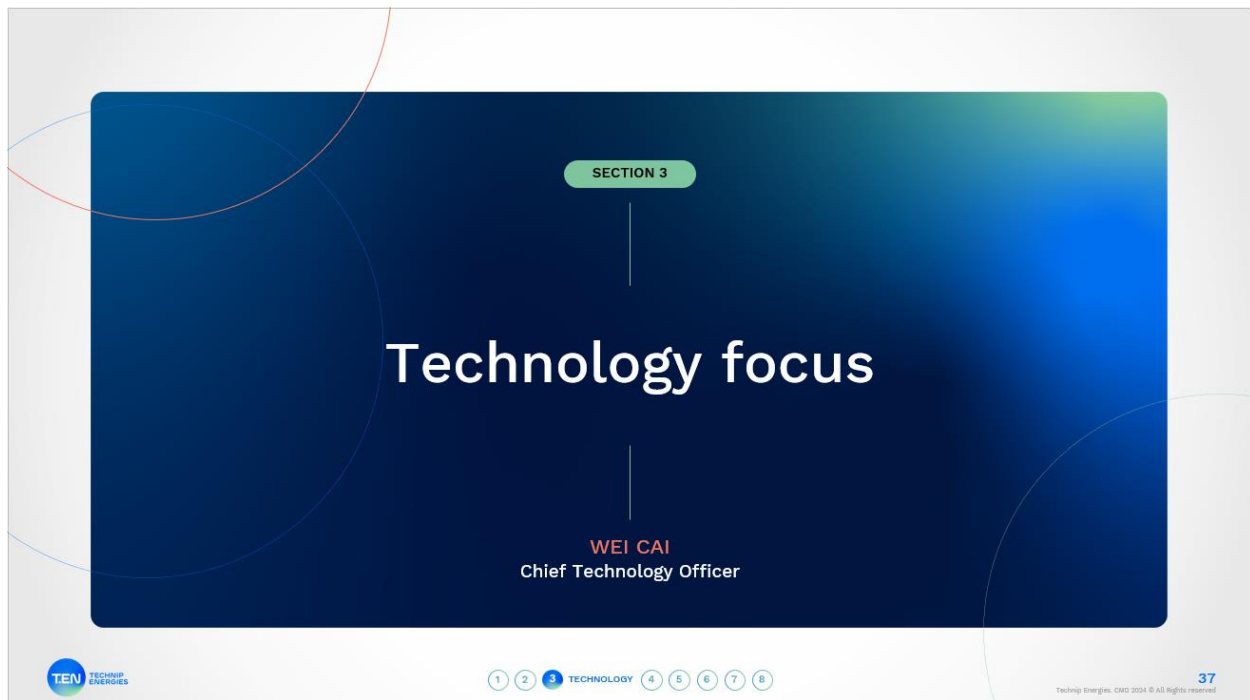


TECHNIP ENERGIES CAPITAL MARKETS DAY 2024 – TRANSCRIPT

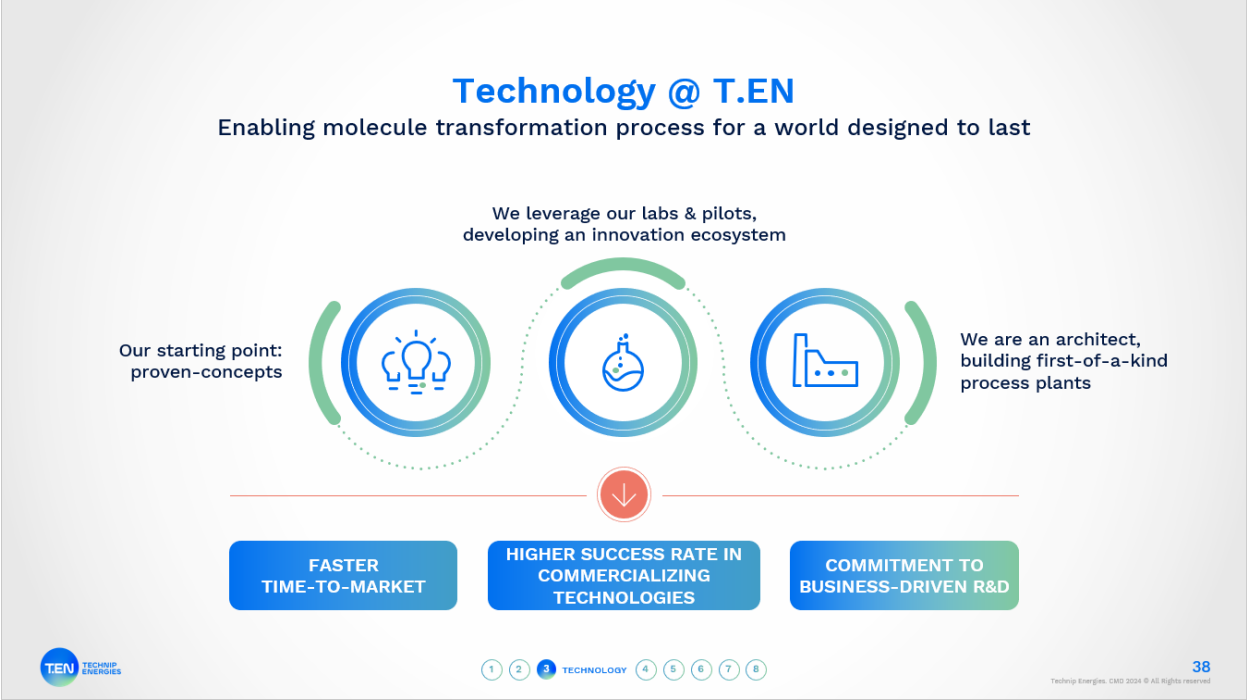
Paris, Thursday, November 21, 2024, 2:00pm CET.

Technology

Wei Cai



Good afternoon, everyone. I'm Wei Cai, Chief Technology