

A white circular icon consisting of two curved arrows forming a circle, positioned to the left of the main text.

BIO-UPTAKE

BIOcomposites in smart plastic transformation processes to pave the way for the large-scale UPTAKE of sustainable bio-based products

Bio-UPTAKE objectives

1

To develop **3** disruptive innovative **manufacturing processes** for bio-based products

2

To adapt and upgrade **6** conformal **manufacturing technologies**

4

Develop and validate **4** new **bio-based intermediate formats**

7

To demonstrate **product circularity**



6

To develop **3 end-products** more than 75% bio-based materials



Construction



Medicine



Packaging

5

To demonstrate the Bio-Uptake solution in **3 manufacturing value chains**

3

Digital end-to-end platform for manufacturing bio-based materials

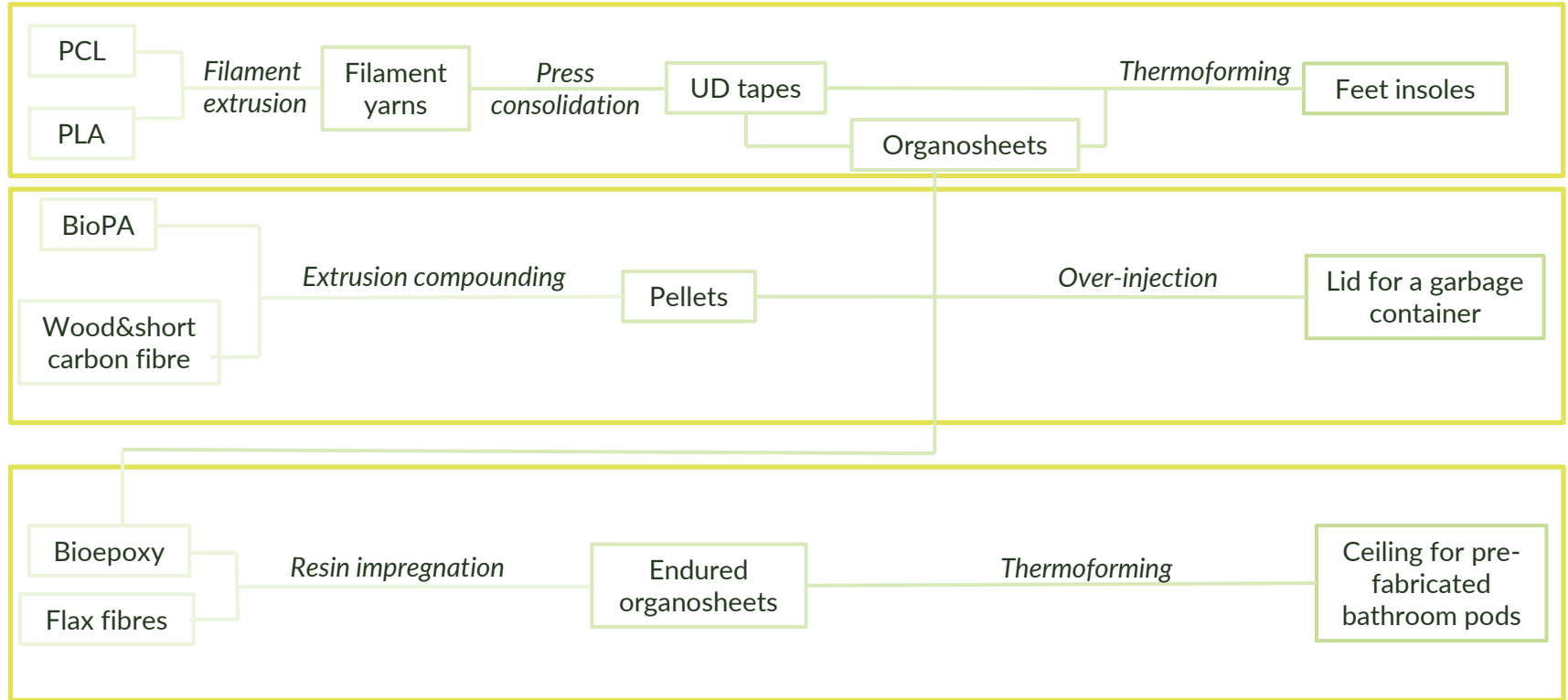
8

To create **2 training programmes**

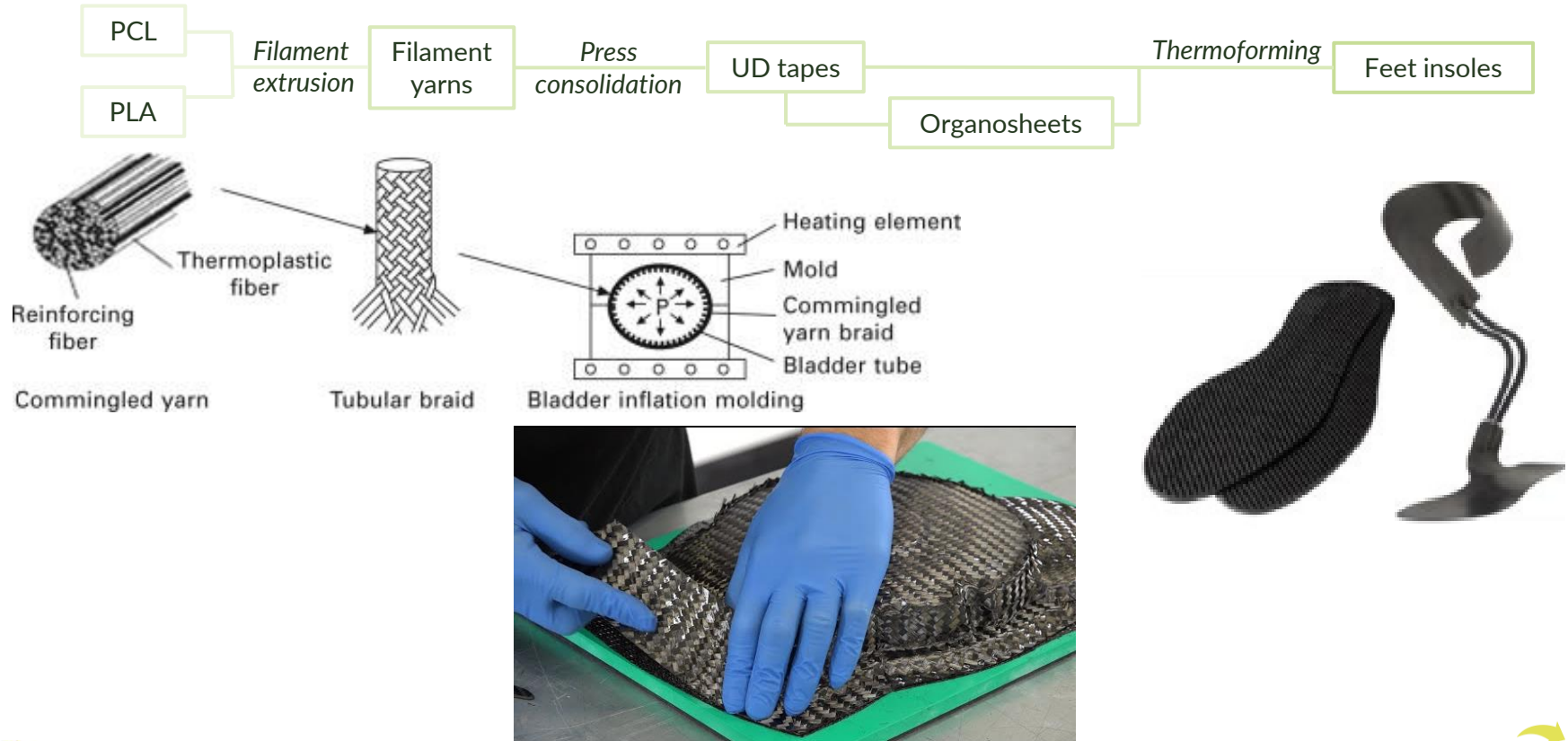
9

To contribute to their **standardization** applied to the 3 value chains

