



SOLVAY

asking more from chemistry®

Specialty Polymers

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Inventing the future with Specialty Polymers


Specialty Polymers at a glance

Net sales
2013e


€ 1.3 bn

REBITDA
2016 CAGR


double
digit




Smart Devices




Electricals & Electronics




Healthcare




Consumer Goods




Aircraft




Construction




Automotive



Industrial

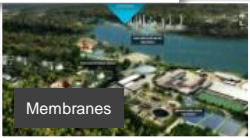


Oil & Gas

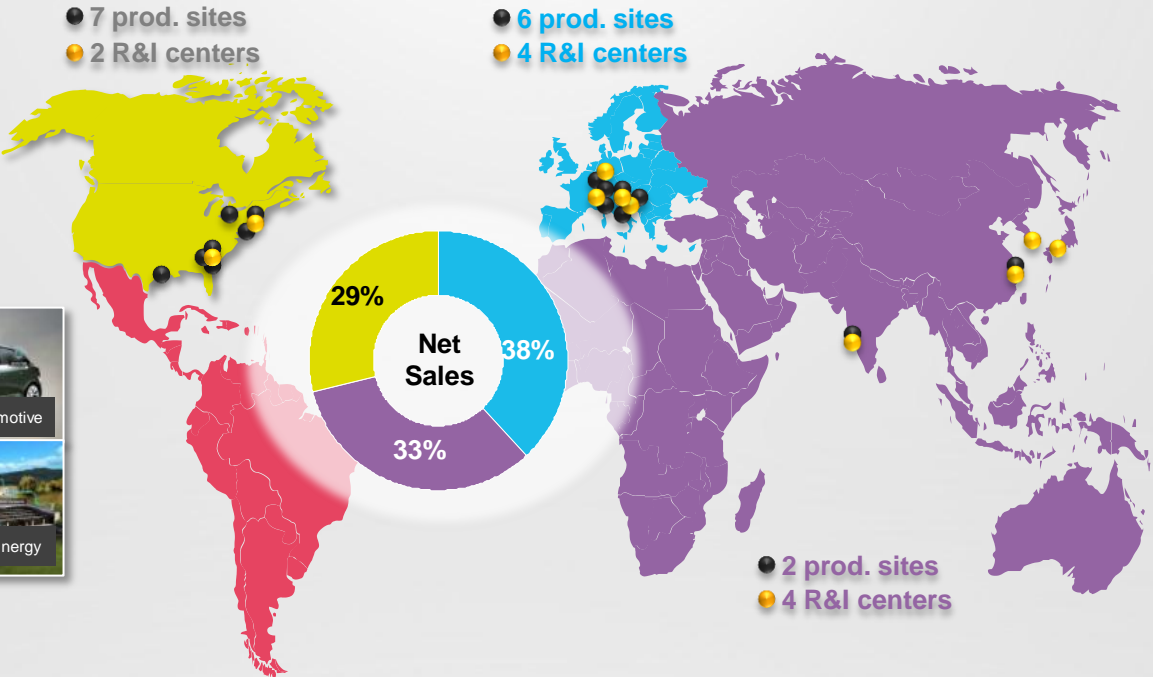


Alternative Energy

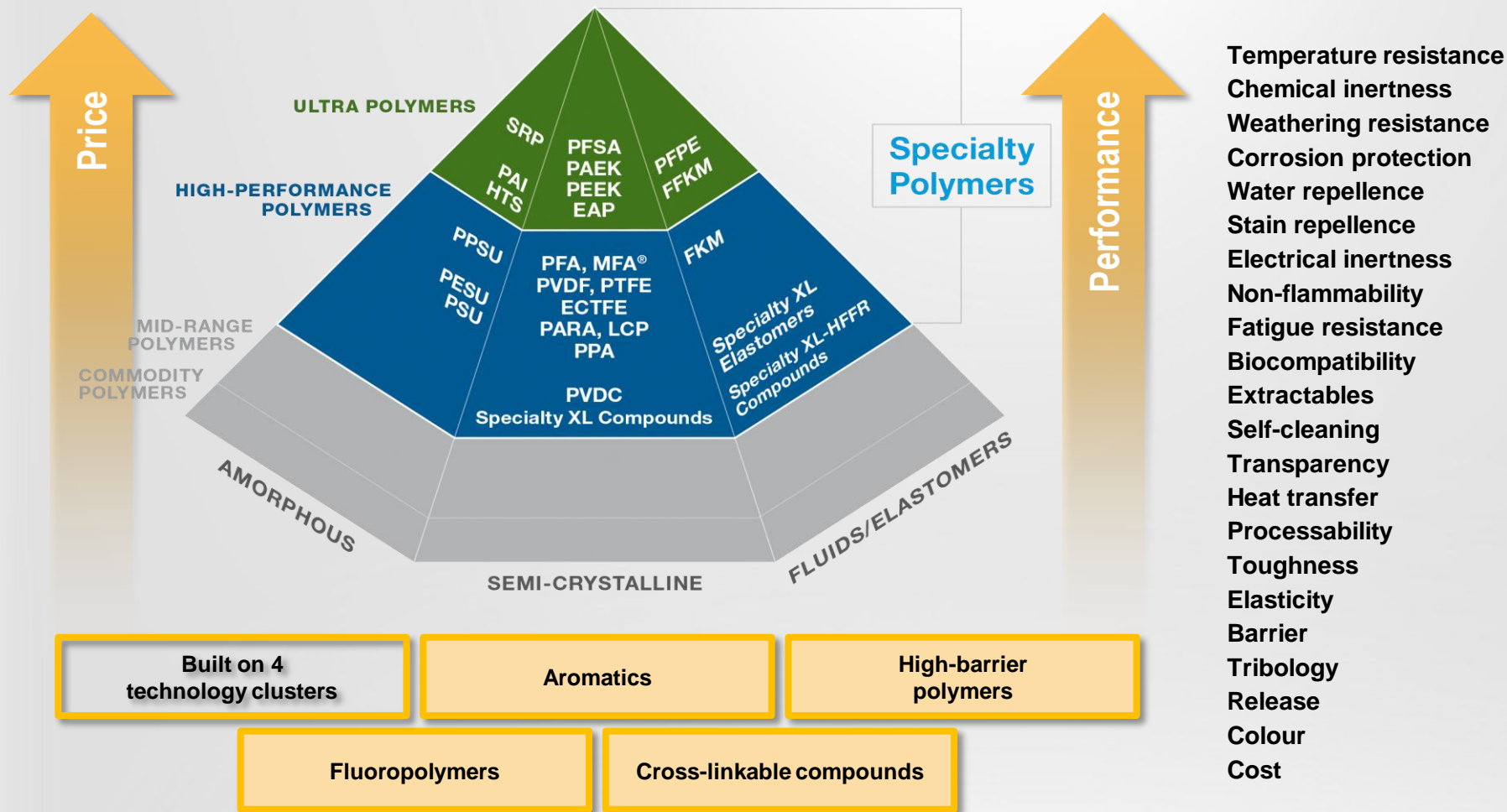
Multiple end markets



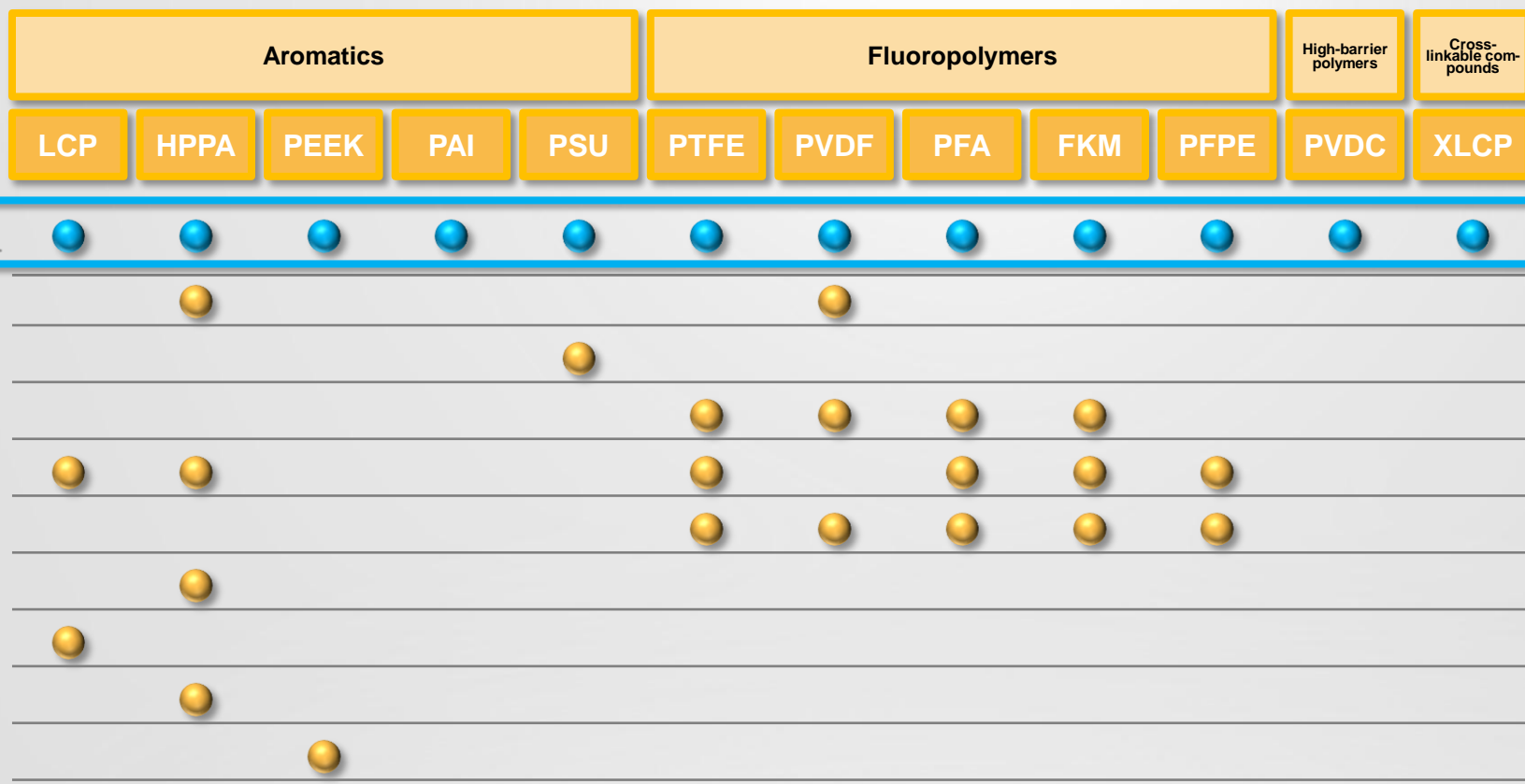
Membranes



Focused on the most advanced products



Industry leader with the broadest product portfolio



Broadest portfolio + Innovation leader = Best solution provider

Global capability to innovate close to our customers ...



10 R&I locations worldwide

50+ Proprietary technologies

500+ R&I specialists (~20% of headcount)

3000+ Patents in force

... delivering unique solutions to our customers

Serving well-diversified and highly dynamic markets ...