Officer at T.EN. Now, let's zoom on into technology.



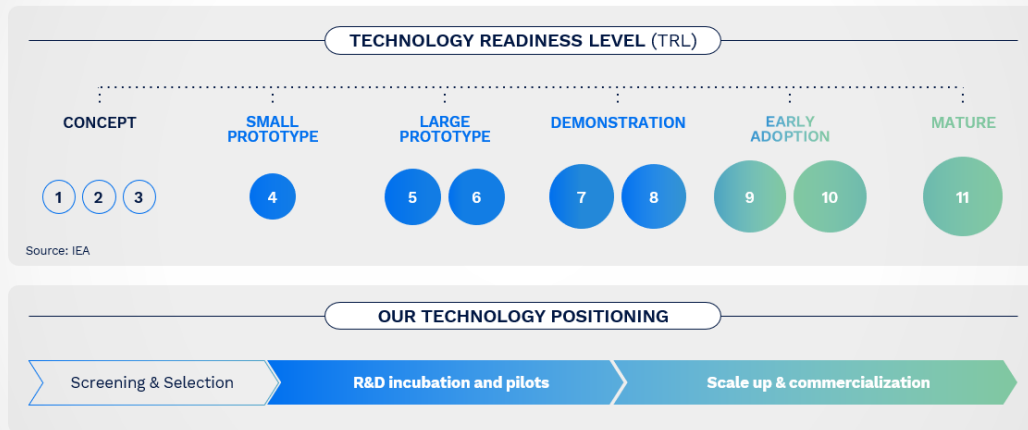
So, first of all, what are we talking about when we talk about technology at T.EN?

So, our technology approach is focused, is practical, is open, and scalable.

