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# Appendix 4E (Rule 4.3A) Preliminary Report for The Year Ended 31 December 2019

### PRELIMINARY RESULTS FOR ANNOUNCEMENT TO THE MARKET

# (NOT AUDITED)

### **Reporting Period**

Report for financial year ended December 31, 2019 compared. All comparisons are made to financial year ended December 31, 2018.

### Results for announcement to the market

in thousands

	Dec. 31, 2019		Dec. 31, 2018		Movement	
Revenue from ordinary activities	€	1,765	€	579	up	205%
Profit (loss) after tax from ordinary activities attributable to members	€	(17,218)	€	(4,810)	down	258%
Net profit (loss) attributable to members	€	(17,218)	€	(4,810)	down	258%

### **Dividends**

No final dividend was paid in relation to the full year ended December 31, 2018.

No interim dividend was paid in relation to the half-year ended June 30, 2019 or to the full year ended December 31, 2019.

# Net tangible assets

€ / per shares	Dec. 31, 2019	Dec. 31, 2018
Net tangible assets backing per ordinary share	-0.37	0.39

The calculation of net tangible assets per ordinary share uses the total number of shares on issue as at December 31, 2019 being 7,226,678 shares.

### **Review of results:**

During the calendar year 2019 the focus of Pyrolyx was completing its commercial facility in Terre Haute, Indiana (TH #1).

The planned start of commercial operations of Terre Haute #1 was delayed from the planned date of end June 2019 due to performance issues with the Company's contractor, Zeppelin Systems. Zeppelin unexpectedly ceased work on and support for completion of the facility in August 2019. Pyrolyx subsequently had to complete the installation and undertake cold and hot commissioning of the facility using its own resources. Production began in January 2020 and is rapidly ramping up towards its target production levels of 13,000 tons of rCB per annum. By our market insights the rCB production facility will be the largest of its kind in the world. The work on a contract for a Front-End Engineering Design (FEED) study to prepare for construction of a second facility in Terre Haute (TH#2) was finalized. Further work on TH #2 is on hold pending commercial operation of TH#1 at target levels of production.

Pyrolyx reported full year revenue of €1,765 thousand an increase of around 205% on prior year revenues. Profit before interest, taxes, depreciation and amortization was minus €7,384 thousand. The result is due to the continued lack of scale and hence operational efficiency of the Company's Stegelitz facility, additional expenses associated with the Terre Haute facility and the North American market development strategy, and to restructuring costs in Germany.

Net tangible assets backing per ordinary share worsened to - € 0.37 per share (2018: +€ 0.39 per share).

The AGM is scheduled for July 2020.

The company is not proposing to pay dividends.

The report is based on accounts which are in the process of being audited.

### Changes in control over entities:

Pyrolyx International GmbH decreased its stake in Pyrolyx USA, Inc. from 90,7% to 88.4% as part of a financing transactions in 2019.

Two new 100% subsidiaries were established for the acquisition of the assets from J&R Tire Recycling Inc.: Pyrolyx Transportation, as a tire collection and hauling company, and Pyrolyx Tire Recycling, as an end-of-life tire (ELT) recycling company.

### Details of associates and joint ventures:

In February 2019, Pyrolyx USA entered into an agreement to acquire J&R Used Tire Service Inc. (Newport, Indiana) as part of the group's vertical integration strategy. In September 2019 Pyrolyx USA acquired the assets of J&R Tire Recycling Inc. Two new subsidiary companies were established to own the assets acquired in this purchase: Pyrolyx Transportation, a tire collection and hauling company; and Pyrolyx Tire Recycling, an end-of-life tire (ELT) recycling company. This was a strategic acquisition in order to supply enough ELT feedstock for Terre Haute #1 and in future for Terre Haute #2.

### Set of accounting standards used in compiling the report:

The consolidated financial statements have been prepared in accordance with IFRS International Financial Reporting Standards and are currently being audited.

### **Details of review modifications:**

IFRS 16 (Leasing) has been applied in accordance with IFRS rules.



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Pyrolyx AG Munich

**Directors' Report** 

for the year ended December 31, 2019

Pyrolyx AG Landshuter Allee 8-10 D-80335 Munich www.pyrolyx.com

# Directors' Report for the period January 1 to December 31, 2019

The directors present their report together with the financial report of the Pyrolyx Group (**Pyrolyx**, **or the Company**) being Pyrolyx AG and its subsidiaries for the financial year ended 31 December 2019 and the auditor's report thereon. Terms that are defined appear in bold the first time they are used.

# 1. Director's roles and profiles

In accordance with German law, Pyrolyx has both a Supervisory Board and a Management Board. These Boards are separate; an individual may not be a member of both boards. The Supervisory Board appoints the members of the Management Board and supervises the activities of the Management Board. The Management Board represents Pyrolyx and is responsible for the management of its affairs.

