

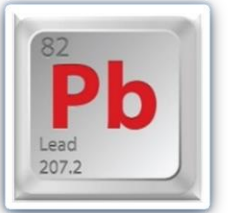
ARGE's Lead (Pb) Reduction Programme

Taking up the lead challenge

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Content

- ➔ The legal pressure on lead (Pb) continues to increase
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- ➔ ARGE's strategy to get to us to the 2030 target picture
- ➔ State of play
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- ➔ Your take-away



The legal pressure on lead (Pb) continues to increase (1/3)

Overview:

- ➔ **Lead (Pb)** in products has been **restricted in EU (EEA) countries since 2006** (RoHS 1).
- ➔ **For ARGE** the relevant core legal acts are the **EU REACH Regulation** and **EU RoHS Directive**.
- ➔ REACH radiates to other EU legal acts, as **Waste Framework Directive (SCIP Database)**, **Construction Products Regulation**, **Taxonomy Regulation**, etc.
- ➔ **Lead (Pb)** as a **Substance of Very High Concern (SVHC) in REACH** has become relevant for **EPD** too.

The legal pressure on lead (Pb) continues to increase (2/3)

Pro memoria:

➔ REACH Regulation:

- ➔ **REACH** stands for **R**egistration, **E**valuation, **A**uthorisation and **R**estriction of **C**hemicals (including substances as e.g. lead) and aims at improving the protection of human health and the environment from the risks that can be posed by chemicals.



➔ RoHS Directive:

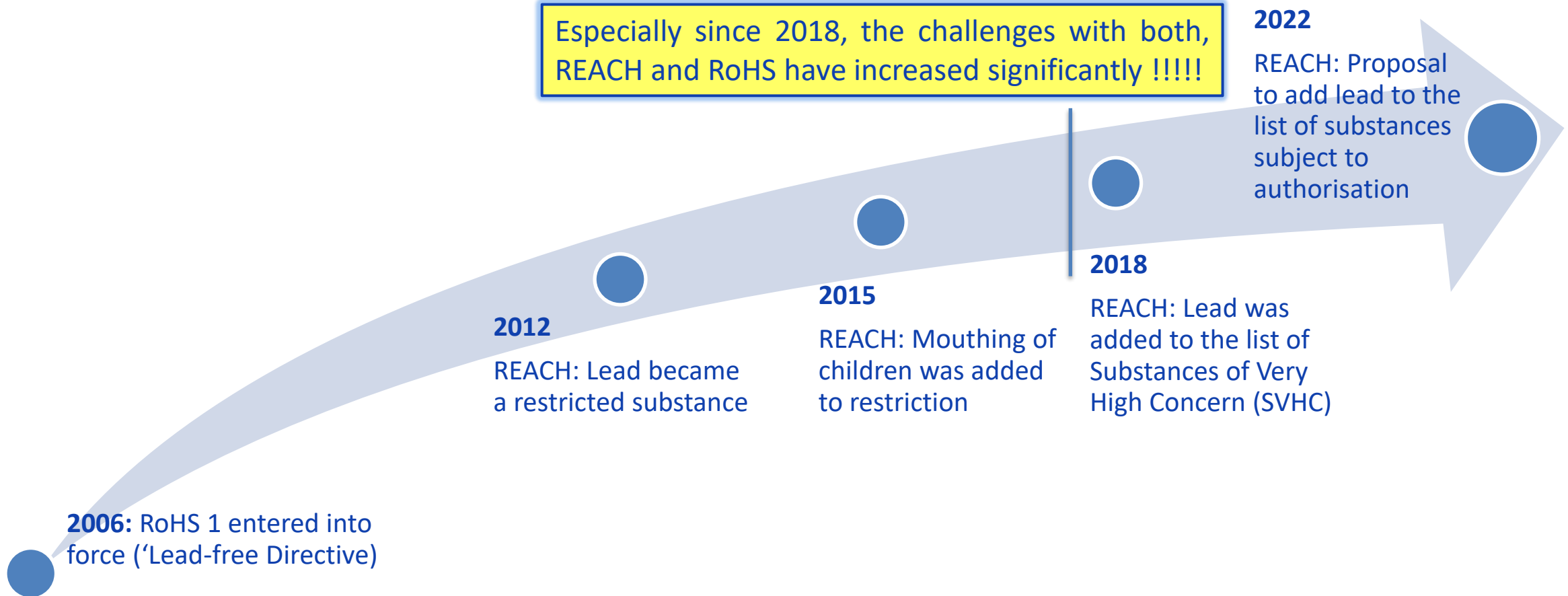
- ➔ **RoHS** stands for **R**estriction of **H**azardous **S**ubstances in Electrical and Electronic Equipment and restricts the use of hazardous substances in electrical and electronic equipment to protect the environment and public health.



