



DELIVERING ON THE PROMISE  
OF BIOCHEMICALS AT SCALE

## Q3 RESULTS PRESENTATION

25 November 2021

# Agenda

INTRODUCTION

Q3 RESULTS OVERVIEW

FINANCIAL REPORT

RESOLUTE UPDATE

PRODUCT AND MARKET DEVELOPMENT

OUTLOOK

# Circa is enabling the transition to lower carbon & sustainable production of advanced bio-based materials

**The world demands change from toxic fossil-based chemicals to a better alternative - Circa is part of the answer.**

- Circa converts waste biomass into a platform molecule that enables the production of high value bio-based chemicals. Our patented technology equips industries to innovate safer, more sustainable and better chemical products.
- We plan to grow our manufacturing capacity to 80,000 tonnes per year (tpa) by 2030, refining our technology and optimising our cost base and yield as we scale.
  - In parallel we develop markets for Cyrene™ a bio-solvent that often out-performs and is up to 80% less carbon intense than NMP and DMF, substances of very high concern identified by the European Chemicals Agency (ECHA).
  - Cyrene™ is a levoglucosenone (LGO) derivative, a platform molecule that has the potential for many more derivatives to be commercialised in high-margin applications, such as drug discovery and production of biopolymers.

*Today we report on our Q3 progress building an industrial scale plant and developing markets for its novel products.*

# Q3 results overview

- Cashflow remains at expected levels
- Royalty agreement with University of York renegotiated
  - rates reduce from 4% to 1.5% for quantities up to 1,000 tpa and 2% to 0.75% over 1,000 tpa
- ReSolute cost increases advised to market 14 October 2021
  - finance options being worked on include re-allocation of capital resources, financial support from regional grants, supplier and export funding programs
  - new scope brings in new suppliers, increased yields and annual opex reduction opportunities (approx €2m)
- Further distribution agreement opportunities underway with distributors (OQEMA and DKSH)
- Textile opportunity underway with major Korean supplier to tier one brand
- Invitation to EU COP 26 panel on bioeconomy enabling climate transition
- Tone Leivestad commences as CFO
- Appointment of Philipp Morgenthaler as head of global manufacturing
- New product development team in place, led by Dr Marc Hein

# Spend remains in line with expected quarterly run rate

## Q321 Income statement

(EUR)

	Q3 2021	Q2 2021	Q3 2020	YTD 2021	YTD 2020
Product sales	3,288	11,835	52,734	16,457	70,195
Other revenue	1,728	31,049	1,168,694	36,843	1,660,707
<b>Total revenue</b>	<b>5,016</b>	<b>42,884</b>	<b>1,221,428</b>	<b>53,300</b>	<b>1,730,902</b>
Cost of sales	73,039	75,014	41,947	211,408	222,010
Employee benefit expenses	604,259	601,844	133,725	2,849,973	411,494
Other operating expenses	709,392	802,622	662,845	3,047,657	3,962,130
<b>Total operating expenses</b>	<b>1,386,690</b>	<b>1,479,480</b>	<b>838,517</b>	<b>6,109,039</b>	<b>4,595,635</b>
<b>Operating result</b>	<b>-1,381,674</b>	<b>-1,436,596</b>	<b>382,911</b>	<b>-6,055,739</b>	<b>-2,864,733</b>
<b>Net financial income/ expenses</b>	<b>-208,322</b>	<b>-114,954</b>	<b>-29,211</b>	<b>-530,093</b>	<b>-33,917</b>
<b>Net profit/ loss before tax</b>	<b>-1,589,996</b>	<b>-1,551,550</b>	<b>353,700</b>	<b>-6,585,831</b>	<b>-2,898,650</b>
Tax expenses					
<b>Net profit/ loss</b>	<b>-1,589,996</b>	<b>-1,551,550</b>	<b>353,700</b>	<b>-6,585,831</b>	<b>-2,898,650</b>
<b>Other comprehensive income:</b>					
Foreign exchange gains/(losses)	15,997	22,707		17,193	
<b>Total comprehensive profit/ loss for the period</b>	<b>-1,573,999</b>	<b>-1,528,843</b>	<b>353,700</b>	<b>-6,568,639</b>	<b>-2,898,650</b>

