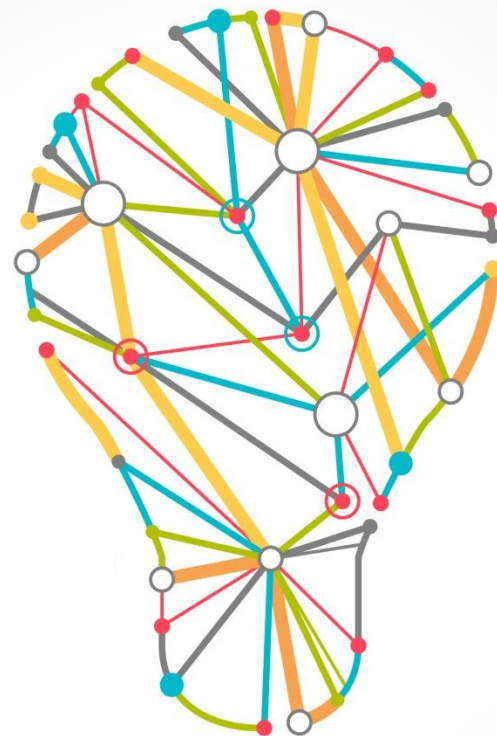




# שיתוף פעולה כזרז לחדשנות

יוחאי גפני  
Dow Israel

27/11/2017

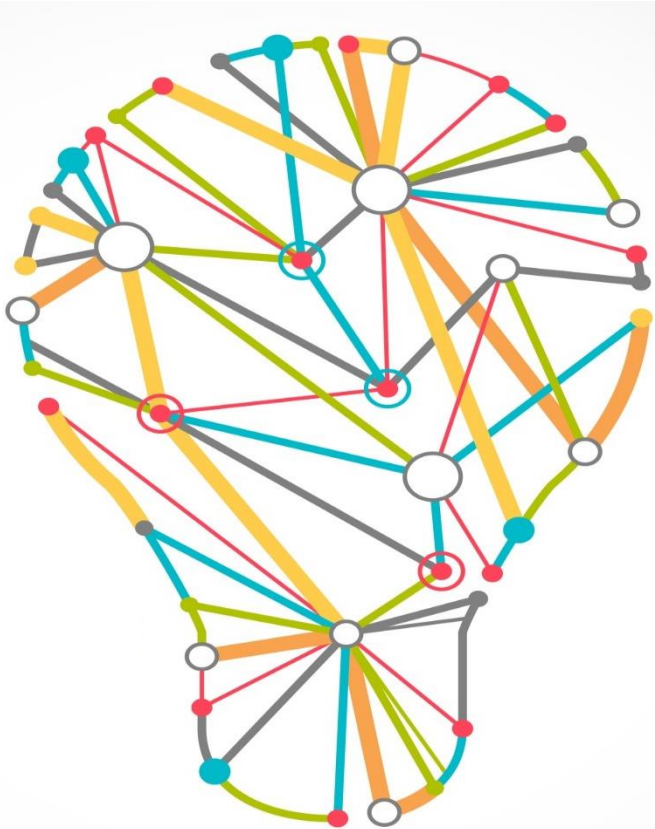




# The need for innovation – Packaging drivers as an example

- Food waste – one third of food (1.3b tons) are wasted annually!
- Reducing waste – Protecting goods from damage and preventing spoilage
- More is needed - Population growth (40% growth by 2030) and urbanization (67% urban living by 2050)
- Globalization – transport food further, cheaper, safer
- Changing lifestyle – Eating habits, rising income, aging population

