



Delivering on the promise of biochemicals at scale

# Q1 2021 presentation

27 May 2021

# Agenda

1. Highlights Q1 2021
2. Introduction to Circa
3. Financials
4. Outlook





## Highlights Q1 2021 (and updates)

- Successful listing on Euronext Growth (2 March) and capital raise of EUR +50m, multiple times oversubscribed
- Circa is fully financed for the ReSolute project to construct a 1,000 tonnes LGO<sup>1</sup> / Cyrene™ plant in France
  - Head of Terms Agreement signed with site owner
- ReSolute project in last two months of basic engineering and continues as planned despite COVID-19 restrictions
  - Final stages of trials with key machinery and equipment suppliers, currently no unexpected developments
  - Initiated process to explore further valorisation opportunities for process by-products (biocoal)
  - Continued strong regional and EU support for the ReSolute project and ongoing positive dialogues
  - Advanced discussions to convert offtake LOIs to sales agreements for ReSolute production output
  - Technip Energies chosen to provide consultancy for next engineering design phase
- Currently in early-stage discussions with potential partners / sites for future plants
- Strengthened board with two experienced directors, Trond Stangeby and Greg Court
- Appointments of GM New Product Development in the UK, and GM Sustainability & Marketing
- New and highly experienced Norway-based CFO to join Circa Q3 2021
- Initial Cyrene REACH Annex IX dossier completed and submitted to European Chemicals Agency

## Industry trends remain strongly positive for Circa

- The EUR +3 trillion chemicals industry landscape is changing across all global markets, driven by safety regulations, brand owners & end users demands for more sustainable products, and the Paris Agreement
- Over the next nine years, major brand owners have committed to specific corporate goals relating to reduction of carbon footprints, sustainable feedstocks, and minimising water use
- A number of major suppliers are struggling to provide customers with suitable replacements and new material inputs. They are locked in with legacy fossil-based plants, and little internal expertise in bio-based manufacturing
- The industry landscape will be very different in 2030, ***providing Circa with major growth opportunities***

Sustainability

## Circa will produce performance biochemicals at scale

- **Ten years and five pilots** to fine-tune and patent the world's only scalable production process for several high value biochemicals
- Extensive commercial work and **strong regulatory tailwinds** resulting in +1m tonne market searching for sustainable chemicals
- The 1,000 tonne ReSolute plant supported by **EU grant and REACH accreditation** will initiate a high growth scale-up plan
- **LOIs with chemical giant Merck KGaA** and other chemicals distributors significantly exceed capacity of the ReSolute plant
- Completed detailed study for a 5,000 tonne plant with industrial partner Norske Skog, basis for **plants up to 50,000 tonnes**
- **Circular economy frontrunner** set to change the significant toll that chemicals has on human health and the environment