- FC5 continues to provide product for Cyrene sales and trial product to customers
- Q321 employee and other operational expenses continue to be in line with the quarterly run rate
- Financial expense is mainly related to unrealized FX (NOK account in Circa Group AS) and negative interests related to the EUR account

# And focus on cash remains critical



## Q321 Assets

(EUR)	30.09.2021	30.06.2021	31.12.2020	30.09.2020
<b>ASSETS</b>				
Tangible assets	874 964	571 281	53 196	2 361
<b>Total non-current assets</b>	<b>874 964</b>	<b>571 281</b>	<b>53 196</b>	<b>2 361</b>
Inventory	44 306	33 748	49 899	37 156
Short term receivables	262 578	408 500	1 708 519	77 601
Cash and cash equivalent	46 849 307	49 717 972	4 724 408	243 975
<b>Total current assets</b>	<b>47 156 191</b>	<b>50 160 220</b>	<b>6 482 826</b>	<b>358 732</b>
<b>Total assets</b>	<b>48 031 155</b>	<b>50 731 501</b>	<b>6 536 022</b>	<b>361 094</b>

- ReSolute™ capex is EUR 565k gross in Q321. Total capex is offset by the BBI contribution of EUR 261k.
- Decrease in short term receivables, reduction is mainly due to retroactive VAT included in Q2 after Circa Group AS has been registered for VAT.
- Cash in Q3 used on:
  - Operation activities EUR 2.3 millions, related to operations in the quarter, as well as payments for STI and Wood where expenses are included in previous periods.
  - ReSolute payments EUR 565k

# Circa remains well-funded



## Q321 Equity and liability

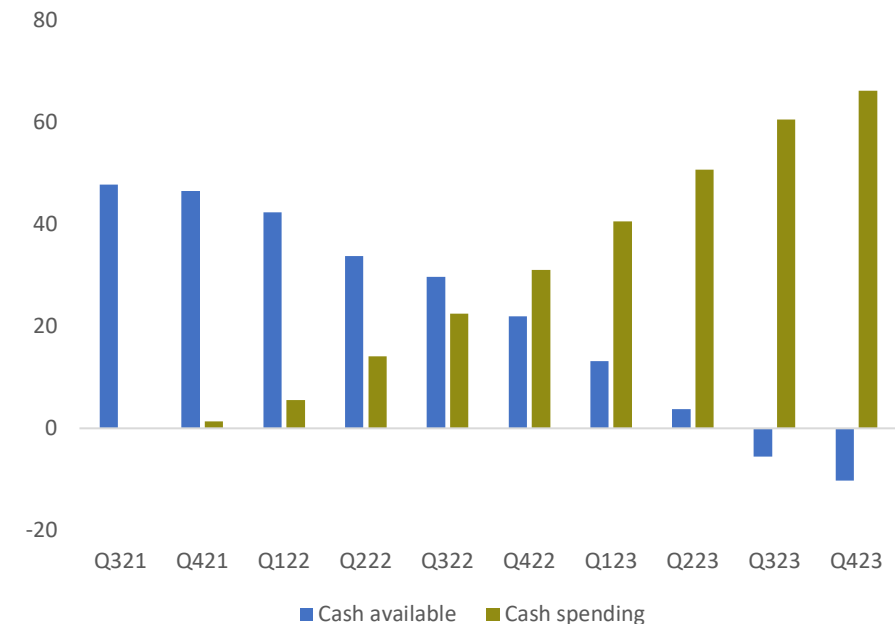
(EUR)	30.09.2021	30.06.2021	31.12.2020	30.09.2020
<i>EQUITY</i>				
Issued and paid in equity	54 013 611	56 808 253	7 335 180	7 141 563
Other equity	-11 695 589	-12 882 966	-7 685 095	-8 235 540
Non-controlling interests				
<b>Total equity</b>	<b>42 318 023</b>	<b>43 925 288</b>	<b>-349 915</b>	<b>-1 093 977</b>
<i>LIABILITIES</i>				
Employee benefits	639 647	550 482	0	0
Other non-current liabilities	0	0	562 590	0
<b>Total non-current liabilities</b>	<b>639 647</b>	<b>550 482</b>	<b>562 590</b>	<b>0</b>
Employees and related	646 830	989 966	32 408	10 373
Borrowings	0	0	0	0
Trade and other payables	248 019	803 112	179 363	430 071
Public duties and related	40 334	47 754	0	0
Other current liabilities	4 138 303	4 414 900	6 111 576	1 014 626
<b>Total current liabilities</b>	<b>5 073 486</b>	<b>6 255 732</b>	<b>6 323 347</b>	<b>1 455 071</b>
<b>Total liabilities</b>	<b>5 713 133</b>	<b>6 806 213</b>	<b>6 885 937</b>	<b>1 455 071</b>
<b>Total equity and liabilities</b>	<b>48 031 155</b>	<b>50 731 501</b>	<b>6 536 022</b>	<b>361 094</b>