# Market Driven Innovation Model



**Past:** Traditional Value Chain Model

**Problem:** Innovation was not flowing across value chain

**Solution:** Market Driven, Cross Value Chain Innovation Model

# Dow Innovation Model:

Engagement Across the Value Chain

**Innovate**

**Collaborate**

**Accelerate**

Material Science



Process  
Research

Catalyst  
Research

Application Development



Converter



Supplier /  
Equipment  
Manufacturer



Brand Owner



Retailer

Research

Development

Commercialization

Communication  
& Reputation

New External  
Partnerships

New Collaboration  
Centers & Tools

New Packaging  
Fabrication  
Capabilities

Packaging  
Application  
Development  
Centers

Film Application  
Development  
Centers



# ACCELERATING INNOVATION

## Collaboration

Effective Ways to Work Together

## Innovation

New Capabilities to Develop Better  
Packaging

## Acceleration

Adapt Global Expertise to Meet Your  
Needs



# LEVERAGING A **GLOBAL TECHNOLOGY** BASE FOR FASTER AVAILABLE **LOCAL SOLUTIONS**



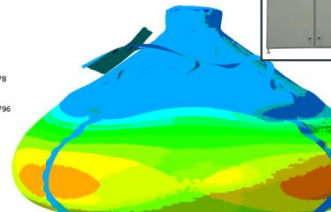
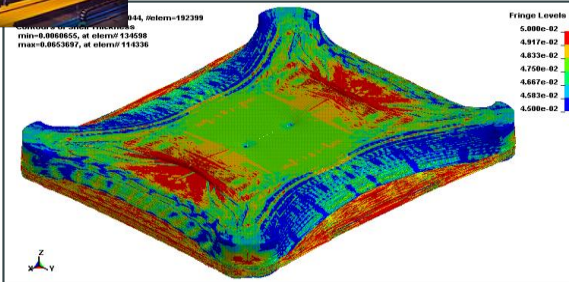


# Our Commitment...

**pack**STUDIOS  
COLLABORATE • INNOVATE • ACCELERATE



LE, Max. In-Plane Principal  
SHEAR, (fraction = -1.0)





# PacXpert Packaging Technology

**PACXPERT™**  
PACKAGING TECHNOLOGY

FROM RIGID TO FLEXIBLE





LESS WASTE



LOWER COSTS



DIFFERENTIATION



CONSUMER CONVENIENCE



LIFE AFTER USE



# Liquid packaging



# REFLEX RECYCLING PILOT PROJECT

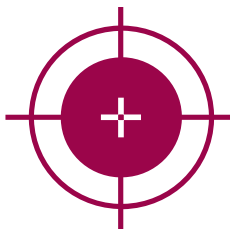
A COLLABORATIVE R&D PROJECT  
FUNDED BY INNOVATE UK

PARTNERS:



# Reflex Project Results

## PROJECT OBJECTIVES



DIVERT **>50%** OF WASTE  
FROM LANDFILL AND  
INCINERATION

**60%** YIELD WHEN  
RECYCLING



## SOCIAL BENEFIT



GENERATE **€140MM**  
NEW ECONOMIC ACTIVITY

## END GOAL



CREATE A **CIRCULAR  
ECONOMY** FOR  
FLEXIBLE PACKAGING

PROTECTING YIELDS

# Agricultural Film Solutions

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**BALE SILAGE FILMS**



**GREENHOUSE FILMS**



**Tunnel films**



## Agricultural Film Solutions

PROTECTING YIELDS



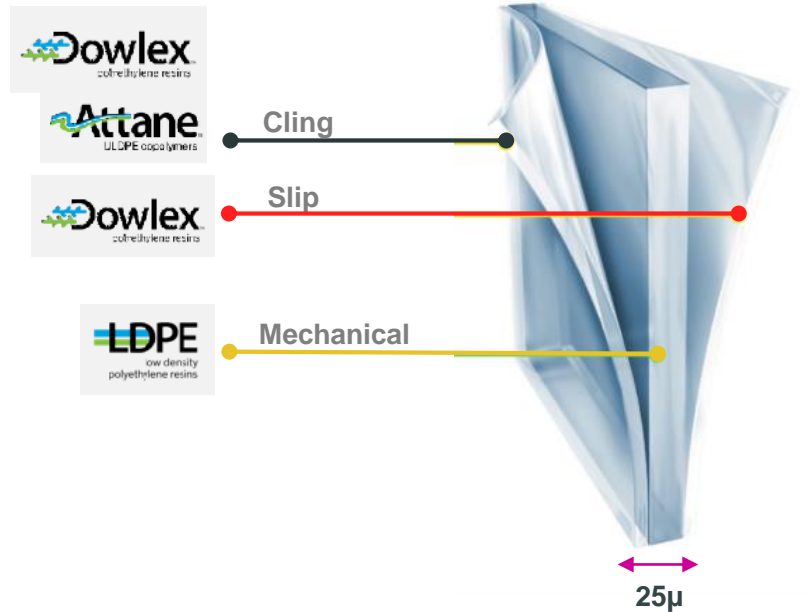
### Dow's solutions for Bale Silage Films offer:

- Outstanding bale sealing
- Good impact and tear resistance
- Even stretch level up to approximately 100%
- Good thickness distribution
- Very good puncture resistance
- Excellent UV resistance
- Low oxygen and water permeability

BALE SILAGE FILMS

GREENHOUSE FILMS

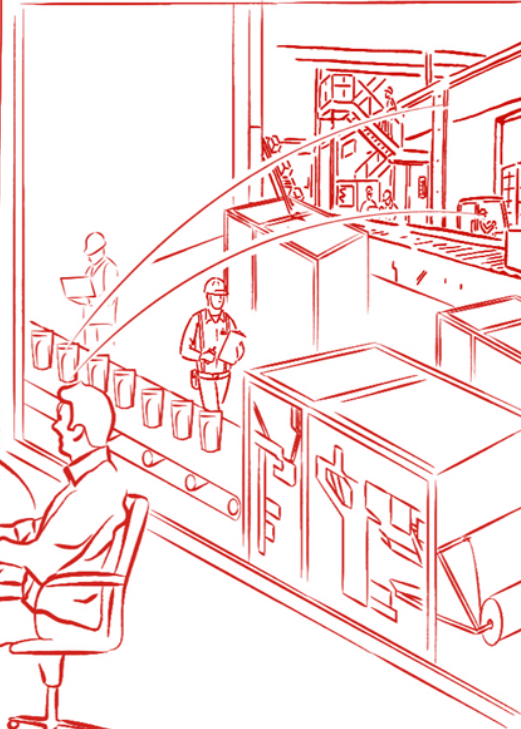
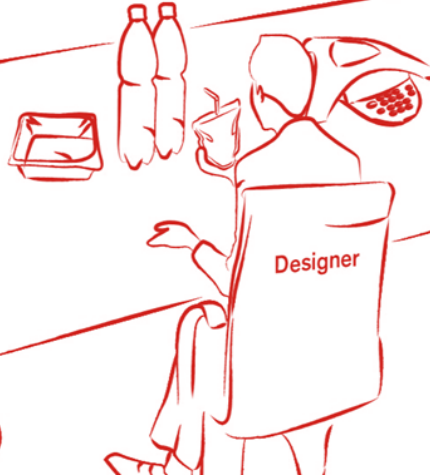
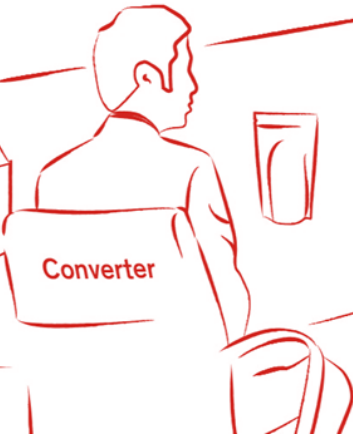
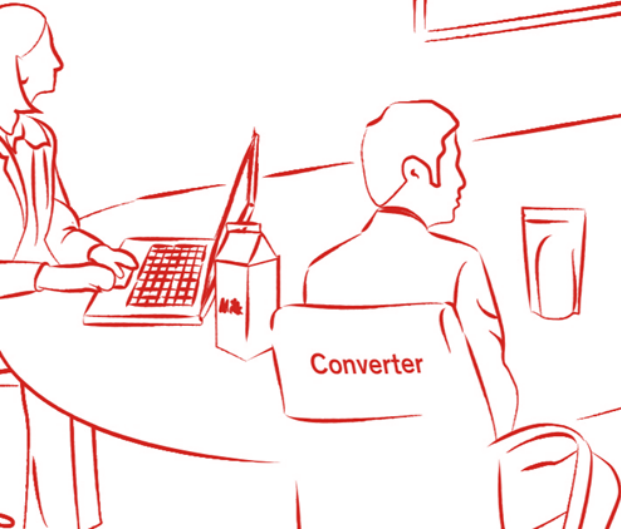
TUNNEL FILMS





# Dow Collaboration Room

pack<sup>haus</sup>



# THANK YOU