Market drivers

Climate Change



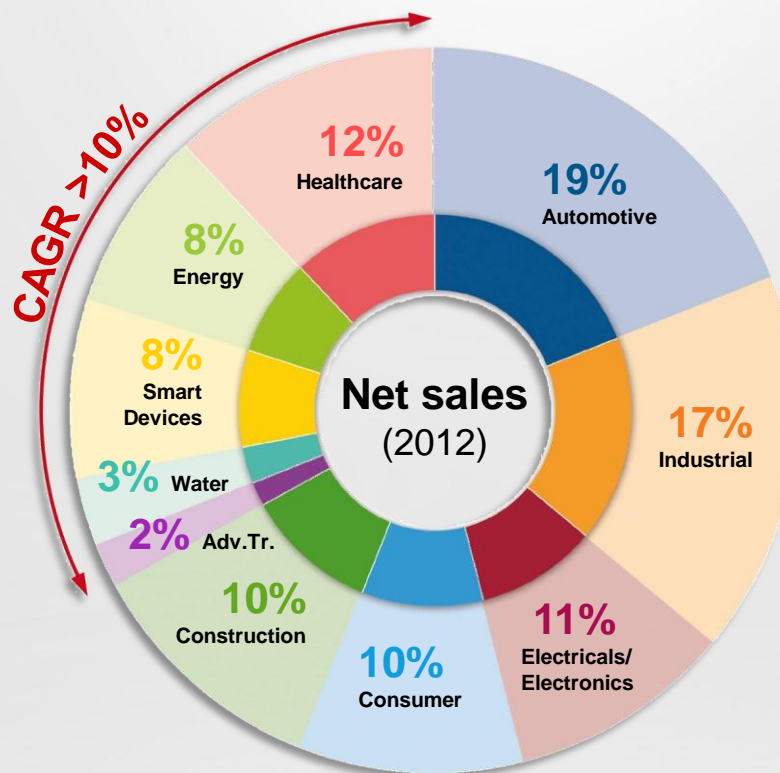
Resource scarcity



Health and well being



"Next billion consumers"



Addressable market
to grow at ~8.5%
CAGR (2013-2016)

... resulting
in superior growth

SMART DEVICES

Driven by increasing mobile connectivity needs

Customer challenges	Our solutions
Design flexibility, lightweight	Kalix® HPPA Ixef® PARA AvaSpire® PAEK Amodel® PPA
Longer life, Battery miniaturization	Solef® PVDF
Smudge resistant displays	Fluorolink® PFPE