- Total Equity is EUR 42.3 mill as of Q321
- Decrease in Trade payables is mainly due to payment to Wood (EUR 400k)
- Decrease in Employee and related is mainly due to short term incentives (STI) related to the IPO that are paid out in Q3 (EUR 326k)
- Decrease in Other current liabilities are mainly due to utilization of the Horizon 2020-grant of EUR 261k in Q321

# Activities following capex announcement Oct 14<sup>th</sup> are building confidence in the estimate - and opportunities for non dilutionary financing

- Activities to reduce capex as well as various financing options is building confidence. The work is ongoing, and with a conservative approach, the cash forecast is presently unchanged from the announcement at October 14<sup>th</sup>.
- Circa Group's available cash balance as per Q321 is approximately €47m
- Available cash balance in the two year period includes outgoing cash balance as per Q321, BBI grant of €5m (55 %) and an assumption of €3m in other grants, which is considered conservative (current commitments approx €1.35m)
- Cash spending on ReSolute plant is given as a range from €50-55m based on the most recent estimates. The graph is based on the highest figure.
- Circa has a well funded and long financial runway. The company is working with various financing options, such as exploring grants and vendor financing opportunities, and will update the forecast as soon as they are confirmed.

Two year cash forecast

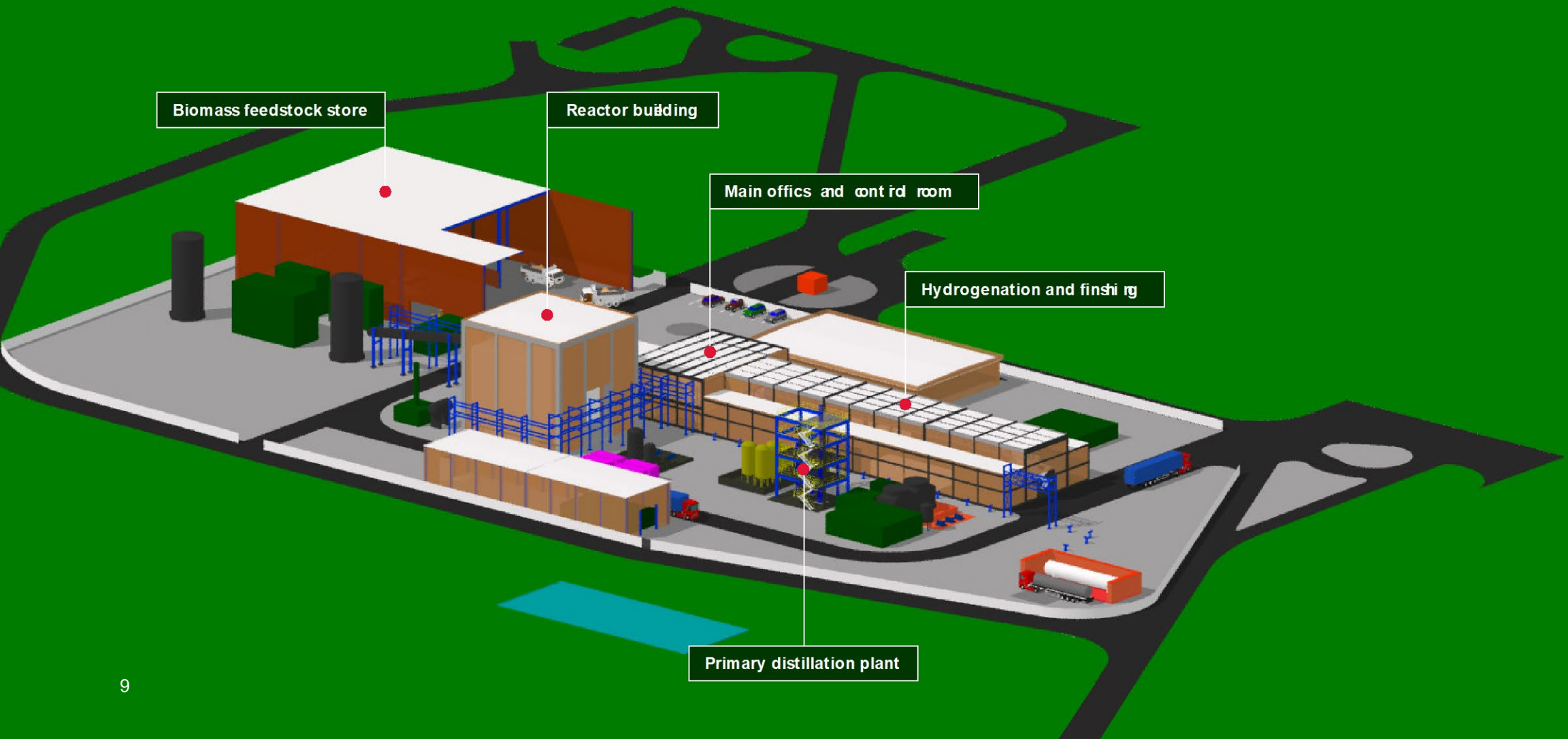


Based on preliminary phasing of ReSolute cash spending. Final phasing after value engineering may impact the timing of cash flows