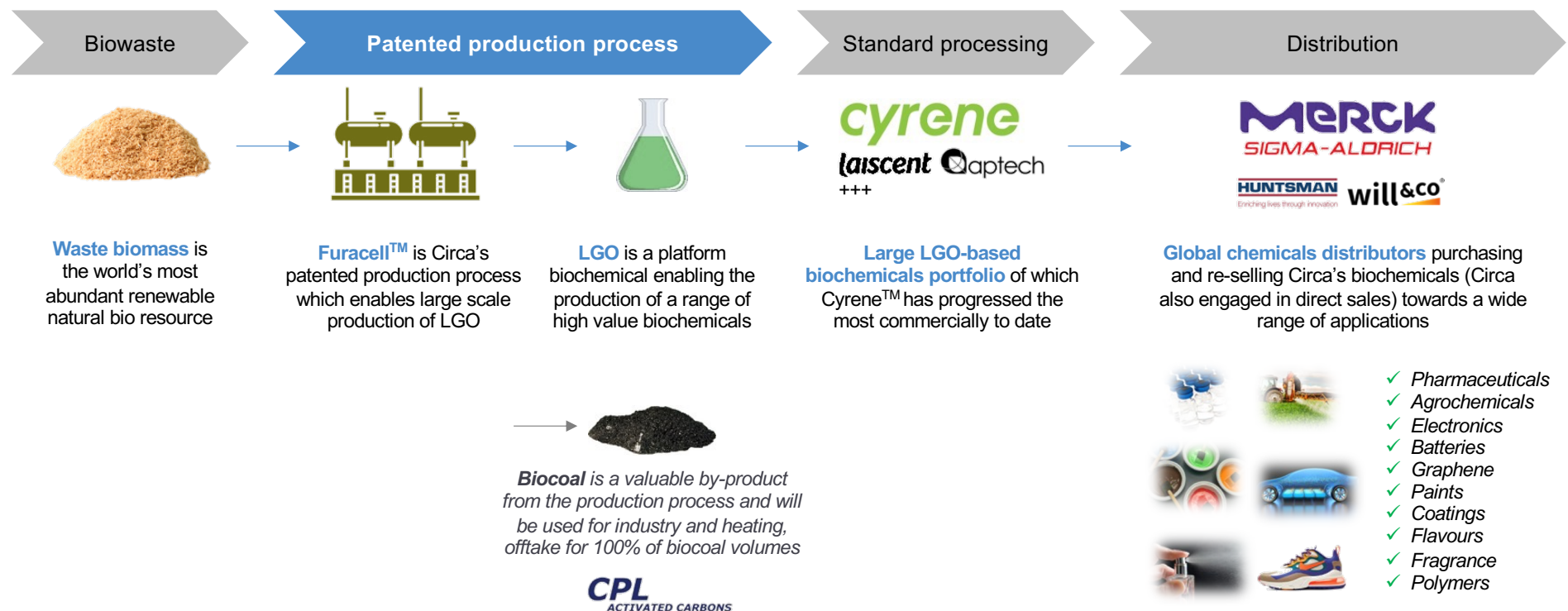
# Circa proprietary Furacell™ process is 4<sup>th</sup> generation technology for the valorisation of biomass



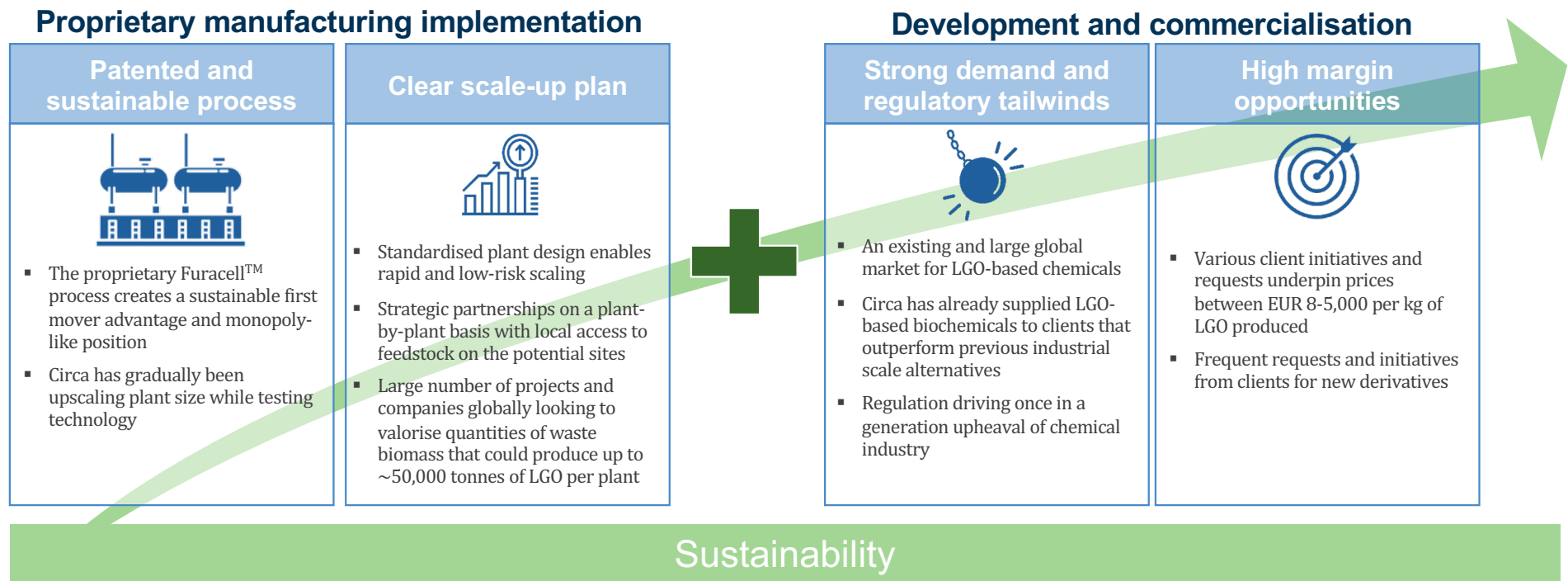
First generation	<ul style="list-style-type: none"><li>• Fuel and building materials<ul style="list-style-type: none"><li>– Energy</li><li>– Sawn goods, plywood</li></ul></li></ul>
Second generation	<ul style="list-style-type: none"><li>• Pulp and paper<ul style="list-style-type: none"><li>– Pulp, paper, packaging</li><li>– Label, bio composites</li></ul></li></ul>
Third generation	<ul style="list-style-type: none"><li>• Extractives<ul style="list-style-type: none"><li>– Modified cellulose</li><li>– Lignin/sugars, biofuel</li></ul></li></ul>
Fourth generation	<ul style="list-style-type: none"><li>• Biomolecules<ul style="list-style-type: none"><li>– High-value biomolecules</li></ul></li></ul>