7 specialty polymers
in **11** applications



HEALTHCARE

Driven by aging population, growing wellness and accessibility

Customer challenges

Bio-compatibility in implantable devices

Hemodialysis membranes

Cost efficiency in medical devices

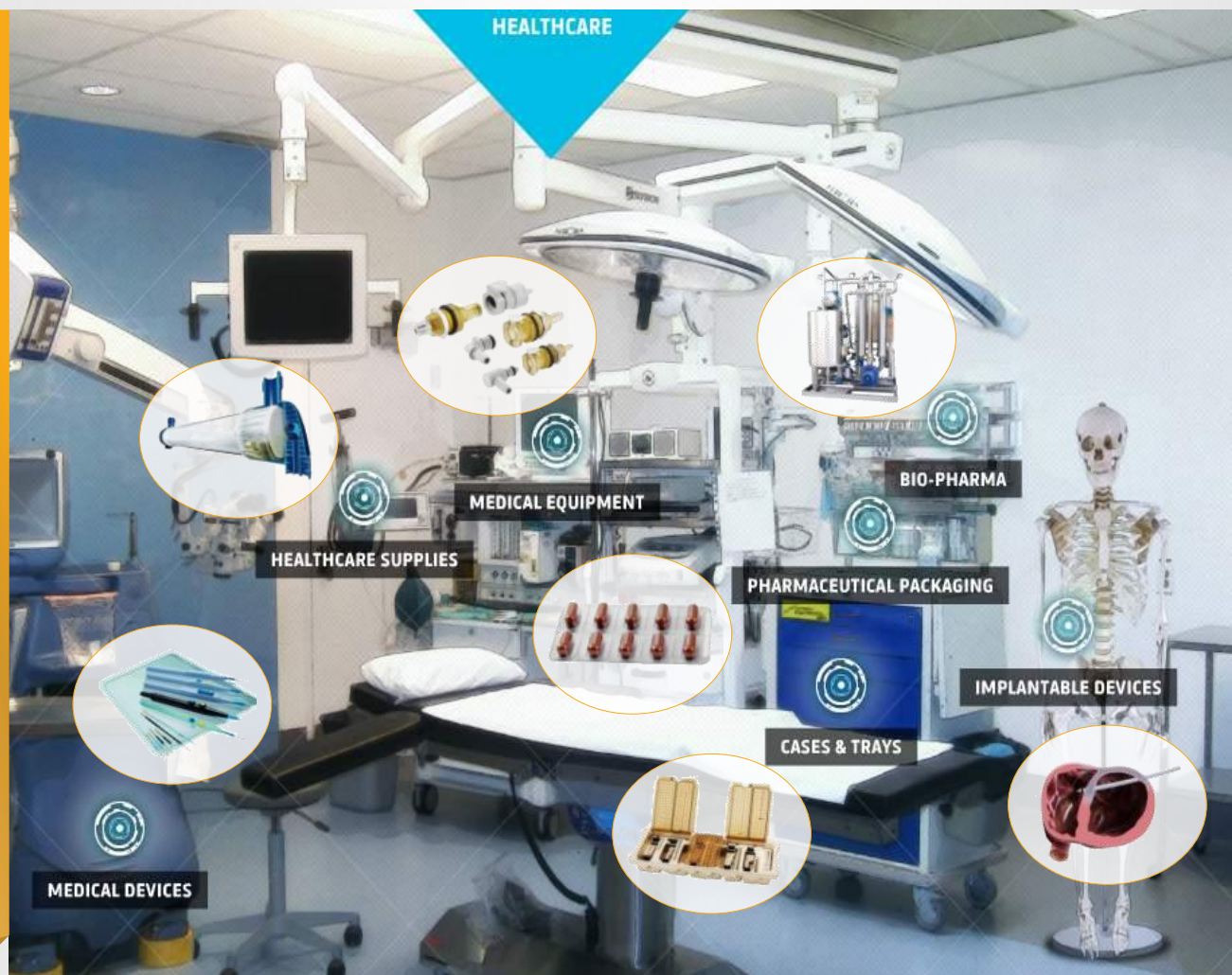
Our solutions

Solviva® biomaterials

Udel® PSU

Radel® PPSU
Ixef® PARA
Diofan® PVDC