# ReSolute plant progresses, with increasing support from local communities and governments

ReSolute ] circa<sup>©</sup>



# ReSolute timetable and capex expectations remain as advised in October

- Significant savings opportunities being studied / negotiated include:
  - On site conversion of char to energy (>€2m opex/year).
  - Internalise waste water treatment (€1m capex savings)
  - Increase in capacity based on improvements in FC5 operations: approx 20%.
- Working with LUKE on sustainable pre-reactor fractionation.
  - Not anticipated for start-up, but upside is ~25-30% capacity uplift.
- Ongoing optimisation work is lowering capex risk for FC6 (10 000+ tonnes) large scale plant.

# Product and market development

- Engagement with Merck continues, discussions extended to levoglucosenone derivatives
- Momentum building in the development of new commercial relationships to distribute Cyrene™:
  - OQEMA for UK and Euro market opportunities.
  - DKSH in Australian and Asian agrochemical markets.
- Chinese research published using Cyrene™ to remove CO<sub>2</sub> and convert into value-added chemicals.
- Recent Shell patent on Cyrene™ use in distillation processes to replace high-C product.
- Strong visibility at key events:
  - October 6: Spoke on Cyrene™ as a replacement for substances of very high concern at ECHA Safer Chemicals conference.
  - October 20: Participated in COP 26 panel following invitation from EU Deputy DG Climate. “The Role of Life Sciences in Delivering Climate Neutrality” alongside BASF and Tetra Pak.

