

Asahi Kasei's challenge for next generation automotive in Europe



28th May 2018
Asahi Kasei Europe GmbH
R&D center Hiromi Nakafutami

AsahiKASEI

Asahi Kasei's great inventions

LIB (Lithium ion Battery)



Dr. Akira Yoshino

Asahi Kasei's great inventions

Electronic Compass



Asahi Technologies in AKXY



Asahi Kasei X (multiplied by) You (the customer)

Asahi Kasei Group Overview

Company name

Asahi Kasei Corp.

Head Office

Chiyoda, Tokyo

Founding

1922

Material
business sector 



Asahi Kasei Corp.
Asahi Kasei Microdevices Corp.

President


Hideki Kobori

Paid-in capital

¥103.3 billion

Employee*

34,670 * At March 31, 2018

Homes
business sector 



Asahi Kasei Homes Corp.
Asahi Kasei Construction
Materials Corp.

Fiscal 2017 results

Net sales ¥2,042.2 billion
(approx. 15 billion euros)

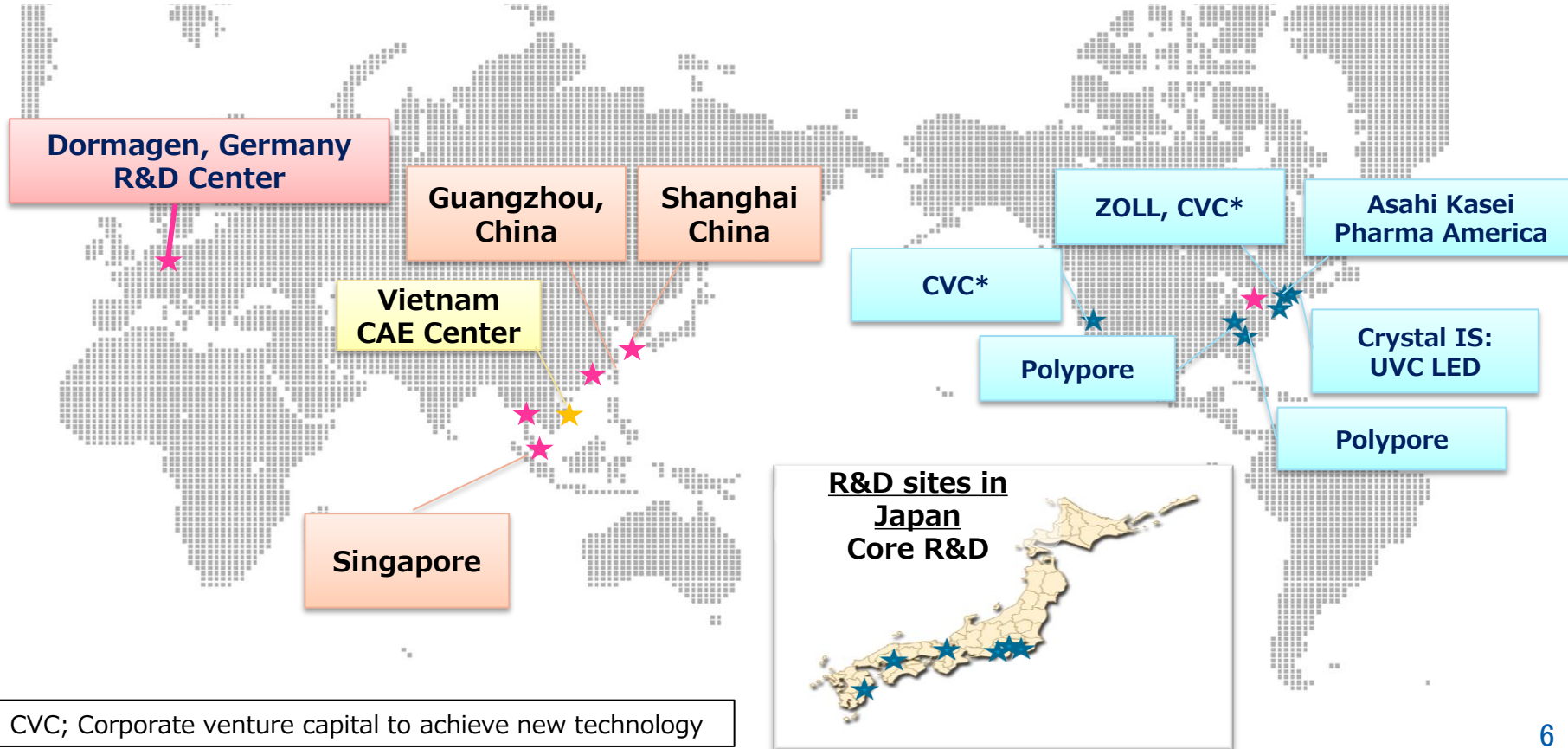


Health Care
business sector 



Asahi Kasei Pharma Corp.
Asahi Kasei Medical Co., Ltd.
ZOLL Medical Corporation

Main R&D bases around the world



R&D center location and structure



Engineering Plastics

LEONA™ **XYRON™**
TENAC™ **THERMYLENE™**

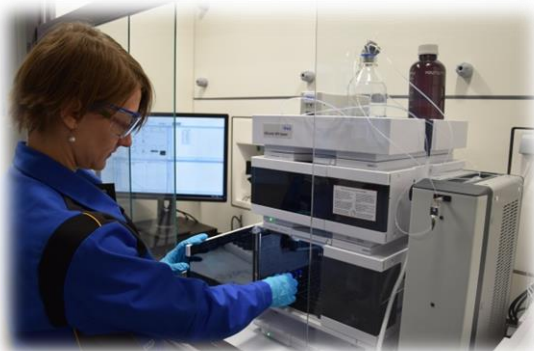
Performance Coating



Synthetic Rubber

Corporate R&D
(Electrolyte, composites)