12 specialty polymers
in **29** applications

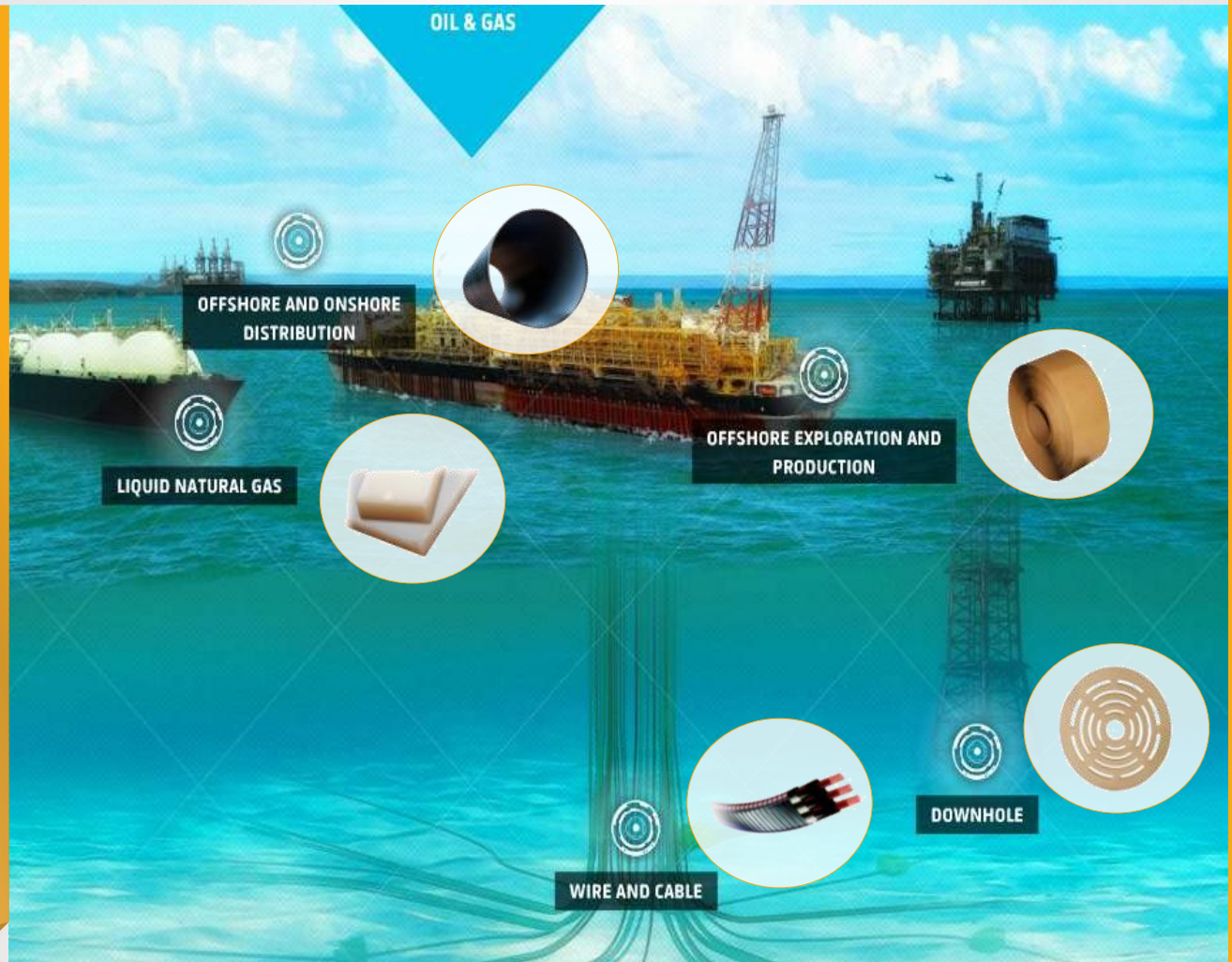


ENERGY: OIL & GAS

Driven by resource scarcity

Customer challenges	Our solutions
Harsh operating environments	Solef® PVDF Polidan® PEX Hyflon® PFA
Rehabilitation of existing pipelines	Solef® PVDF
New applications for existing technologies	Hyflon® PFA Torlon® PAI Tecnoflon® FKM