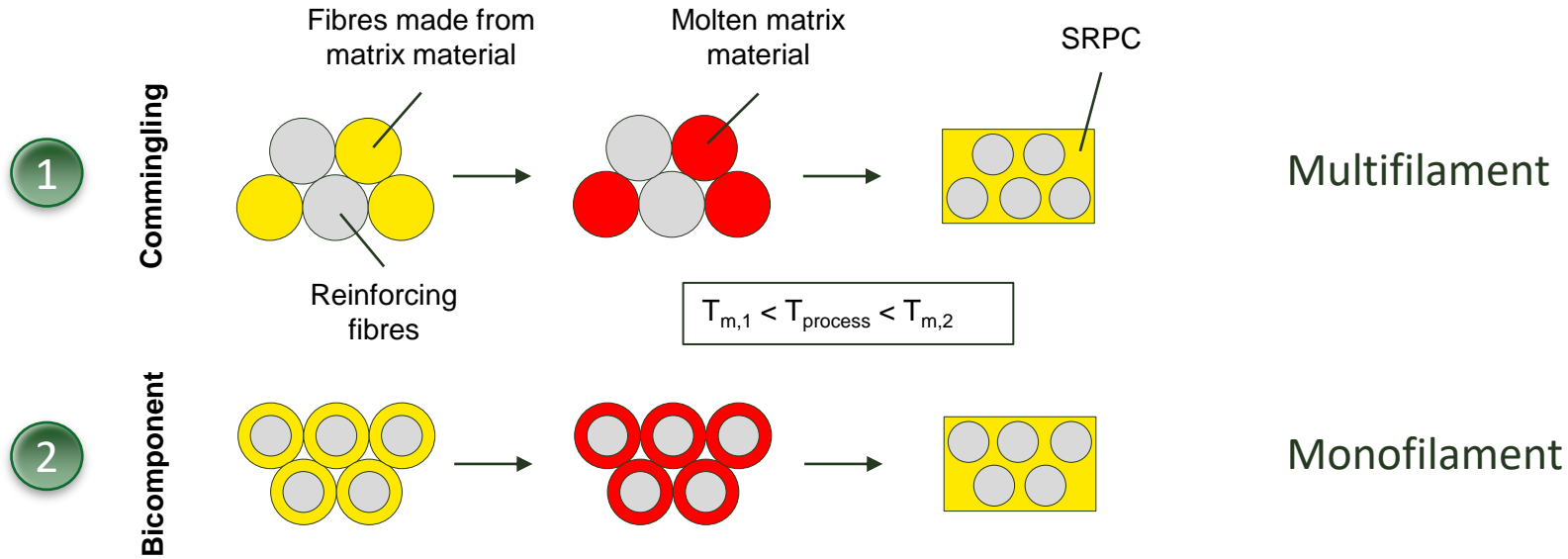
Bio-UPTAKE demo cases



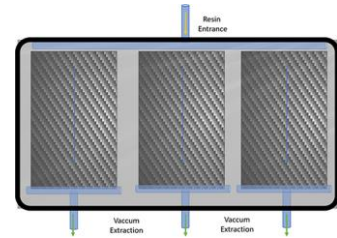
Bio-UPTAKE demo cases → Feet insoles



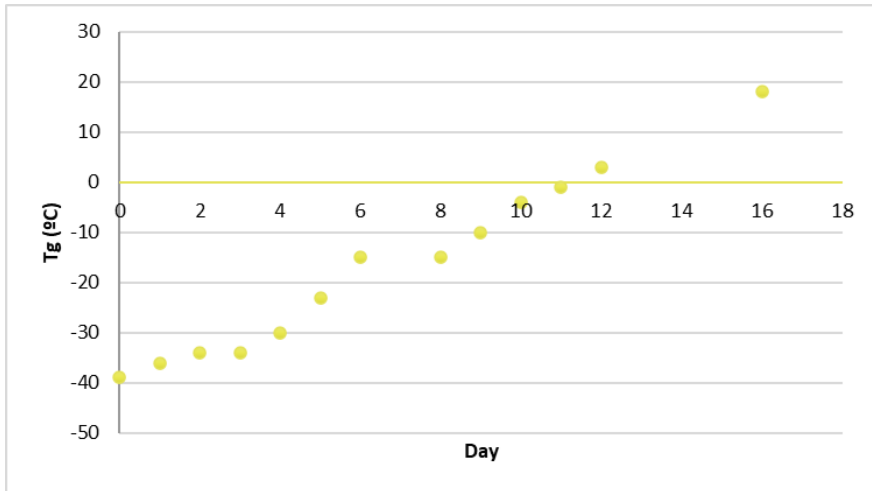
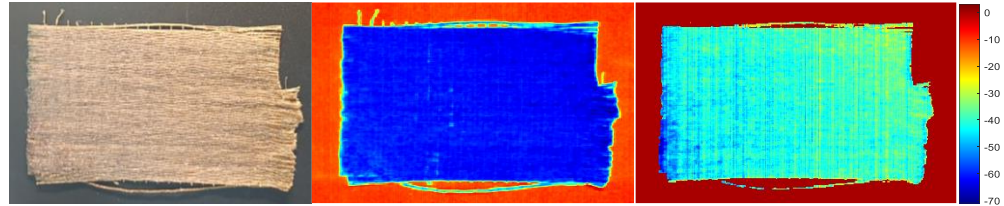
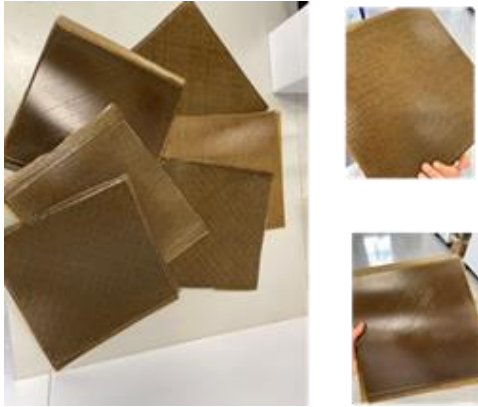
Bio-UPTAKE demo cases → Feet insoles