1. Technical Support
2. Market development



Mega trends in the environment in Europe









Paris agreement
(Nov 2016 —)

→ To keep global temperature increase "well below" 2°C (36°F) and to pursue efforts to limit it to 1.5°C



Abandon nuclear
power by 2022
(Germany)

CO2 reduction target

| Entity | Target | By | Below |
|---|---------|------|-------|
|  EU | 40% | 2030 | 1990 |
|  Japan | 26% | | 2013 |
|  China | 60-65% | | 2005 |
|  India | 33-35% | | 2005 |
|  Russia | 25-30% | | 1990 |
|  USA | 26-28%? | 2025 | 2005 |

Major OEMs need to cut off fleet emissions by
~30% by 2020 to meet EU emissions target

H2 Project (Clean Energy Project)



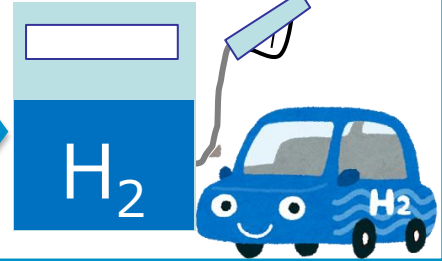
Renewable
Energy Sources

Alkaline
water
Electrolyzer



CO₂ free
H₂

Gas



Chemical
Reaction

Fuel

CO₂ Free
CH₃OH

GAS

5% Mix

CO₂ Free
CH₄



ALIGN CCUS

h2herten
Wasserstoff-Kompetenz-

H2 Project in Herten (Clean Energy Project)

AsahiKASEI



Mega trends in the automotive industry



**Reduce CO₂
emission**

Electrification

Lightweight

Asahi Kasei 's global innovation strategy



SAFETY



COMFORT



ENVIROMENT

Innovative technologies and novel solutions

Wide spectrum of products in AKXY



Speech recognition system
For navigation, audio LSIs



TENAC low VOC
polyacetal
for interiors



Diramica
Seat skin



XYRON for battery
related parts

LEONA fiber
for Airbags



LEONA PA66 resin
for engine related parts

SunForce
foam beads
for battery parts



Daramic
Lead acid battery
separator

Synthetic rubber
for fuel-efficient Tires



Sensors
for electric motors



LEONA fiber
for Tire cord

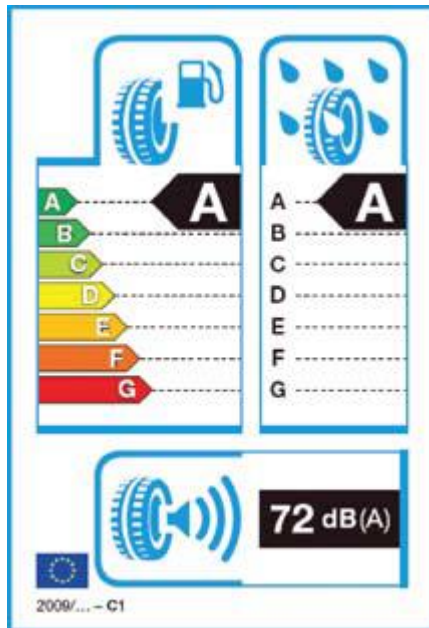


Functional material
for **paint / coating**

Hipore and **Celgard**
LIB separator



Superior Rubber for eco tires



Networking – Science

AZL Aachen GmbH in cooperation with



AZL Partner Companies Effective: April 2017

AZL Aachen GmbH in cooperation with
AZL RWTH AACHEN
Aachener Zentrum für
integrativen Leichtbau

A grid of logos for AZL partner companies. The logos are arranged in rows and columns. The 'AsahiKASEI' logo is circled in red. The grid includes logos for companies such as 3M, A. Schulman, AFFAN, AFPT, aliancy, Ashland, AKK materials, BASF, berndorff, BYK, Cato, CODE, COMBILITY, DOW, DSM, EPCOR, ENGEL, Engidisk, EVONIK, F. tech, FAGOR, FARPLAS, faurecia, FEF, Freudenberg, GEMOLITH AG, Gurit, HELIX, Henkel, HEXCEL, HILLE, HUNTSMAN, HYOSUNG, isola, J. Seligmann, KATCON, KraussMaffei, KUKA, LANXESS, Kaserline, LG, LÖRSSEN, M-Boss, M.TEC, Mahr, MABU HACH, MEROBIL, MITSUBISHI, Mitsui Chemicals, Mubea, NAFEN, NETZSCH, Nippon Electric Glass, PHILIPS, OP, Polytan, RSCG, SCA, SIEMENS, Siempelkamp, SIMPAC, SINTER, SKI, SSGT, Telene, TENCATE, Vötsch, and VELUX.

May 2, 2017

AZL Aachen GmbH in cooperation with AZL of RWTH Aachen University
www.a2l-lightweight-production.com

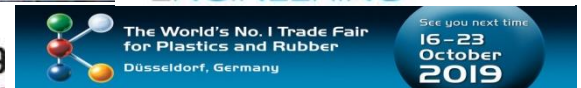
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Networking – Corporate level

Trade shows and conferences



November 13–16, 2018
Messe München



Networking – Life in Düsseldorf



2018 Feb JUDO work shop in Düsseldorf

The commitment of the Asahi Kasei Group:

To do all that we can in every era to help the people of the world
make the most of life and attain fulfillment in living.

Since our founding, we have always been deeply committed
to contributing to the development of society,
boldly anticipating the emergence of new needs.

This is what we mean by “Creating for Tomorrow.”



Creating for Tomorrow