# Circa converts waste biomass to high-value biochemicals



# Growth strategy based on two clear drivers







# Cyrene™ is Circa's first biochemical with proven commercial potential

**Merck** ABOUT US PRODUCTS & SERVICES SCIENCE & TECHNOLOGY CAREERS INVESTORS

## Merck Introduces New Greener Solvent, Cyrene™

Merck today launched Cyrene™ — a sustainable dipolar aprotic solvent, produced in two steps from a renewable cellulose source

24 APR 2019 | DARMSTADT, GERMANY

◆ **New bio-derived product is a safer, more sustainable alternative for Dimethylformamide and N-Methyl-2-pyrrolidone solvents**

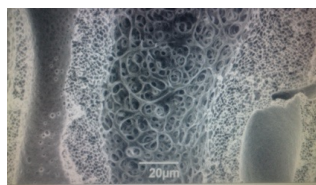
Darmstadt, Germany, April 24, 2019 – Merck, a leading science and technology company, today launched Cyrene™ — a sustainable dipolar aprotic solvent, produced in two steps from a renewable cellulose source. The bio-derived alternative was created in response to the need for solvents to meet stricter regulation requirements for both employee safety and environmental sustainability. The new product targets the rising demand for greener alternatives to Dimethylformamide (DMF) and N-Methyl-2-pyrrolidone (NMP).

"With a strong focus on green chemistry, Merck is dedicated to providing today's scientists with innovative solutions to help solve environmental challenges before us," said Klaus Bischoff, head of Research Solutions, Life Science at Merck. "As a greener alternative, Cyrene™ solvent allows our customers to improve the safety of their processes and reduce the environmental impact of their research and manufacturing — without compromising performance."