# 1.1 Supervisory Board (Non-Executive Directors)

Names and profiles of the people who served on the Supervisory Board during fiscal year 2019:

**David A. Steele** (appointed July 20, 2018) was formerly a senior executive with Worley, an international engineering company, holding positions in Australia, Asia and in the United States, culminating as Group Managing Director, Services. Mr. Steele was appointed Chairman of the Supervisory Board on April 17, 2019.

**Mr. William Best** (appointed January 28, 2019) was previously a long time Hill Samuel /Macquarie Bank executive director and retiring in 2010 after over 27 years with the investment bank. During this time, he held a variety of senior management positions culminating as Managing Director of Macquarie Equities and joint head of Macquarie Underwriting Limited.

**Stephen Roberts** (appointed January 28, 2019) is an experienced company director and board chair with listed and private commercial enterprises and large not for profit organizations. He has 30 years' experience as MD & CEO in global businesses particularly with extensive direct leadership experience in Asia Pacific including Japan and the Middle East.

**Bernhard Meder** (re-appointed February 18, 2019), is an entrepreneur and founder of the Meder Electronics Group (MEG). MEG is a market leader in the field of electromagnetic component production. Mr. Meder is also founder of M-Invest GmbH in Germany. Mr. Meder was automatically re-appointed to the Supervisory Board after his resignation as member of the Management Board became effective.

**David F. Groves, Chairman** (appointed July 20, 2018) is a private investor holding various directorships in ASX listed and private companies. Mr. Groves is also a Council Member at the University of Wollongong. Mr. Groves was Chairman of the Supervisory Board from July 20, 2018 to April 16, 2019. He resigned as Member of the Supervisory Board on April 17, 2019.

**Dr. Lars Franken** (appointed July 20, 2018) is a Partner and member of the Managing Board of Independent Valuation and Consulting IVC corporation. Mr. Franken resigned as Member of the Supervisory Board on January 31, 2019.

**Guido Veit** (appointed April 17, 2018) has more than twenty years of international project and plant engineering experience. Mr. Veit is currently responsible for the global rubber, plastics and mixing business of Zeppelin Systems. Mr. Veit resigned as Member of the Supervisory Board on February 1, 2019.

# 1.2 Management Board (Officers)

Names and profiles of the people who served on the Management Board during fiscal year 2019:

Michael Triguboff, Chief Executive Officer (effective December 15, 2018), is director of numerous public and private companies in Asia, the US and Australia. Mr. Triguboff is a former founder and managing director of boutique funds manager MIR Investment Management which specialized in Asia-Pacific equities and was previously founder and managing director of Lazard Asset Management Pacific and global partner of Lazard Freres. Mr. Triguboff resigned from the Supervisory Board effective. December 15, 2018 and was elected to become Chief Executive Officer (CEO) on December 15, 2018.

Bernhard Meder (effective July 16, 2018 – February 18, 2019), is an entrepreneur and founder of the Meder Electronics Group (MEG). MEG is a market leader in the field of electromagnetic component production. Mr. Meder is also founder of M-Invest GmbH in Germany. Mr. Meder was appointed interim CEO effective July 16, 2018. On December 15, 2018 Mr. Meder stepped down as CEO and announced his resignation from the Management Board condition precedent to the entry of Michael Triguboff in the commercial register as Member of Management Board. The registration in the register became effective on February 18, 2019.

# 1.3 Supervisory Board meetings

Supervisory Board meetings held, and attendance, are set out in the table below.

Director	10 Jan	26 Feb	29 Mar	14 Apr	14/19 Apr	17 May	2 Jun	5 Jul	20 Aug	18 Oct	14 Nov	11 Dec
Groves	Х	Х	Х	X	Х	Х	X	n/a	n/a	n/a	n/a	n/a
Steele	X	Х	0	Х	Х	Х	Х	Х	X	Х	X	X
Best	n/a	Х	Х	Х	Х	Х	Х	Х	X	Х	X	×
Roberts	n/a	X	Х	Х	Х	Х	Х	Х	X	Х	Х	X/O
Meder	n/a	0	Х	Х	Х	Х	Х	0	Х	Х	Х	Х
Franken	х	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Veit	х	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

# 1.4 Nomination and Remuneration Committee meetings

The Nomination and Remuneration Committee did not meet in 2019.

# 1.5 Audit and Risk Committee meetings

The Audit and Risk Committee consisted of David Steele and Lars Franken until Dr Franken's resignation. Stephen Roberts joined the committee in February 2019. The committee was chaired by Dr Franken until his resignation and then by David Steele until his appointment to Chair of the Supervisory Board, after which Stephen Roberts was elected chair.