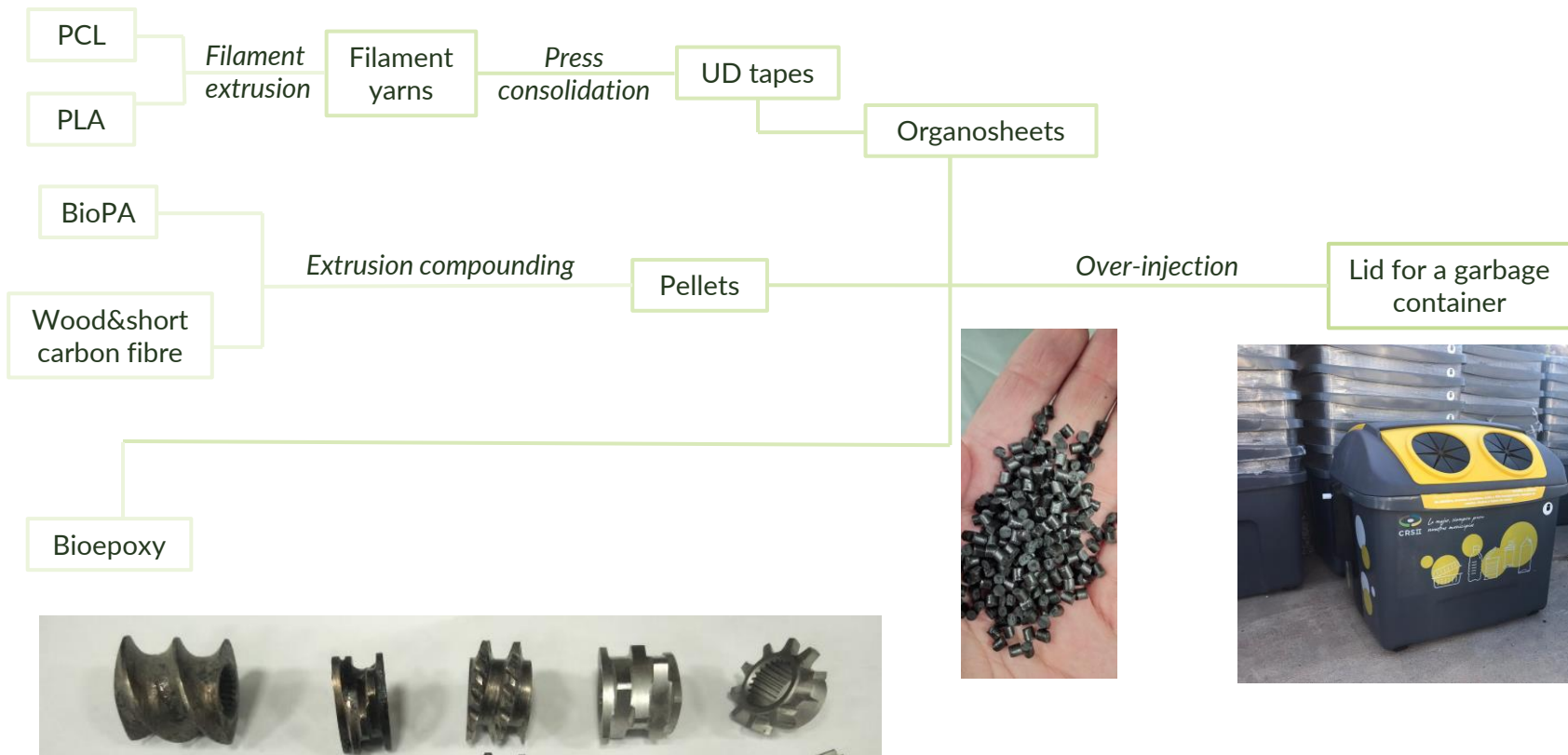
Bio-UPTAKE demo cases → Ceiling



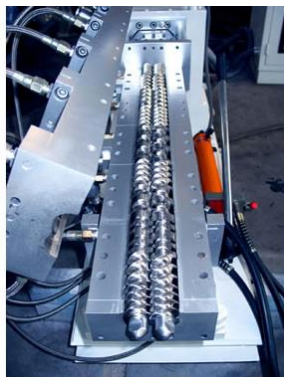
Bio-UPTAKE demo cases → Ceiling



Bio-UPTAKE demo cases → Container lid

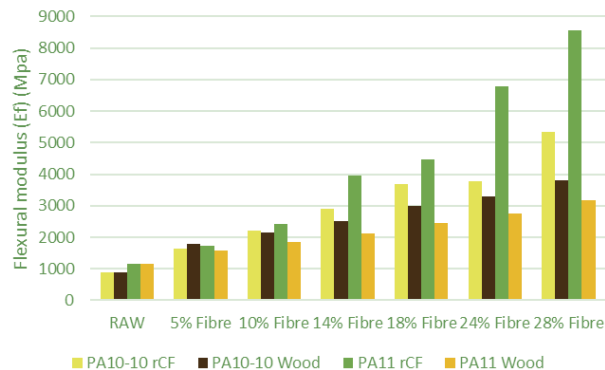


Bio-UPTAKE demo cases → Container lid

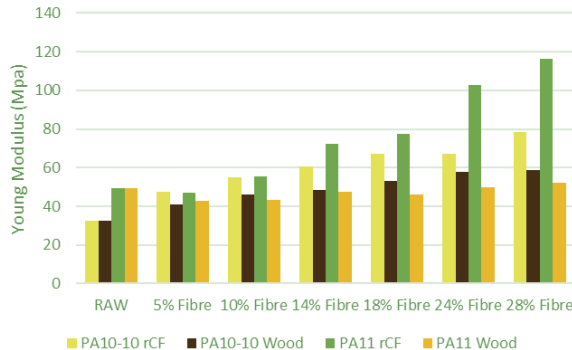


