



## WALTER RIPPLE

### VICE PRESIDENT, SUSTAINABILTY



- 28 Years Industry Experience
- Bachelors of Chemistry, Texas A&M University
- Executive MBA, University of Michigan
- Former VP & General Manager, Global GLS
   TPE Business
- 2+ years Vice President, Sustainability



## SUSTAINABILITY

#### AT AVIENT













## **2030 SUSTAINABILITY TARGETS**



Enable 100% of products manufactured for packaging applications to be recyclable or reusable.



Obtain 40% of electricity demand from renewable sources.



100% of technology platform projects will deliver sustainable solutions.



Assess top 90% of supplier spend for alignment with Avient Sustainability objectives.



Reduce Scope 1 & 2 greenhouse gas emissions by 35%.



Develop and implement solutions to end plastic waste while supporting AEPW \$1.5B investment in key initiatives.



Reduce waste to landfill by 35%.



## **PRODUCTS**

#### 8 WAYS WE HELP CUSTOMERS BE MORE SUSTAINABLE



Lightweighting



Bio-derived Content



Reduced **Energy Use** 



**Eco-conscious** 



Volatile Organic Compound Reduction



Renewable Energy Applications



Recycling



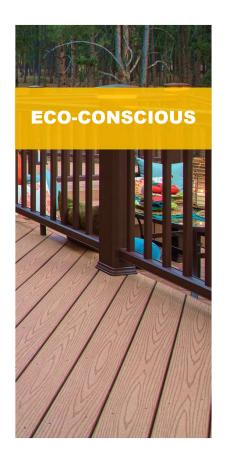
Reduced Material Requirements



## **TRENDS IN FOCUS**









## SUSTAINABLE SOLUTIONS FOR THE CIRCULAR **ECONOMY**

**OPTICA™ TONERS FOR PET** 

**ULTIMATE™ UV LIGHT BARRIER** 

JOULE™ & SMARTHEAT™ **INFRARED ABSORBER** 

LACTRA™ SX LIGHT BLOCKING **ADDITIVE FOR PET** 

AMOSORB™ OXYGEN

RESOUND™ OM THERMOPLASTIC ELASTOMERS

**CESA®-NATUR BIO-SOURCED ADDITIVES** 

> TRIPLE A™ ACETALDEHYDE **SCAVENGER FOR PET**

IR SORTABLE BLACK FOR **RECYCLABLE PACKAGING** 

**SCAVENGER FOR PET** 



**COLORANTS FOR RECYCLABLE PACKAGING** 

**VERSAFLEX™ POST-CONSUMER RECYCLED (PCR)** TPE FORMULATIONS

















## **AVIENT CYCLEWORKS**

# INNOVATION CENTER TO ADVANCE THE CIRCULAR ECONOMY



- Laboratory mimics real-world circular recycling in a research environment
- Conducts chemistry testing to improve plastics recycling for customers
- Screening and evaluation of additive and colorant systems during recycling
- Collaboration platform for customers and value chain partners



# AVIENT ENABLES CUSTOMERS' CIRCULAR ECONOMY GOALS

#### COLORMATRIX™ PROCESS AID & TONER FOR RECYCLED PET











## LIGHTWEIGHTING

#### WHAT'S HAPPENING

#### PLASTICS ARE:

up to

lighter than



#### STEEL

up to

lighter than





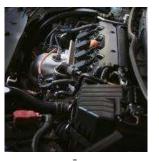
#### **REDUCE CARBON EMISSIONS**



**BETTER FUEL ECONOMY** 



#### **AVIENT SOLUTIONS**



**COMPLĒT™ LFT ENGINEERED RESINS** 



**POLYSTRAND™ TAPES AND LAMINATES** 



NYMAX™ NYLON **FORMULATIONS** 



**HYDROCEROL® CHEMICAL FOAMING AGENTS** 



## **AVIENT SOLUTIONS ENABLE LIGHTWEIGHT DASHBOARD SKINS**

#### HYDROCEROL® FOAMING AGENT SOLUTIONS



20% Reduction in weight of dashboards



20% Reduction In Cycle Time/Energy



Reduced CO<sub>2</sub> emissions





## **ECO-CONSCIOUS**

#### WHAT'S HAPPENING









#### **AVIENT SOLUTIONS**



MAGIQ™ FIBER **COLORANTS & ADDITIVES** 



ONCOLOR™ BRILLIANT **METALLIC COLORANTS** 



ONCOLOR™ WPC CAPSTOCK **TECHNOLOGY** 



**ZODIAC™ AQUARIUS™ WATER BASED SCREEN PRINTING INKS** 



## **AVIENT ECO-CONSCIOUS SOLUTIONS IMPROVE FACE MASK PERFORMANCE**

MAGIQ™ ELECTRET PLUS TECHNOLOGY





**Protects** against aerosols & bacteria particles







## **PLANET**

## KEY PERFORMANCE INDICATORS 2016-2019

#### **56 ENERGY REDUCTION PROJECTS SAVE**

7400+

MT/CO<sub>2</sub> ANNUALLY



**ASSESSE, BELGIUM** 



**PUNE, INDIA** 

**ENERGY INTENSITY** 

**DECREASE** 



**WASTE INTENSITY** 

2% **DECREASE** 



WATER INTENSITY

20% **DECREASE** 



**TOTAL CO2 EMISSIONS** 

**DECREASE** 













Westlake Chemical

**N**TOMRA

mondi A NOVA Chemicals OxyChem. X AVIENT

SCG Sealed Air SUMİTOMO CHEMICAL

CLARIANT

Braskem 🗼

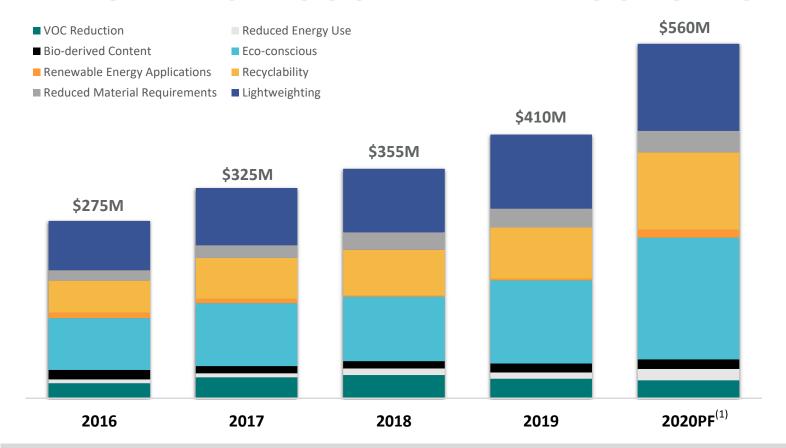
Reliance



Driving breakthrough innovations



## REVENUE FROM SUSTAINABLE SOLUTIONS



Revenue from sustainable solutions expected grow at an 8-12% CAGR into the future



## **THANK YOU**