11 specialty polymers
in **29** applications



ENERGY: RENEWABLES

Driven by resource scarcity and climate change impacts

Customer challenges

Durability in harsh conditions

Increasing energy storage and safety

Lubrication for life

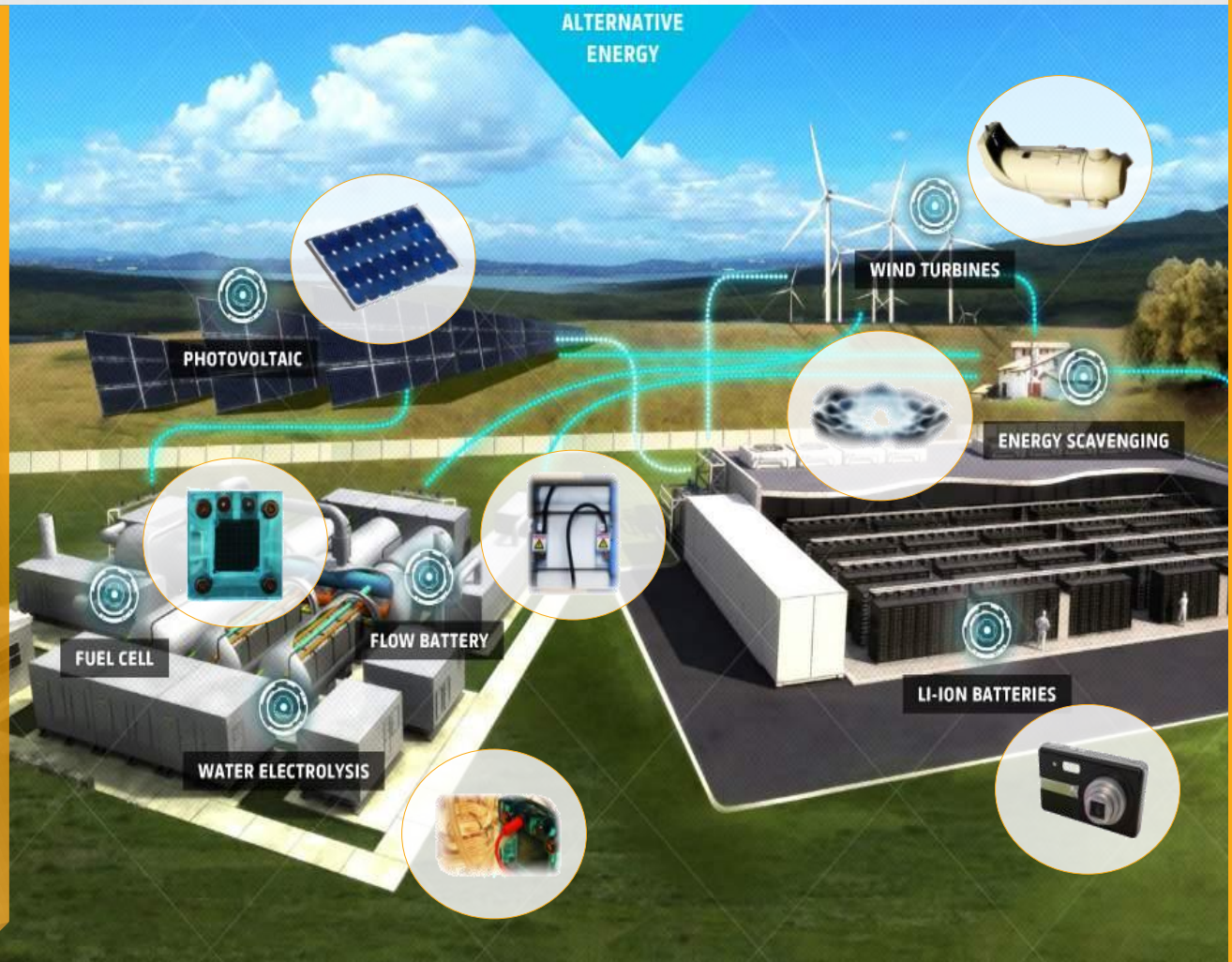
Our solutions

Solef® PVDF
Halar®
ECTFE,
Galden®
PFPE

Solef® PVDF,
Cogegum®
HFFR
Aquivion®
PFSA

Fomblin®
PFPE

15 specialty polymers
in **18** applications



WATER PURIFICATION

Driven by clean water scarcity

Customer challenges

High-purity separation performance

Our solutions

Udel® PSU
Solef® PVDF
Veradel®
PESU
Halar® ECTFE

4 specialty polymers
in **8** applications



ADVANCED TRANSPORTATION: AIRCRAFT

Driven by resource scarcity and climate change

Customer challenges	Our solutions
Lightweight structural components	KetaSpire® PEEK Radel® PPSU Foams
Lightweight interiors	Radel® PPSU KetaSpire® PEEK Torlon® PAI Fomblin® PFPE
Flame retardancy	Radel® PPSU KetaSpire® PEEK Torlon® PAI
Lubrication in harsh conditions	Fomblin® PFPE
13 specialty polymers in 29 applications	



AUTOMOTIVE

Driven by sustainable mobility (climate change and resource scarcity)