- Cyrene™ is a low-toxicity and sustainable solvent that replaces and outperforms toxic and fossil solvents (NMP, DMF, DCM, DMSO)
- NMP and DMF are categorised as Substances of Very High Concern by the European Chemicals Agency (ECHA)
- Use of fossil solvents highly restricted and bans to be fully enacted once suitable alternatives (like Cyrene™) become available at scale
- Cyrene™ is widely acknowledged as the only viable low-toxicity and sustainable alternative<sup>1</sup>, and offers dramatic reduction in waste creation both during production and at end-of-life
- Cyrene™ is sold through chemical distribution giant Merck KGaA, which has a strong focus on green chemistry
- More than 1,000 research and customer test have been executed for Cyrene™ across multiple applications

And further performance-based possibilities in pipeline

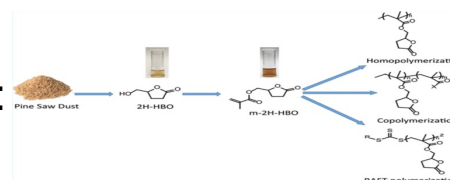
It could be ultra filtration membranes:



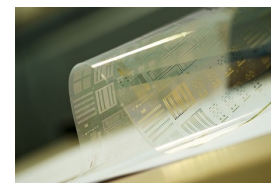
It could be a new epoxy for space rocket fuel tanks :



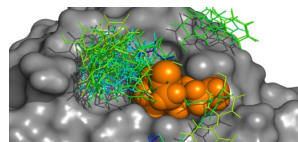
It could be a new specialty bio-polymer:



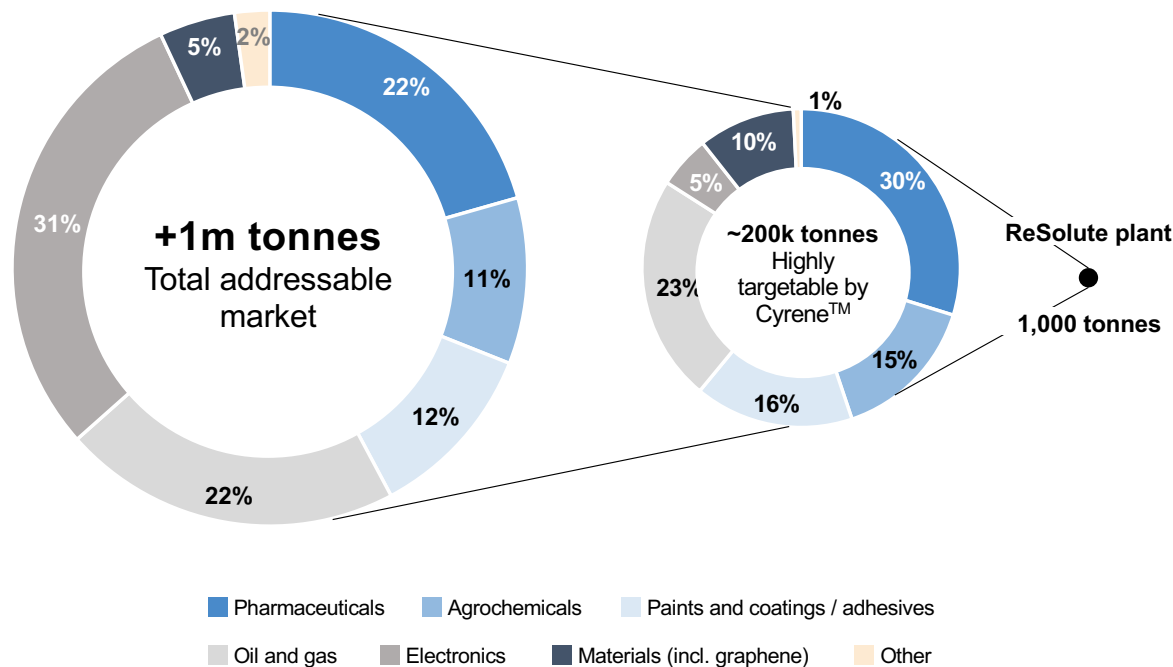
It could be new chemistry for organic thin film transistors:



Or a new starting molecule for pharma:



# Cyrene™ targets a large market with unique performance and sustainability

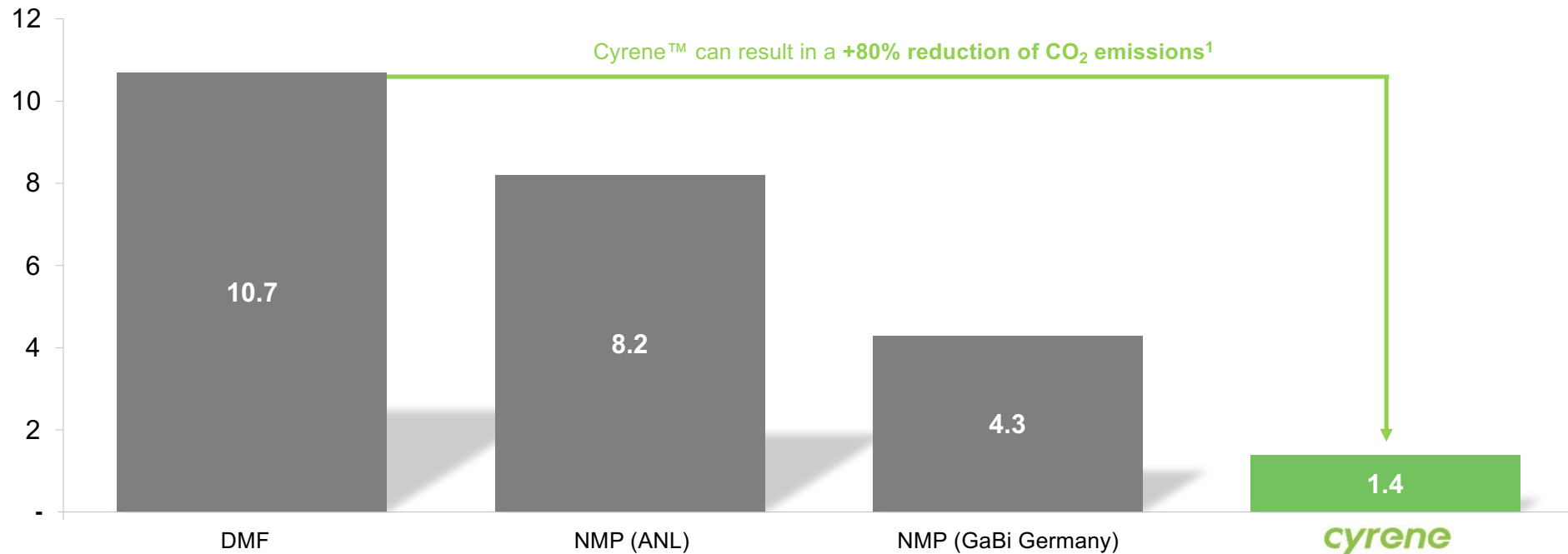


- Global dipolar aprotic solvent market estimated at +1m tonnes
- Currently served by toxic and fossil-based solvents (NMP, DMF, DCM and DMSO)
- Cyrene™ outperforms traditional dipolar aprotic solvents in higher value applications, representing 20-30% of the total market
- Marketed on “outperform” results, and does not rely on being a sustainable and low-toxicity alternative to existing solvents

# Cyrene™ also offers substantially lower CO<sub>2</sub> emissions than competition



Global Warming Potential (GWP)  
(CO<sub>2</sub> equivalent/kg)



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Source: IPCC 2013 Impact Assessment Method. 1) Does not include disposal where Cyrene™ also has an advantage in some processes. A full replacement of existing product mix with Cyrene™ in the 200,000 tonnes unique market is estimated to result in savings of 1.3m tonnes of CO<sub>2</sub> emissions per year





# The ReSolute project is constructing a 1,000 tonne LGO / Cyrene™ plant



**circa**  is leading the  
**ReSolute** consortium

## ReSolute consortium partners



- Horizon 2020 is the largest EU Research and Innovation programme to date and a means to drive economic growth and innovation
- The ReSolute consortium received the prestigious EU Horizon 2020 Flagship grant of EUR 11.6m in H1 2020
- Grant received on the back of extensive review from independent industry experts and in strong competition with other applicants
- The project is developed with and supported by eleven highly qualified partners along the entire value chain
- Strong testimony towards the technical, commercial and economic viability and promise of the project