The legal pressure on lead (Pb) continues to increase (3/3)

Some milestones:

Especially since 2018, the challenges with both, REACH and RoHS have increased significantly !!!!!



2006: RoHS 1 entered into force ('Lead-free Directive')

2012
REACH: Lead became a restricted substance

2015
REACH: Mouthing of children was added to restriction

2018
REACH: Lead was added to the list of Substances of Very High Concern (SVHC)

2022
REACH: Proposal to add lead to the list of substances subject to authorisation

2030: Looking at lead in building hardware

➔ Building hardware products, as door closers, door locks, panic exit devices, glass door gear, window fittings are lead-free 👍!



➔ Many/most/all (?) keys are made from unleaded alloys (unleaded: < 0.1%) 👍.

➔ Lead content in lock cylinders is significantly reduced 👍. 

➔ It's not just looking into the crystal ball!



ARGE's strategy to get to us to the 2030 target picture (1/3)

ARGE works bidirectionally:

- ➔ **There is a clear commitment** by the manufacturers in ARGE **to strive for the reduction – and where reasonably possible – the elimination of lead** in their products!
- ➔ In addition, **ARGE contributes to EU law making and implementation** (REACH and RoHS)

ARGE's strategy to get to us to the 2030 target picture (2/3)

Quotes:

➔ **Quote from a Policy Officers of the European Commission:**

“If you benefit from a derogation for your keys and locks, you cannot expect that this derogation will last forever.”

2019

➔ **Quote from a consultant to the European Commission:**

“Isn't there any progress with having eliminated lead in your mechatronic/ electronic building hardware which you can report?”

2021

ARGE's strategy to get to us to the 2030 target picture (3/3)

We sliced the elephant:

4 Work Packages

- ➔ **WP 1: Keys** – Establishing robust test data for lead release in artificial saliva
- ➔ **WP 2: Keys** – Reduction of lead content in copper alloy
- ➔ **WP 3: Lock cylinders & padlocks** – Reduction of lead content in copper alloy
- ➔ **WP 4: All other building hardware products** – Compiling and disseminating information relevant for reduction of lead content respectively elimination of lead in products

