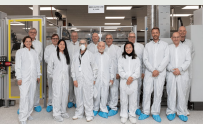
- Partner @ Acton Capital
- Active Business Angel
- Former entrepreneur
- Hannes has won various industry awards, including EY's Entrepreneur of the Year in the Pacific region



Working breakfast @ hotel

Friday, 10.00 a.m.

cellcentric



Cellcentric

We power sustainable life.

We are creating superior hydrogen fuel cell solutions.

- cellcentric is a 50:50 joint venture of Daimler Truck AG and the Volvo Group AB
- cellcentric's primary focus is to develop, produce, and commercialize fuel cell systems for use in heavy-duty trucks
- 30 years of extensive experience in developing sage and efficient world-class fuel cell systems
- They are using hydrogen in their fuel cells and creating energy without emitting anything but pure water
- Location Canada is currently cellcentric's production site for fuel cell stacks

Seattle and Vancouver: Must visit

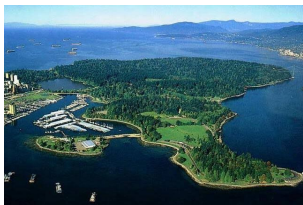


Space Needle in Seattle



Pike Place Market in Seattle

Vancouver Seawall im
Stanley Park



Stanley Park in Vancouver