European  
Commission

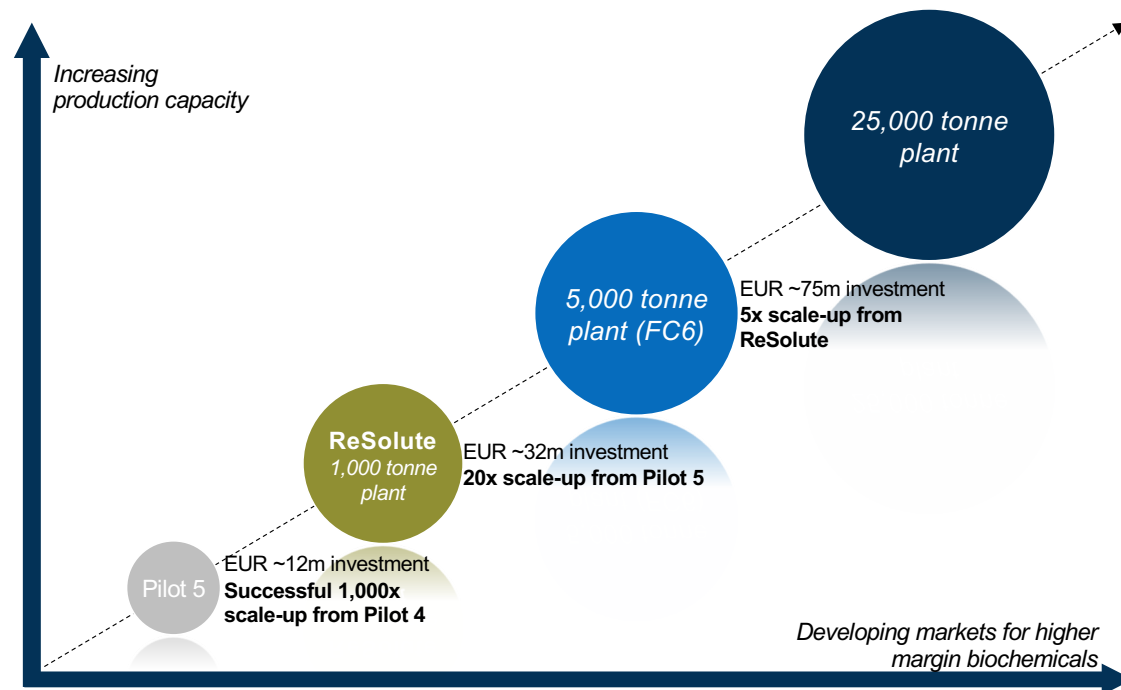
Horizon 2020  
European Union funding  
for Research & Innovation

## ReSolute project: *progressing on schedule*



- Basic Engineering work on target for completion July / August 2021
- Site Head of Terms signed
- Appointment of pre EPC (M) contractor
- Permitting dossiers underway
- Overall, on track for start-up in Q1 2023 according to plan

# ReSolute is the start of commercial scale for Circa



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- Total ReSolute project CAPEX is EUR 32m
- Final investment decision taken in 2020 and start-up expected January 2023
- Cyrene™ will be the commercial foundation for the ReSolute plant
- LOIs in place for more than the ReSolute production volume
- Basis for continued development of other LGO-based biochemicals
- Revenue target of EUR ~1bn in 2030 and attractive margins

## Circa has a clear growth strategy





# Q1 2021 Income statement

Comprehensive Consolidated Statement of comprehensive income 2021		
	<u>Q1 2021</u>	<u>Q1 2020</u>
(EUR)		
Total revenue	5 400	414 937
Total operating expenses	3 242 869	699 867
<b>Operating result</b>	<b>-3 237 469</b>	<b>-284 930</b>
Total finance income	79 170	-3 183
Total finance expenses	285 987	0
<b>Net financial income/ expenses</b>	<b>-206 817</b>	<b>-3 183</b>
<b>Net profit/ loss before tax</b>	<b>-3 444 286</b>	<b>-288 113</b>
Tax expenses	0	0
<b>Net profit/ loss</b>	<b>-3 444 286</b>	<b>-288 113</b>
<b>Other comprehensive income:</b>		
Foreign exchange gains/(losses)	-21 511	0
<b>Total comprehensive profit/ loss for the year</b>	<b>-3 465 797</b>	<b>-288 113</b>

