





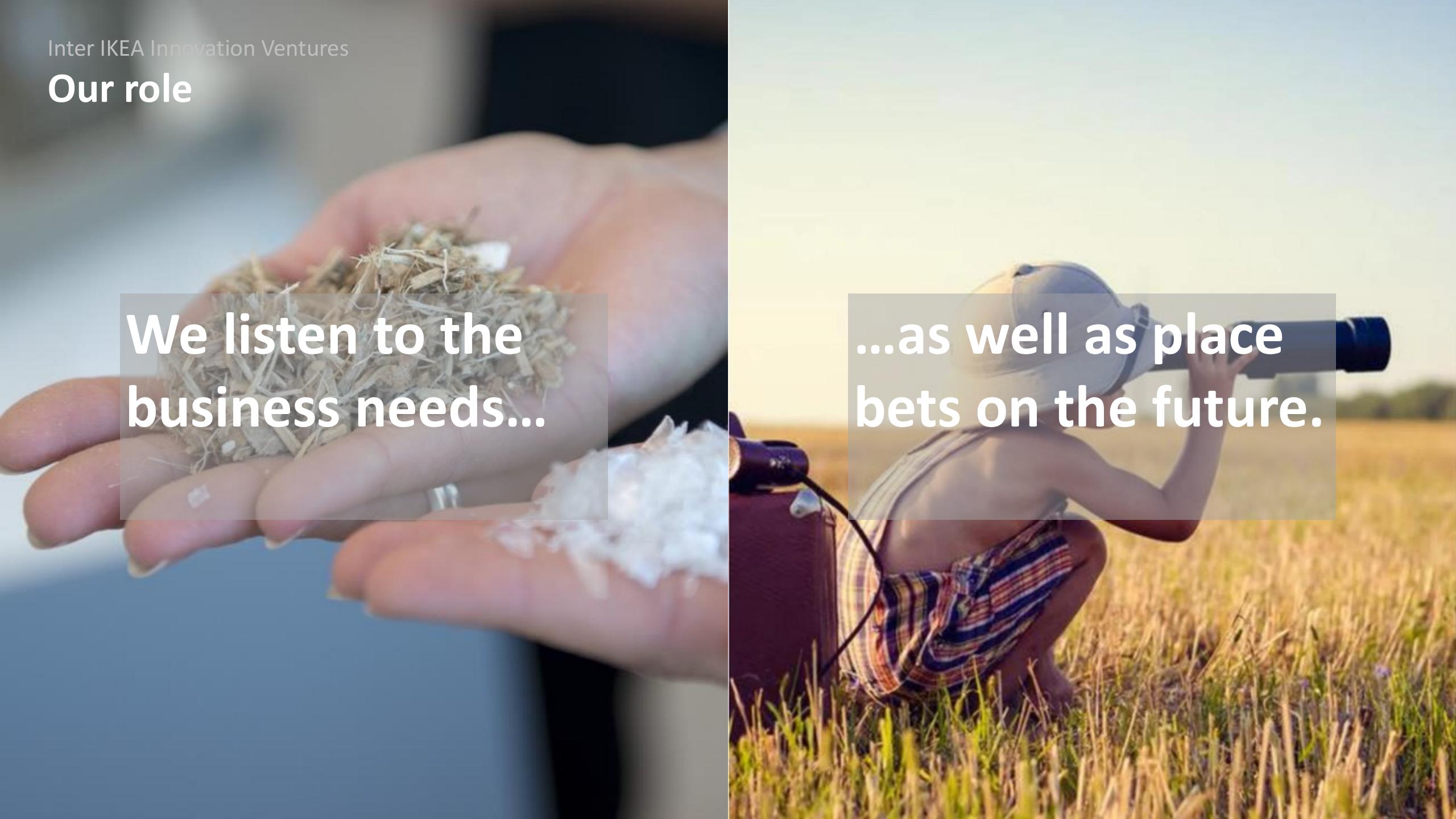
How we make things better

DEMOCRATIC DESIGN

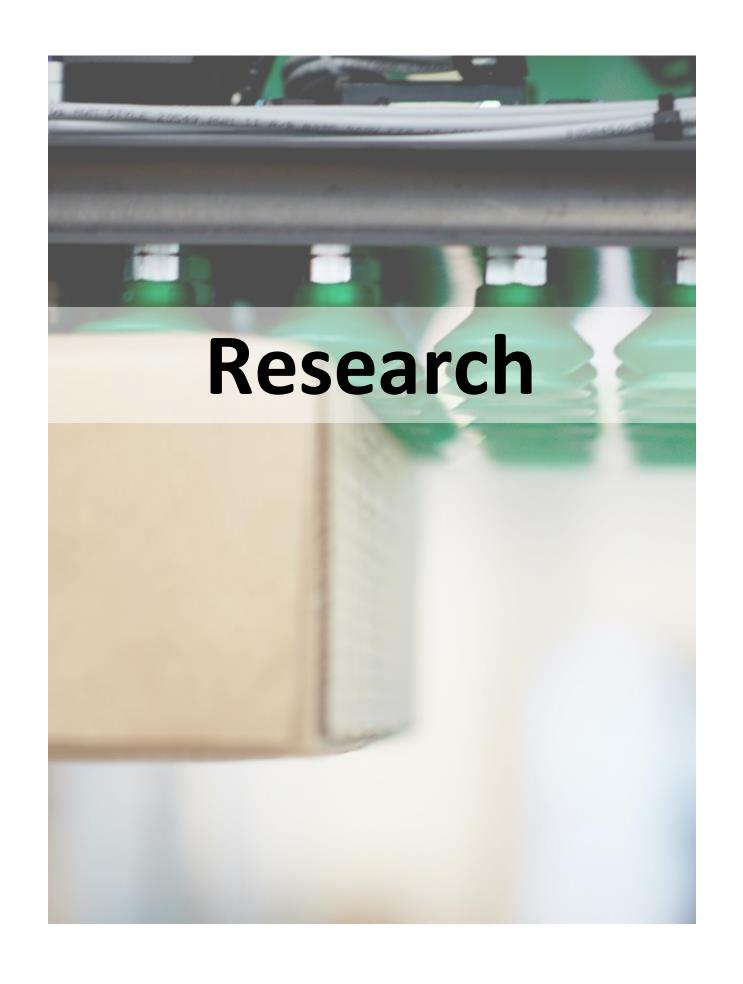
is the way we make things at IKEA. But we don't just make things. We are making things better. Making things better through IKEA design means doing five things better.