Customer challenges	Our solutions
Combustion engine efficiency	Tecnoflon® FKM Amodel® PPA
Lightweight, Wear reduction	KetaSpire® PEEK Fomblin® PFPE Ixef® PARA Torlon® PAI
Performance of (hybrid) electrical vehicles	Solef® PVDF Aquivion® PFSA

19 specialty polymers
in **68** applications



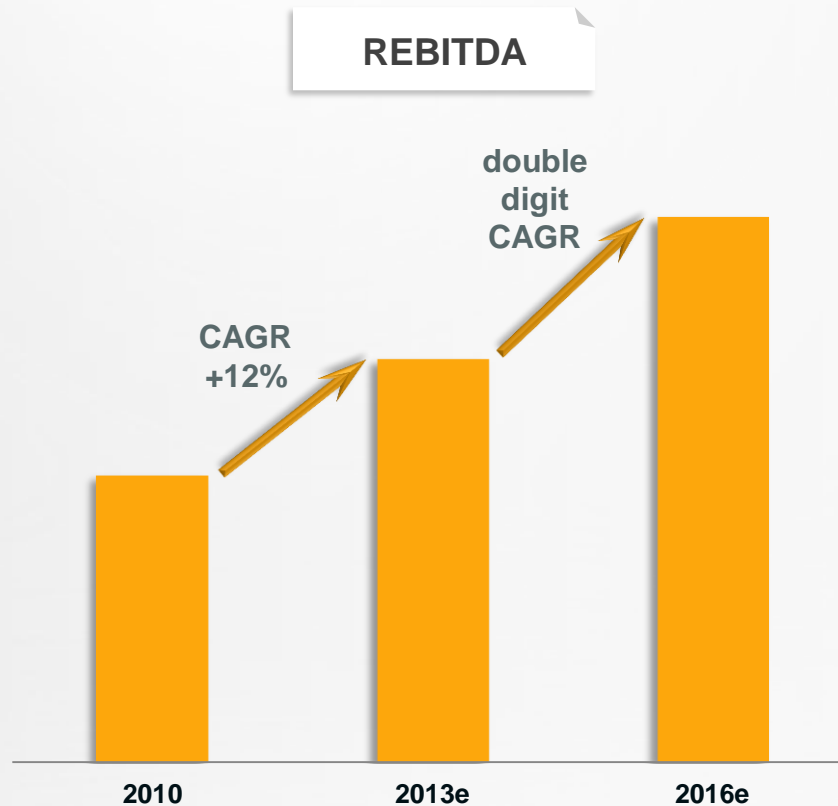
Solvay's unique solution portfolio

	Aromatics					Fluoropolymers					High-barrier polymers	Cross-linkable compounds
	LCP	HPPA	PEEK	PAI	PSU	PTFE	PVDF	PFA	FKM	PFPE	PVDC	XLCP
Smart Devices	●	●	●		●		●		●	●		
Healthcare		●	●		●	●					●	
Oil & Gas		●	●	●			●	●	●	●		●
Renewable Energy			●		●		●		●	●		●
Adv. Transport.	●	●	●	●	●	●	●	●		●		●
Water					●		●					
Automotive		●	●	●	●	●	●	●	●	●		●
...	●	●	●	●	●	●	●	●	●	●	●	●

Broadest portfolio + Innovation leader = Best solution provider

Key contributor to Solvay's growth ambition

- **Market leader** with **broadest** product portfolio, serving best solutions to customers
- Supplying highly dynamic **growth markets** driven by ever increasing demand for **sustainable solutions**
- Delivering value through **innovation**, **market growth** and **operational excellence**





2013

marks:

150
YEARS

*of Solvay chemical product developments and
industrial knowhow*

50
YEARS

*of presence in Specialty Polymers
with the 50th anniversary of Ixan®/Diofan® PVDC*

15
YEARS

*of presence in the offshore Oil & Gas industry
with the 15th anniversary of Solef® PVDF resin*

**Inventing
the future with
Specialty Polymers**