Bio-UPTAKE demo cases → Container lid

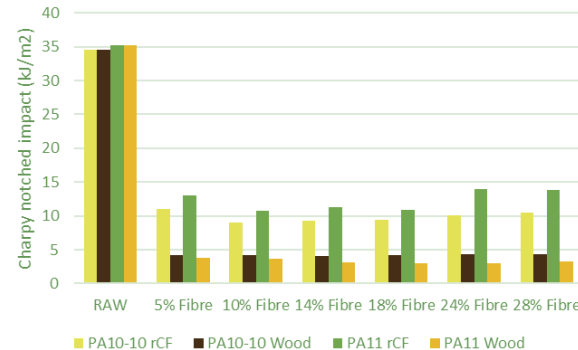
Flexural Modulus



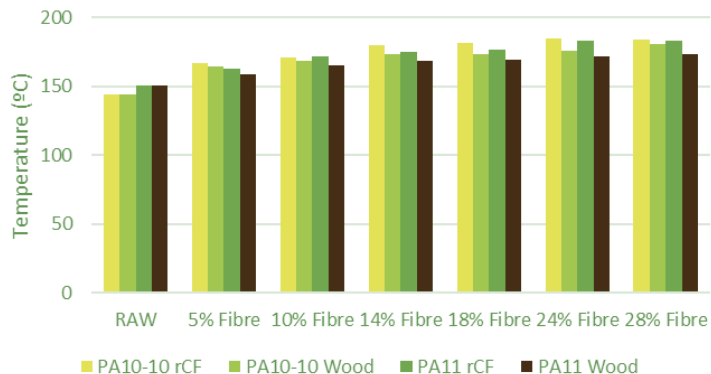
Young Modulus



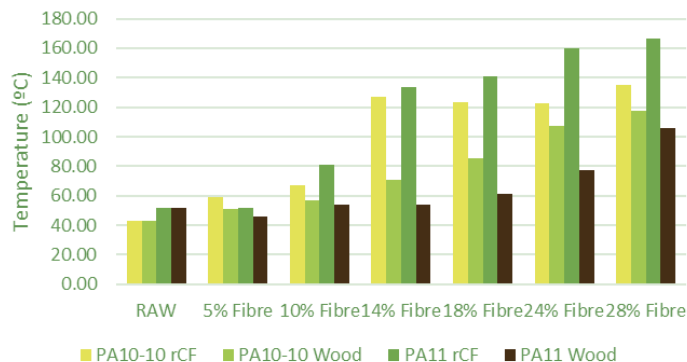
Charpy notched impact tests



VICAT

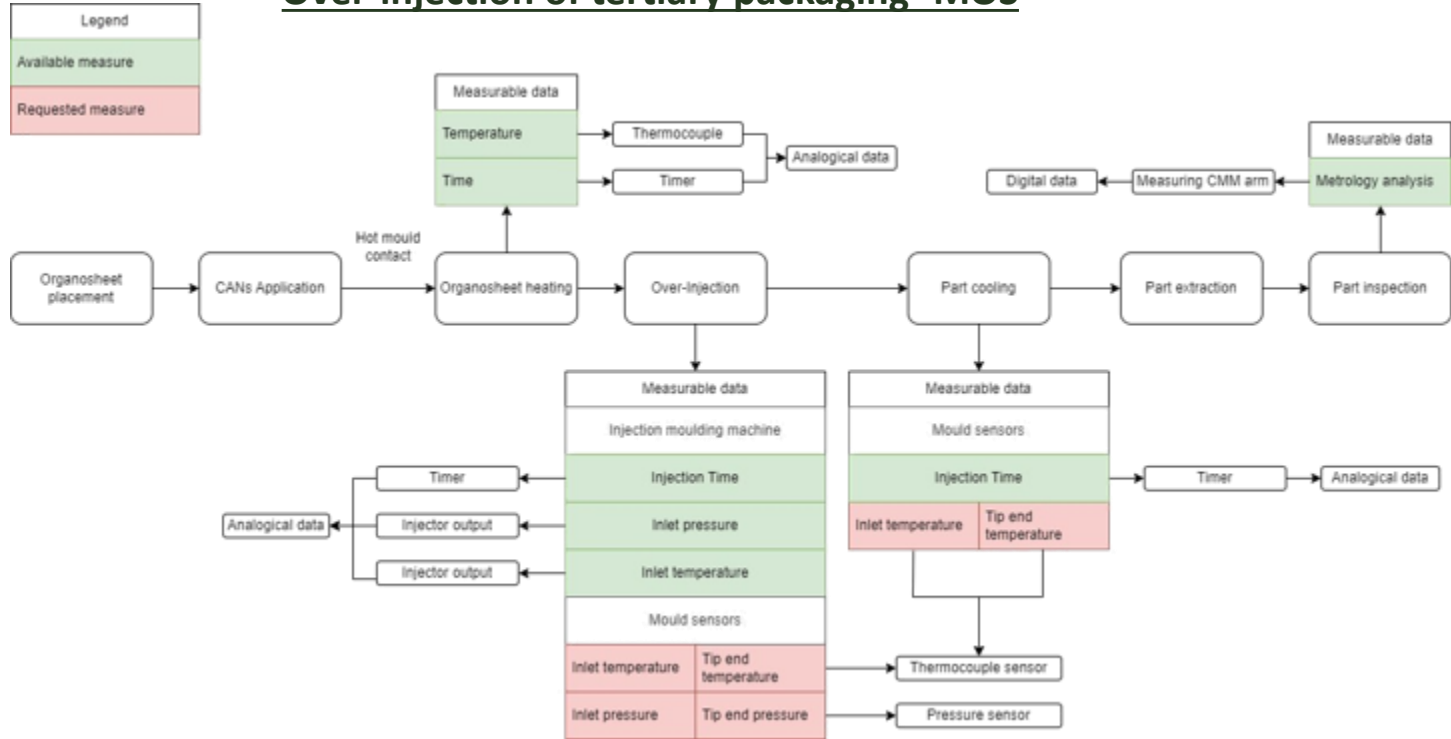