State of play WP 1

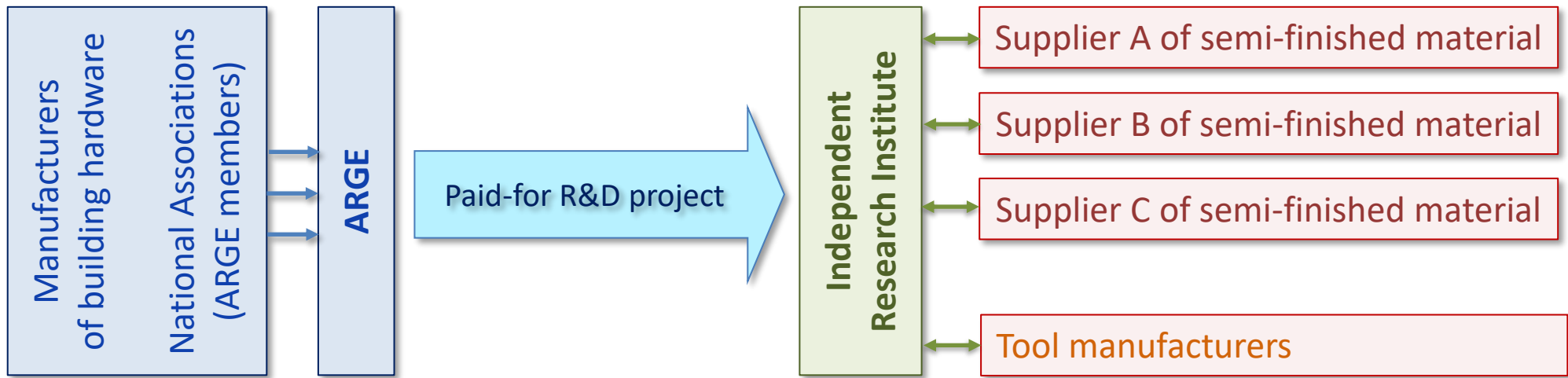
Testing keys for lead migration

- ➔ **Team** established
- ➔ Relevant **test standards** studied and understood
- ➔ Potential **test institutes** identified
- ➔ **Request for quotation** prepared

State of play WP 2 and WP 3

Research projects for reducing/ eliminating lead in keys, locks cylinders and padlocks

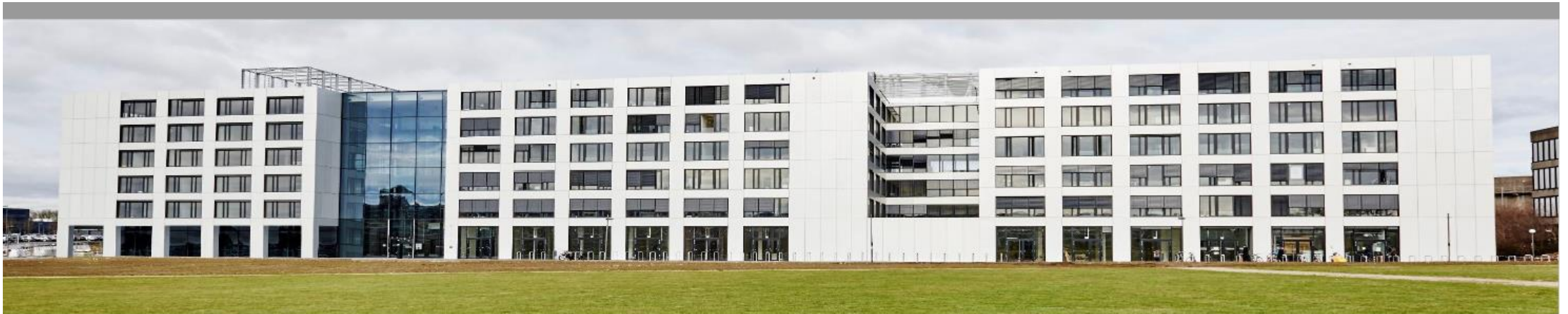
- ➔ **Structure** established
- ➔ **Stakeholders** committed



State of play WP 2 and WP 3

Research projects for reducing/ eliminating lead in keys, locks cylinders and padlocks

➔ **Envisaged research partner:** RWTH Aachen WZL (Germany)



➔ **First, indicative cost estimate:** € 100k for key project

€ 150k for lock cylinder project

State of play WP 4

Compiling and disseminating information for all other products than keys and lock cylinders

- ➔ **Scope defined: 11 product lines** to be dealt with:
 - Door closers and door coordinators
 - Electric strikes
 - Emergency and panic exit devices
 - Handles (door and window handles) and knobs
 - Hinges
 - Mortise locks
 - Sliding door gear
 - Surface mounted locks (night latches)
 - Swing door drives
 - Window automation
 - Window fittings (e.g., tilt & turn furniture)
- ➔ **Compilation of data** kicked-off

Tasks for 2022/2023/2024

- ➔ **WP 1:** Obtain Europe-representative data for lead migration of keys (*end-date: 2023*)
- ➔ **WP 2 + 3:** Establish financing of projects, and subsequently carry out projects (*end-date 2024/2025*)
- ➔ **WP 4:** Compile and disseminate information (*end-date 2023/2024*)

Your take-away from this presentation ...

- ➔ **The legal pressure on lead continues to increase!**
- ➔ **ARGE is working bidirectionally:**
 - **Legal direction:** With the European Commission
 - **Technical direction:** In research projects with our suppliers
- ➔ **Manufactures in ARGE have the clout to make things happen!!!**



Let's master the



challenge!

Thank you!

Any questions?