1. It is focused because we know exactly what technology building blocks we need to build the future for our four markets, energy, energy derivatives, decarbonization, and circularity.
2. It is practical because we know to start from the proven concept, and we don't start from scientific discoveries.
3. It is also open. We constantly scan the horizon, for new ideas and early-stage technology that is viable in a practical manner. So, we do this by leveraging our people, global labs, and also our partners in our innovation ecosystem.
4. It is scalable because we have unique capabilities. It can develop technology from lab to pilot and all the way to implementation at industrial scale.

So overall, our technology, this approach of a technology can reduce the time to market, can really increase the probability of success, and also enable us to reinvest in the future technology. So, our technology really makes technical energy to transform the industry. We're uniquely equipped to address the challenge of scale that Arnaud talked about earlier.

From proven concept to successful commercialization



So let me elaborate a little bit more about our position in technology.

As I said earlier, we don't start from scientific discoveries. We start from proven concepts that is at technology readiness level three or four, and scale it up to seven or eight in a few years.

Let me give you three examples of technology that went through our three-phase approach, lab, pilot, demonstration plant.

T.EN technology proof points



Hummingbird®

Achieved TRL 8 from 4 in 5 years

SUSTAINABLE FUELS

Opening a pathway to SAF

- Ethanol-to-ethylene technology
- Technology acquired from bp in 2016
- Utilized in world's first commercial scale AtJ¹ SAF facility



Bio-2-Glycols™

Achieved TRL 7/8 from 3 in 3 years

BIOCHEMICALS

Enabling green polyester

- A bio-solution to produce MEG² from glucose
- Pilot plant running
- Commercialization in 2025



EARTH®

Achieved TRL 9 from 4 in 5 years

HYDROGEN

A recuperative reforming solution

- Enhanced Annular Reforming Tube
- Reduces fuel costs by 30% and CO₂ emissions by up to 10%
- Fully proven with 3+ applications

¹ Alcohol-to-Jet – Freedom Pines, Georgia, USA

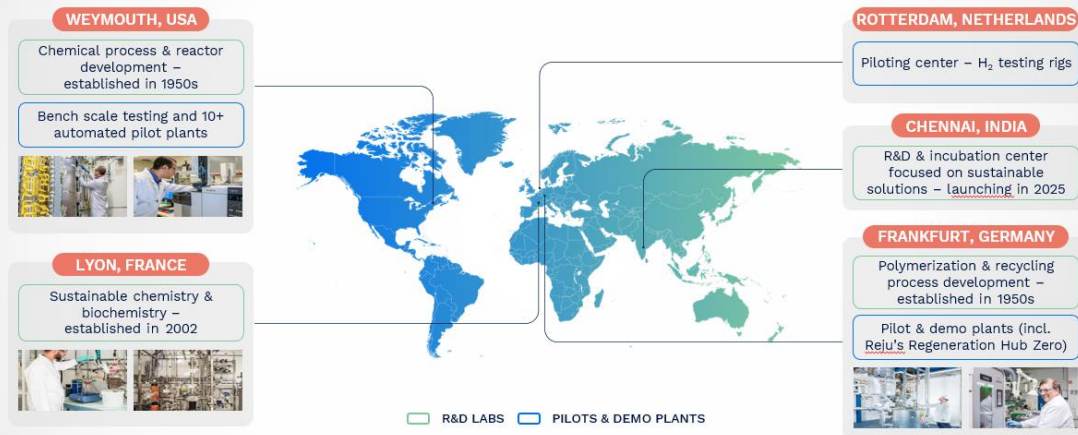
² Mono ethylene glycol



1. So, first example is in sustainable fuels. We acquired the Hummingbird technology a few years back, where we are able to scale it to commercial-ready in five years. As we speak today, this technology is under commissioning in the world's first commercial agricultural jet plant in the United States.
2. Then the second example is in biochemicals. So, we acquired early-stage Bio Glycols technology. Now we are on track to provide economic bio-solution to produce MEG from glucose next year. So that's within three years.
3. Then third example is in hydrogen. So, we leverage our in-house capabilities, develop earth technology. Launched in 2019, this technology already are winning two prominent chemical industry awards. Combining with our low-carbon solutions, today we are able to offer blue hydrogen plants with more than 99% carbon footprint reduction.