HDT



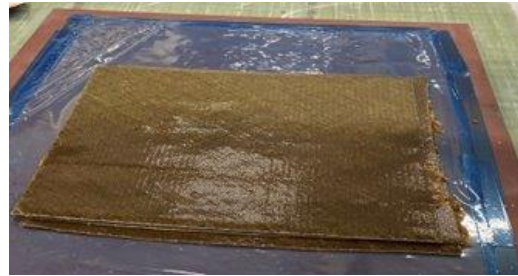
Bio-UPTAKE → Next steps

Over-injection of tertiary packaging -MOS



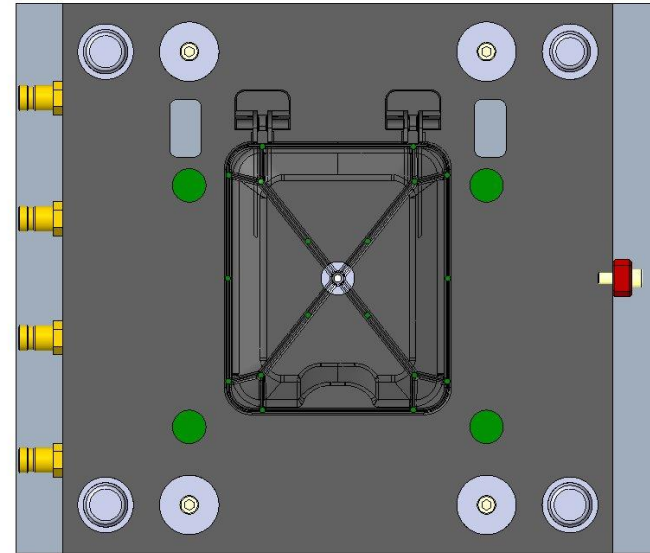
Bio-UPTAKE → Next steps

Thermoforming parameters



Prepreg manufacturing trials

Mould for overinjection





Thank you

Julio Vidal