- Revenue not expected before ReSolute plant is commissioned in January 2023
- Total operating expenses are €3.2m FC5 plant operations, administration costs and reorganisation costs account for €1.5m. Employee benefit expenses of €1.6m includes €1m for the short-term employee incentive program and €0.4m for the long-term incentive program.
- Financial income and expense are mainly related to foreign exchange. Circa Group has companies with AUD, GBP and NOK as functional currency.

# Q1 2021 Balance Sheet

## Condensed Consolidated Statement of financial position at 31 March 2021

(EUR)	31.3.21	31.3.20	31.12.20
<b>ASSETS</b>			
Total non-current assets	264 028	4 077	55 219
Total current assets	49 380 628	243 290	6 519 444
<b>Total assets</b>	<b>49 644 656</b>	<b>247 367</b>	<b>6 574 664</b>
<b>EQUITY</b>			
Issued and paid in equity	54 247 412	4 808 145	7 142 044
Other equity	-11 571 836	-10 352 948	-7 489 767
<b>Total equity</b>	<b>42 675 576</b>	<b>-5 544 803</b>	<b>-347 723</b>
<b>LIABILITIES</b>			
Total non-current liabilities	419 044	4 985 598	1 945 224
Total current liabilities	6 550 037	806 572	4 977 162
<b>Total liabilities</b>	<b>6 969 081</b>	<b>5 792 170</b>	<b>6 922 386</b>
<b>Total equity and liabilities</b>	<b>49 644 657</b>	<b>247 367</b>	<b>6 574 664</b>

- **Non-current assets** mainly consist of capitalized expenses related to ReSolute. Expenses are capitalized and offset by grant utilization of 46.2% of total capex.

- **Current assets mainly comprise of cash and cash equivalents following the private placement completed in Q1**

31.12.20 includes short term receivables mainly related to accrued tax grant from Tasmania

31.12.20 Cash and cash equivalent is receipt of ReSolute grant

31.3.21 includes proceeds from IPO

- **Equity** presented in accordance with IFRS
- **Non-current liabilities** : all debts and related party loans settled as part of reorganisation executed prior to listing in Q1
- **Current liabilities** are mainly other payables related to operational activities. The balances at 31.12.20 and 31.3.21 includes the ReSolute project grant received.



## Outlook / focus

- Manage ReSolute project on time and budget
- Finalise discussions with chemical distributors regarding sales agreements
- Continue dialogue and exploration of site opportunities for future plants
- LGO-derivative development and commercialisation strategy underway
- Add further senior personnel to support project and product development
  - GM Sustainability and Marketing appointed
  - Oslo based CFO appointment being finalised
- In process of establishing subsidiary and organisation in France
- Continue to keep shareholders and stakeholders up to date



## Sustainability and Circa

- The level of public awareness and policy engagement with global sustainability issues creates opportunities for those who can enable sustainable business models
- The Paris Agreement is driving decarbonisation of the global economy
- Waste reduction, especially plastics, is evolving circular product life cycles that eliminate toxic substances
- This sustainability context requires the chemicals industry to adapt, creating market opportunities for substitutes
- EU REACH is regulating toxic solvents - and supporting new sustainable alternatives *that perform*
  - With Cyrene, Circa has demonstrated its foresight and capacity to capitalise on these disruptive forces
  - This alignment with sustainability extends to ReSolute, which is planned to occupy a repurposed coal fired power plant, regenerating a disused facility as part of a green energy precinct development
  - Future plants and further LGO derivatives have similar potential to realise net positive impact
  - Circa sees its purpose in the transition to a sustainable economy through the development of sustainable performance biochemicals





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