So, these just a few examples that reflect our expertise, drive, and experience in developing technologies in our traditional market and adjacent market. Whether acquired or developed in-house, we know how to bring them fast to scale and commercialization.

T.EN's global footprint of labs and pilots



1,000+ innovation focused people in a de-centralized R&D structure



So, this kind of performance is made possible by a network of labs and pilots across the world, as well as our partners.

So, as you can see, our labs, I'll give a few examples. Our Boston Technology Hub hosts a women's lab, which was established 70 years ago. It is a lab and 10-plus pilot plants. It is our center of excellence to design chemical reactors and develop process technologies.

And our full-fledged lab in Frankfurt, Germany, is really dedicated for polymer process development. It is crucial to host our existing proprietary polymer processes, as well as developing recycling technologies. It has been recognized by many awards, for example, the Germany Top 100 Innovator Award.

That is why Reju, our new material regeneration company, will establish its first operating unit in Frankfurt, which Patrik will talk about later today.

So recently, we expanded to in Europe by acquiring a new lab in Lyon, France, which is specialized in biochemical and sustainable chemistry.

We will soon be opening a new lab in Chennai, India. This will not only expand our footprint in the APAC region, but will also strengthen our overall R&D capabilities.

So, our network of labs and pilot plants is a perfect illustration of our approach to technology, which is to start from a proven concept, leveraging our in-house capabilities, and also working with selective partners --and to prove--to improve those technologies or bring those technologies to the next level.