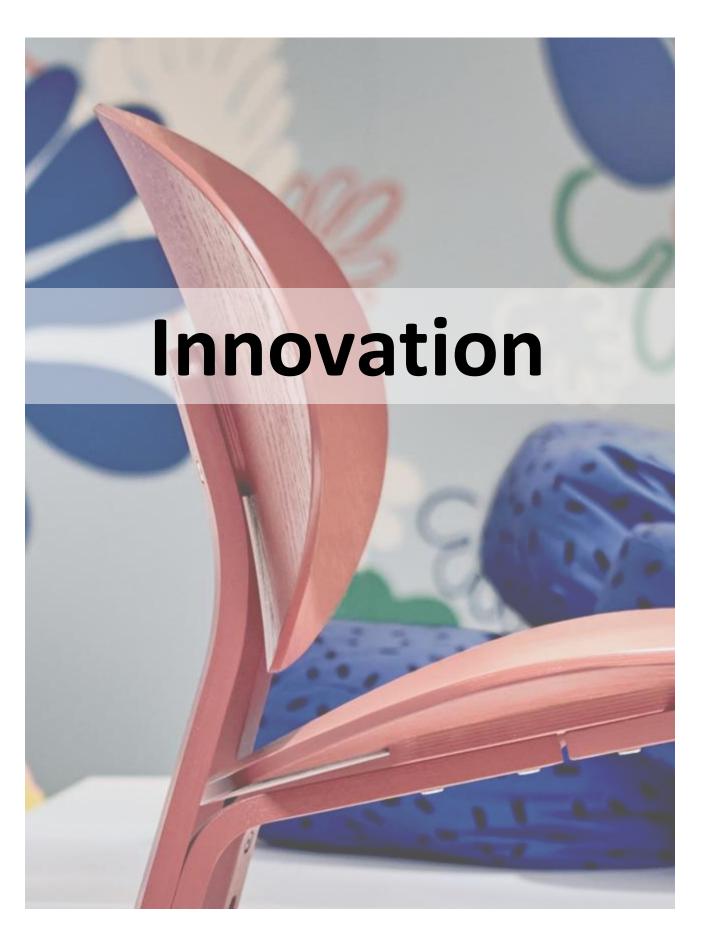


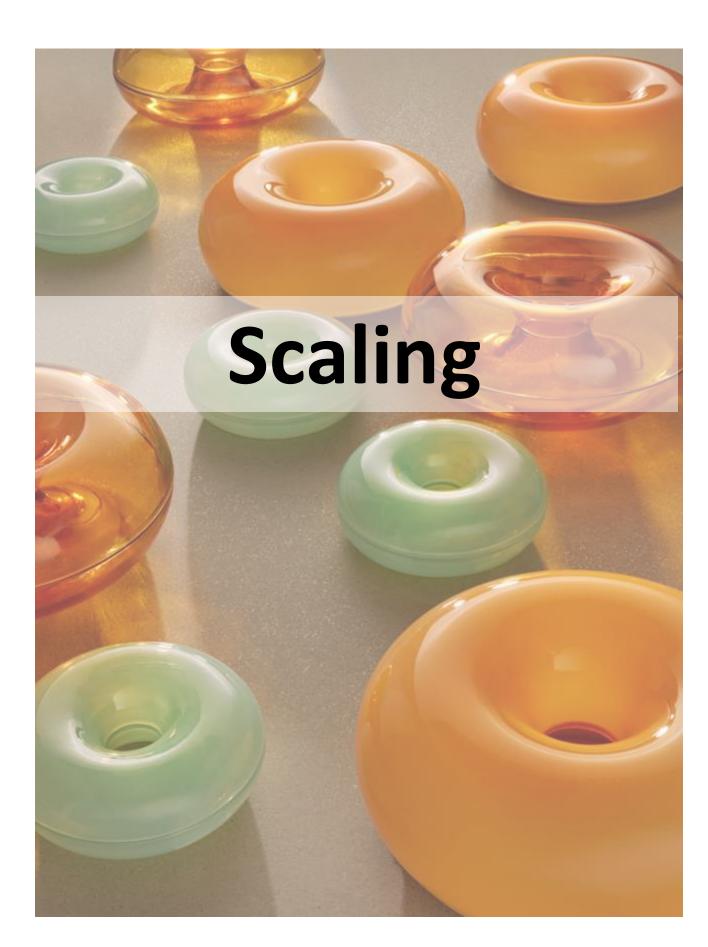




An academia approach for ventures







Internal 7



Research collaborations

Research on:

- Renewable glues
- Carbon storage in biogenic materials
- Thermoplastics testing and modelling
- Post consumer Textiles
- Recycled plastic properties
- Bio-PP
- Chemical recycling Textiles

Participating in consortiums/centres:

- The Bridge
- ARI4Sweden
- Bio-glue centre
- FiBre
- Wingquist

Internal 8

Inter IKEA Innovation Ventures

Theme - Foam

Description

IKEA is targeting to reduce the greenhouse gas emission from the value chain in absolute terms by at least 50% by FY30 compared to baseline FY16.

The largest portion of the IKEA climate footprint comes from materials and IKEA products used in customers' homes. IKEA has set specific movements for the different materials in order to reach above goal.

Problem statements

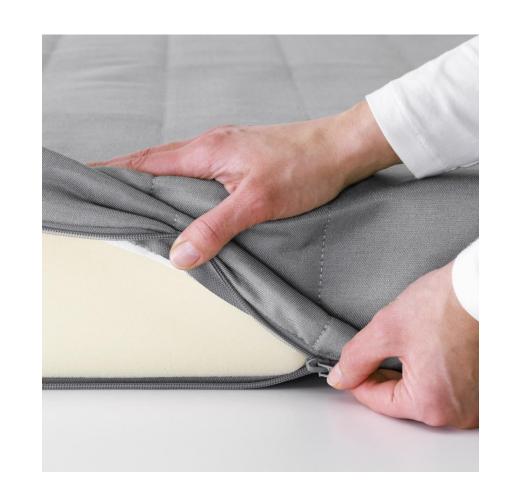
- 1. Materials alternative to totally replace PU foam
- 2. Solutions to replace totally/partially PU foam
- 3. PU foam with a better carbon footprint

Insights

Foam is a material with great comfort properties and hence is a desirable material for many comfort products of IKEA range:

- Mattresses
- Sofa cushions
- Seating applications









Theme - Glue

Description

IKEA is targeting to reduce the greenhouse gas emission from the value chain in absolute terms by at least 50% by FY30 compared to baseline FY16.