# LGO Derivatives: Focused on 4 target markets



## HEALTH SCIENCE & PHARMACEUTICALS

- \$140 B (CAGR of 5.1%)
- Targeting derivatives that are well aligned with known intermediates used in API and genomics applications



## AGRICHEMICALS – INTEGRATED PEST MANAGEMENT

- \$2.6 B (16% CAGR)
- Focus on sustainable production of unique and difficult to obtain molecules which are well suited and prevalent in the application



## FLAVORS & FRAGRANCES

- \$8.9 B for Dairy (CAGR 3.9%) and Convenience Foods (CAGR 5.5%)
- Development of useful precursors and targeted end-use products



## BIO-POLYMERS

- \$26.1 B (CAGR 7.3%)
- Investigating the synthesis of unique bio-based monomers for use in the production of novel polyester and polyacrylate polymer systems

- Grow LGO platform in niche applications that are high value and high growth
- Provide unique solutions that offer value through:
  - ✓ Sustainability
  - ✓ Simplified synthetic pathways
  - ✓ Scalability
  - ✓ Secure Supply

# We are leveraging robust scientific evidence to progress the use of LGO and its derivatives:

## HEALTH SCIENCE & PHARMACEUTICALS

---

Merck MSD used an LGO derivative to synthesize MK1026, currently in Phase II trial for treatment of lymphoma.

Research partner showing positive in-vivo results using an LGO derivative for the potential treatment of breast cancer.

Provider of wound care applications evaluating 2-deoxy-D-ribose synthesized from LGO.

## FLAVORS, FRAGRANCES & AGRICHEMICALS

---

Range of lactone structures are known and readily accessible from LGO.

Project to scale up the production of dairy lactone from LGO.

Working with a partner in the synthesis of pheromones from LGO for use in pest management applications.

## BIO-POLYMER APPLICATIONS

---

EU CHAMPION project: Circa providing LGO derived monomers to create sustainable bio-based polymer.

Active discussions with a leading paint and coatings brand to produce LGO based monomers for use in products.

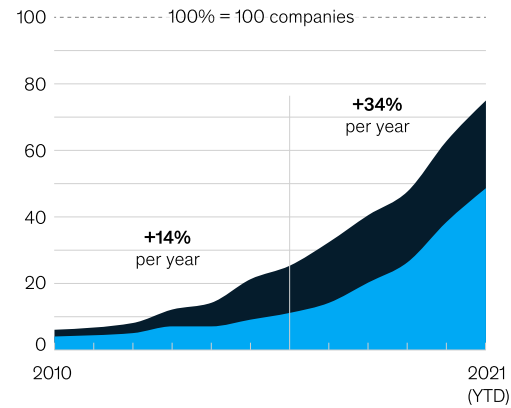
*Our objective is to demonstrate commercially viable production capability at scale quickly, leading to meaningful commercial engagements in each of our target areas*

# Accelerating corporate climate commitments puts \$2.6 trillion of chemical revenue under scrutiny

## Commitments to reduce Scope 3 greenhouse-gas emissions are accelerating.

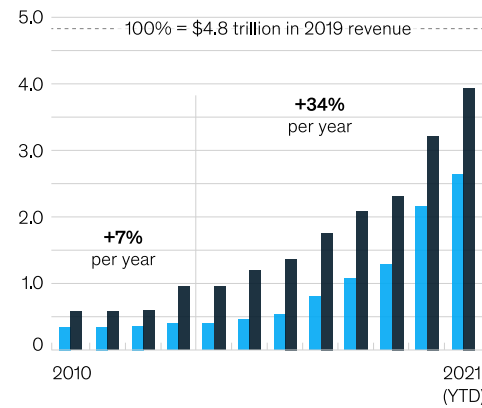
Companies with emissions-reduction commitments, number of top companies across end markets<sup>1</sup>

■ Scopes 1, 2, and 3<sup>2</sup> ■ Scopes 1 and/or 2 only



Cumulative 2019 revenue with associated commitments, \$ trillions across end markets<sup>3</sup>