A substantial and diverse technology portfolio

OUR TECHNOLOGY PORTFOLIO

~2,800
PATENTS

60+
PROPRIETARY TECHNOLOGIES

40+
TECHNOLOGY ALLIANCES

KEY MARKETS

DECARBONIZATION

SUSTAINABLE
FUELS

HYDROGEN

SUSTAINABLE
CHEMISTRY

GAS
PROCESSING

CIRCULAR
TECHNOLOGIES

CO₂ MANAGEMENT

REFINING

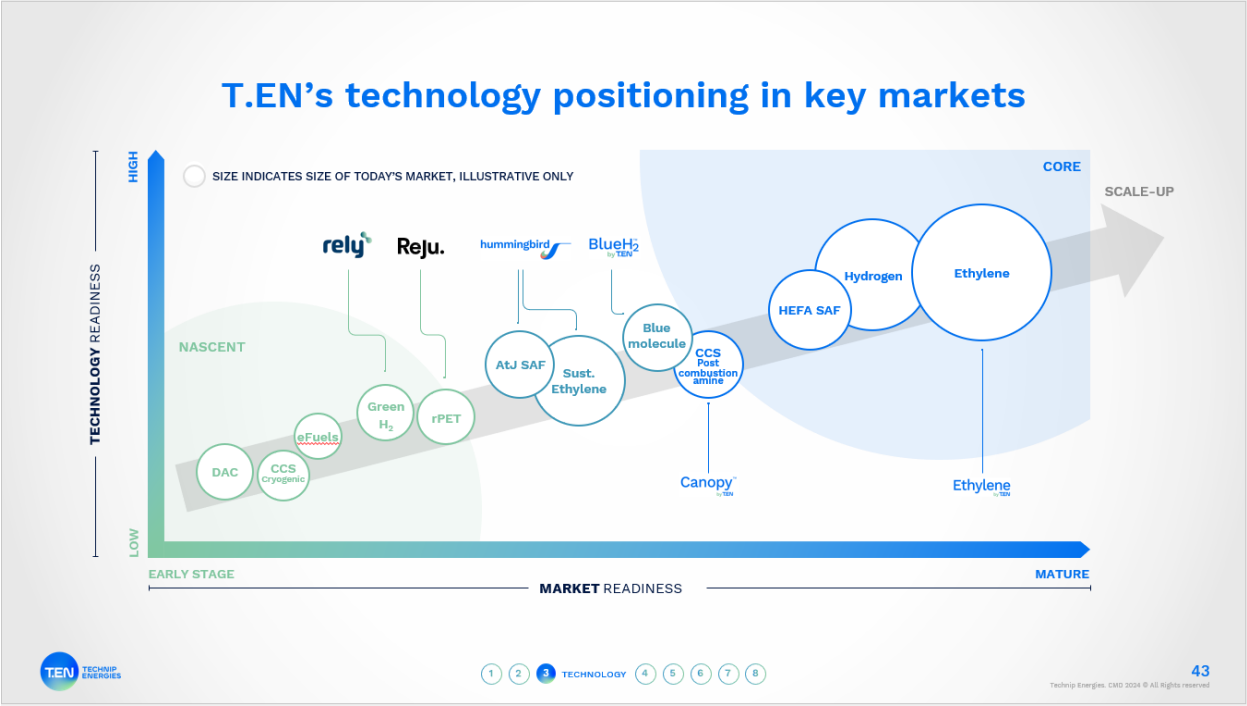
ETHYLENE

BIOCHEMICALS



So, our labs bring together more than 1,000 teams globally. This innovation outcome is really reflected by more than 2,800 granted patents, and over 60 proprietary technologies, and more than 40 alliances for co-development.

Building on this innovation heritage, we have the resources and ambition to grow our technology portfolio further, focusing on key markets while positioning for the future growth in our nascent markets.



So, speaking of markets, let's take a look at our breadth of technology in the context of market readiness and technology readiness.

Our core business is very naturally centered on our traditional market markets where innovation must continue to strengthen our leadership position.

For example, ethylene. Ethylene is commonly called most important chemical. So, we are continuing to invest to develop a low emission furnace and next generation crack and furnace. And also, our sustainable ethylene solution has been selected by U.S. Department of Energy for a demo plant in the Gulf Coast. I'm convinced that we are set to transform ethylene industry as we strive to offer more sustainable solutions.

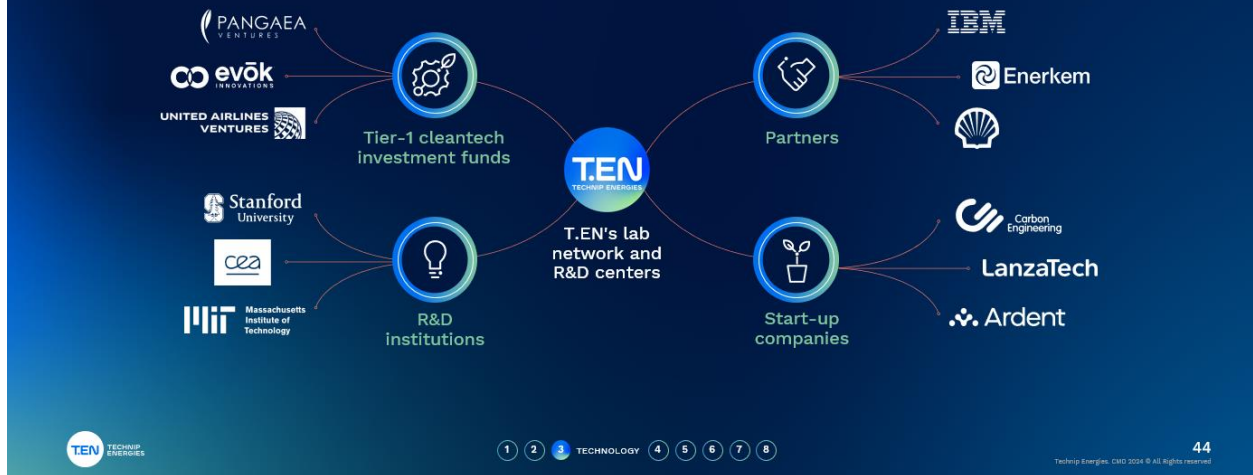
And then in the emerging energy transition market, we continue to invest in carbon capture, blue molecules like hydrogen and its derivatives, and also sustainable aviation with aviation fuels with a focus on aircraft to jet.