The largest portion of the IKEA climate footprint comes from materials and IKEA products used in customers' homes. IKEA has set specific movements for the different materials in order to reach above goal.

Problem statements

- 1. Biobased crosslinker
- 2. Biobased/Recycled glues for particle/ fiber boards
- 3. Biobased/Recycled glues for furniture

Insights

Glue is a strategic component in IKEA's furniture manufacturing due to its pivotal role in ensuring the durability and integrity of flat-pack products, which are core to the brand's identity and logistical model. Glue is used in different components of IKEA range:

- HDF/MDF
- Fiber boards
- Plywood









Change drivers & Ways forward



Product in the center



Smart material usage



Renewable and recycled raw materials



Transforming waste into resources











Affordability

Research project on recycled plastic properties

What?

• Identify the impact of the micro-structure for different recycling grades

How?

 A 4-year project application has been sent in together with a University and another large global company

Why?

- Evaluate if flow simulation can predict microstructures and a mechanical model can be built predicting material response
- Create an awareness of impact of recycling alternatives



Internal 12

Good Example

ÖNNESTAD – a replica of the GOGO chair from 1973 – uses only half the amount of steel for its productions compared to GOGO

We have focused on sourcing alternative grades, such as high-strength steel. It has a lower climate footprint because less material is needed to reach the required strength compared to standard steel.