■ Scopes 1, 2, and 3<sup>2</sup> ■ Scopes 1 and/or 2 only



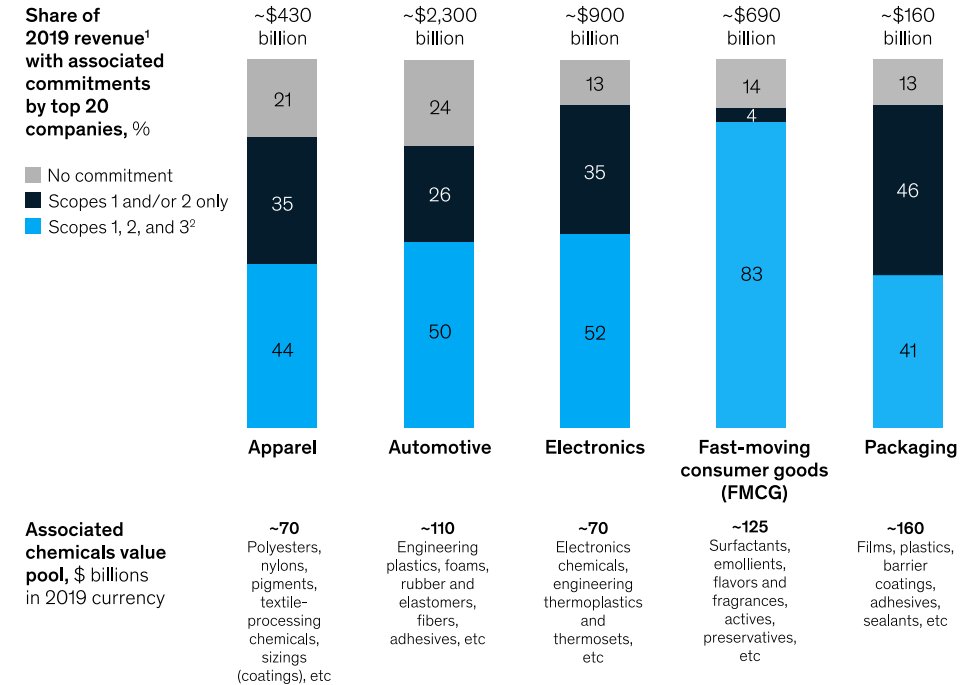
<sup>1</sup>Top 20 companies by 2019 global revenue in each of five end markets: apparel, automotive, electronics, fast-moving consumer goods (food, home, and personal care), and packaging.  
<sup>2</sup>Scope 1 covers direct emissions from owned or controlled sources, including emissions from the combustion of fuel and vehicles. Scope 2 covers indirect emissions from the generation of purchased electricity, steam, heating, and cooling. Scope 3 emissions are not directly owned by the company but cover all other indirect emissions that occur in a company's value chain.  
<sup>3</sup>Sum of 2019 revenue associated with top 20 companies across end markets.  
 Source: Environmental, Social, and Governance (ESG) by McKinsey; Sustainability Insights by McKinsey; McKinsey analysis

McKinsey & Company

## Approximately \$500 billion of spending on chemicals and materials is under scrutiny.

Share of 2019 revenue<sup>1</sup> with associated commitments by top 20 companies, %

■ No commitment ■ Scopes 1 and/or 2 only ■ Scopes 1, 2, and 3<sup>2</sup>



Associated chemicals value pool, \$ billions in 2019 currency

End Market	Value Pool (\$ billions)	Chemicals/Materials
Apparel	~70	Polyesters, nylons, pigments, textile-processing chemicals, sizings (coatings), etc
Automotive	~110	Engineering plastics, foams, rubber and elastomers, fibers, adhesives, etc
Electronics	~70	Electronics chemicals, engineering thermoplastics and thermosets, etc
Fast-moving consumer goods (FMCG)	~125	Surfactants, emollients, flavors and fragrances, actives, preservatives, etc
Packaging	~160	Films, plastics, barrier coatings, adhesives, sealants, etc