Then in the nascent market, we're investing in next generation carbon capture including direct air capture and circularity as, for example, Reju and the green hydrogen e-fuels as exemplified by our joint venture Rely, which you will hear later today.

So, in summary, we are working on this broad spectrum of technologies that keep us at the forefront of the industry.

Leveraging innovation ecosystem

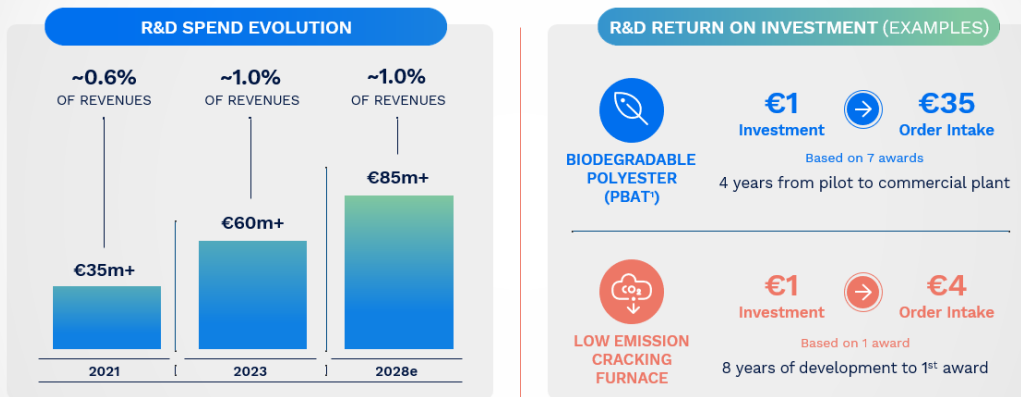
Bringing internal and external energies together



So, innovating in such a broad spectrum, diverse technology landscape requires us to work with a range of players and inventors from universities like MIT and Stanford to the capital venture capitalists and the galaxy of startup companies, as well as mature companies and our customers.

Our creativity, technology agnostic approach, combining with our engineering expertise and operational excellence, help us or allow us to build and operate such a powerful innovation ecosystem. This is a real game changer for us and make us stand out in our industry.

Doubling down on technology development



Accelerating time-to-market and capturing higher value



* Polybutylene adipate terephthalate



While leveraging and continue to build this innovation ecosystem, internally, we have doubled our R&D investment over the past three years.

The 1% --spending--revenue spending on R&D is at high-end range among our peers, if not the top.

Our unique approach to technology investment also generates measurable outcomes, as exemplified by two examples. So, we developed biodegradable polymer in a record time have won seven awards and generated order intake that is 35x of R&D investment.

Another example is low emission furnace which is done by CPChem. We sold one this year which is already demonstrating early success.

This is the kind of model --we want to replicate. So, which will drive further accretion of our margins.



Technology @ T.EN

Enabling molecule transformation process for a **world to designed to last**

FASTER
TIME-TO-MARKET

HIGHER SUCCESS RATE
IN COMMERCIALIZING
TECHNOLOGIES

COMMITMENT TO
BUSINESS-DRIVEN R&D



So, in summary, with our unique technology strategy and position, T.EN is a clear standout.

Our approach brings technology to market much faster, at scale, and with the right economics. We are part of a solution.

After having spent the past ten minutes talking about technology, the T in TPS, I will now hand over to my colleague, Davendra, to focus on P&S, products and services.