

# Solvay Today



We are a **science company** whose technologies bring benefits to many aspects of **daily life**.

Our **innovative solutions** contribute to safer, cleaner, and more sustainable products found in homes, food and consumer goods, planes, cars, batteries, smart devices, health care applications, water and air purification systems.

Our Group seeks to create **sustainable shared value for all**, notably through its Solvay One Planet plan crafted around three pillars: protecting the climate, preserving resources and fostering better life.



# A balanced presence to better serve our customers

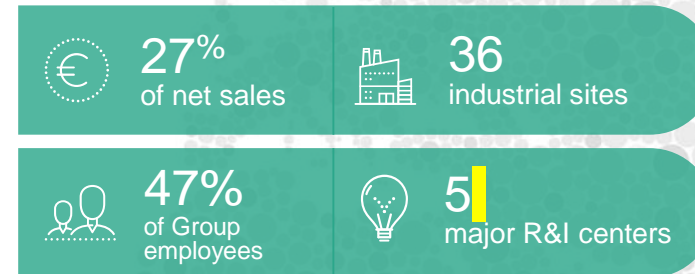
2021 figures



## NORTH AMERICA



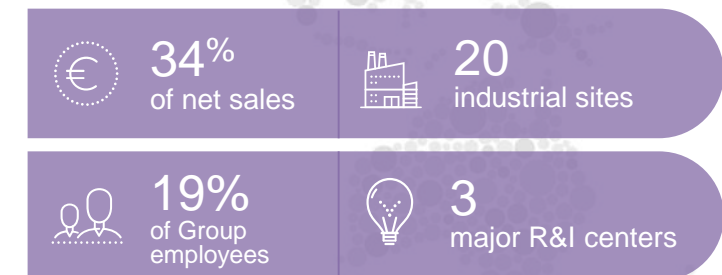
## EUROPE



## LATIN AMERICA



## ASIA PACIFIC & Rest of the world\*



\*includes Middle-East and Africa

# Solvay and hydrogen production



Solvay sees hydrogen as a critical need for the global economy

Solvay's Aquivion membrane technology is designed for the electrolyser and fuel cell markets

“The hydrogen economy has taken-off, and with our new hydrogen platform, we are partnering with our customers in the electrolyser and fuel cells space to make it happen,” said Solvay CEO **Ilham Kadri**. “Green hydrogen will be one of the most competitive low carbon solutions for transportation applications in the near future and I’m proud that Solvay’s membrane technology will be a key element in the transition towards cleaner mobility, helping the fight against global climate change.”

- **Green hydrogen:** Solvay’s platform brings together all the solutions the group has to offer to help enable the green hydrogen economy. These include Solvay’s ion-conducting polymer membrane technology, which is at the heart of electrolyzers and fuel cells systems, and plays a key role in their efficiency and durability.

# Solvay and hydrogen storage

## H2@Scale New Markets Funding Opportunity Announcement (FOA)

DE-FOA-0002229

These awards are funded through the Department of Energy’s Energy Efficiency and Renewable Energy Office’s (EERE’s) Hydrogen and Fuel Cell Technologies Office, with contribution from EERE’s Advanced Manufacturing Office and Vehicle Technologies Office.

Selectee Name	Location (city, state)	Project Title	
TOPIC 2: ADVANCED CARBON FIBER FOR COMPRESSED HYDROGEN AND NATURAL GAS STORAGE TANKS			
Collaborative Composite Solutions Corporation	Oak Ridge, TN	Melt Spun PAN Precursor for Cost-Effective Carbon Fiber in High Pressure Compressed Gas Tankage	
Hexagon R & D LLC	Lincoln, NE	Carbon Composite Optimization Reducing Tank Cost	
University of Kentucky	Lexington, KY	Low-Cost, High-Strength Hollow Carbon Fiber for Compressed Gas Storage Tanks	
University of Virginia	Charlottesville, VA	Low-Cost, High-Performance Carbon Fiber for Compressed Natural Gas Storage Tanks	

Solvay partners with 3 Teams to develop carbon fiber supporting the development of low cost tanks for H<sub>2</sub> storage  
Leveraging Solvay’s carbon fiber technology and partner innovation

# Opportunities for Carbon Fiber Manufacturing

Solvay to collaborate with Trillium on bio-based acrylonitrile for carbon fiber applications

Reduced CO<sub>2</sub> footprint



- Challenges

- Recycling
- Scrap reduction
- Reducing energy consumption during manufacturing
- Increased throughput