Note: Figures may not sum to 100%, because of rounding.  
<sup>1</sup>Sum of 2019 revenue generated by top 20 companies in each end market: apparel, automotive, electronics, fast-moving consumer goods (top 20 companies across food, home, and personal care sectors), and packaging.  
<sup>2</sup>Scope 1 covers direct emissions from owned or controlled sources, including emissions from the combustion of fuel and vehicles. Scope 2 covers indirect emissions from the generation of purchased electricity, steam, heating, and cooling. Scope 3 emissions are not directly owned by the company but cover all other indirect emissions that occur in a company's value chain.  
 Source: Environmental, Social, and Governance (ESG) by McKinsey; Sustainability Insights by McKinsey; McKinsey analysis

McKinsey & Company

# 2030 targets are driving industry transition, and Circa is scaling low-carbon alternatives for this technology cycle

## TRANSITION TO A LOW CARBON ECONOMY

Drivers	Industry in transition
<ul style="list-style-type: none"> <li>• <b>COP26</b> has drawn attention to the <b>hard to abate</b> sectors, including chemicals</li> <li>• A few <b>systemically important carbon emitters</b> account for the bulk of emissions</li> <li>• What was seen as a burden is increasingly being framed as a way for <b>boards to manage risk, and a market opportunity</b> for those that have the foresight to act</li> </ul>	<ul style="list-style-type: none"> <li>• Accountability for <b>interim targets towards net zero</b> addressing every scope</li> <li>• Fossil solvent customers <b>demand an alternative</b></li> <li>• <b>BASF</b> sets net zero targets in March 2021</li> <li>• <b>Royal Dutch Shell</b>, under pressure to increase emissions reductions, departs the Netherlands</li> <li>• <b>Industry bodies</b> withhold support for new entrants</li> </ul>

## SUSTAINABLE ALTERNATIVES IN DEMAND

Market development	Demand for Cyrene™
<ul style="list-style-type: none"> <li>• Target markets with strong sustainability drivers and in applications where Cyrene™ has out-performed NMP and DMF</li> <li>• Interest from textiles in <b>PU leather</b> manufacture</li> <li>• <b>Graphene applications</b> highlight Cyrene™ as solvent of choice</li> <li>• Shell patent demonstrates Cyrene™ performance in <b>petroleum distillation</b> application</li> </ul>	<ul style="list-style-type: none"> <li>• Tier 1 <b>textile engagement underway</b> and engagement with major Korean supplier</li> <li>• Ongoing interest from <b>major industrial conglomerates</b> to understand Cyrene™ and volume availability</li> <li>• Momentum building in the development commercial relationships to distribute Cyrene™ <b>OQEMA and DKSH</b></li> </ul>

## SUSTAINABILITY



**Circa Group AS**

Sjølyst plass 2  
0278 Oslo  
Norway

**Contact**

CEO – Tony Duncan

[Tony.Duncan@circagroup.com.au](mailto:Tony.Duncan@circagroup.com.au)

CFO – Tone Leivestad

[Tone.Leivestad@circa-group.com](mailto:Tone.Leivestad@circa-group.com)

*This presentation contains statements regarding the future in connection with Circa Group's growth initiatives, profit figures, outlook, strategies and objectives. All statements regarding the future are subject to inherent risks and uncertainties, and many factors can lead to actual profits and developments deviating substantially from what has been expressed or implied in such statements.*

Let's GO



# ReSolute start-up timetable remains as advised in October



Schedule	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23
	M13	M14	M15	M16	M17	M18	M19	M20	M21	M22	M23	M24	M25	M26	M27	M28	M29	M30	M31	M32	M33	M34	M35	M36	M37	M38	M39
	Q1 Year 2			Q2 Year 2			Q3 Year 2			Q4 Year 2			Q1 Year 3			Q2 Year 3			Q3 Year 3			Q4 Year 3			Q1 Year 3		
Reactor Engineering Design																											
Permitting																											
• EPC BoP Detail Engineering																											
FEL-4 Equipment Procurement & Manufacturing																											
FEL-4 Equipment Delivery at site																											
FEL-4 Construction																											
FEL-4 Erection																											
FEL-4 E&I Installation																											
COMMISSIONING - Cold																											
COMMISSIONING - Hot																											
Start-up																											

# Circa converts waste biomass to high-value biochemicals