The audit committee met on March 25, 2019 to review the year end reporting for 2018, and on August 27, 2019 to review the half-year reporting for fiscal year 2019.

The audit committee regularly reviewed and approved via circular resolution the quarterly Appendix 4C reporting.

## 1.6 Remuneration Practices

# 1.6.1 Supervisory Board (Non-Executive Directors)

The Renumeration for the Members of the Supervisory Board was altered in 2019 by resolution of the Annual General Shareholder Meeting held on June 7, 2019.

Following this resolution, the members' annual remuneration is € 30,000 (formerly €6,000), with exception of the Chairman, whose remuneration is € 80,000 (formerly €28,000), reflecting the role as key liaison to the Management Board. In addition, out of the pocket expenses and value added tax on renumerations are reimbursed and insurance fee on D&O policies are covered.

All members of the Supervisory Board have elected to defer their payments until the Company's operations in Terre Haute are cash flow positive.

### 1.6.2 Management Board (Officers)

Members of the Management Board were remunerated with a market-oriented fixed base salary that is reviewed yearly. Based on a Business Management Agreement, Michael Triguboff charges € 18,000 per month via his associated company TSAL PTY LTD.

# 2. Operating result

**Pyrolyx** reported full year revenue of € 1,765 thousand an increase of around 205% on prior year revenues. Profit before interest, taxes, depreciation and amortization was minus € 7,382 Thousand. The result is due to the continued lack of scale and hence operational efficiency of the Company's Stegelitz facility, additional expenses associated with the Terre Haute facility and the North American market development strategy, and to restructuring costs in Germany. Net tangible assets backing perordinary share worsened to minus € 0.37 per share (2018: +€ 0.35 per share).

# 3. Review of operations

During the calendar year 2019 the focus of **Pyrolyx** was completing its commercial facility in Terre Haute, Indiana, while reducing operating costs elsewhere wherever possible.

**Pyrolyx AG** headquarters office space and staff were significantly downsized and the office moved to much smaller location in the city of Munich. In parallel an operational audit was undertaken of **cct Stegelitz GmbH**, the corporate entity which owns the Company's facility in Stegelitz. The outcome of this audit is still under review and management is considering options to improve the performance of this facility.

**Pyrolyx USA**: The focus continued to be on completion of the facility in Terre Haute (Terre Haute #1). The planned start of commercial operations of Terre Haute #1 was delayed from the planned date of end June 2019 due to performance issues with the Company's contractor, Zeppelin Systems. Zeppelin unexpectedly ceased work on and support for completion of the facility in August 2019. Pyrolyx subsequently had to complete the installation and undertake cold and hot commissioning of the facility using its own resources. Production began in January 2020 and is ramping up towards its target production levels of 13,000 tonnes of rCB per annum.

Pyrolyx and Zeppelin are addressing their respective claims and counterclaims in court with no current resolution. Zeppelin's claims, although strongly refuted by Pyrolyx, have been included as liabilities in Pyrolyx's balance sheet.

The work on a contract for a Front-End Engineering Design (FEED) study to prepare for construction of a second facility in Terre Haute (Terre Haute #2) was finalized. Further work on Terre Haute #2 is on hold pending commercial operation of Terre Haute #1 at target levels of production.

In September 2019 Pyrolyx USA acquired the assets of J&R Tire Recycling Inc. Two new subsidiary companies were established to own the assets acquired in this purchase: Pyrolyx Transportation, a tire collection and hauling company; and Pyrolyx Tire Recycling, an end-of-life tire (ELT) recycling

company. This was a strategic acquisition in order to supply sufficient ELT feedstock for Terre Haute #1 and in future for Terre Haute #2.

Funding German operational improvements and the construction of Terre Haute #1 present significant challenges to Pyrolyx. Cash flow from operations has improved after implementation of restructuring measures but remains negative. Cash flow from investing activities is dominated by the construction of Terre Haute #1. Most of the capital cost of this facility is funded through an industrial revenue bond but construction cost over-runs totaling greater than \$15M are being financed through tranches of debt and equity financing with private investors (see cash flow statements in the management report for further details). The Company believes it has identified and accounted for all material capital expenditure items to achieve target production rates. The Company expects a strong operational cash flow once Terre Haute #1 is fully operational.

Due to the delay in startup of operations of Terre Haute #1, the company has not been able to comply with the financial covenants of the bond agreement. However, the company is completely current to meet all her debt obligations within the bond agreement. Due to IFRS and US GAAP accounting standards the complete liability from the bond must be classified as 'current'. Management has actively communicated with the bondholders and provided a plan to bring the company into compliance with the financial covenants during fiscal year 2020.

A large long-term supply contract for the delivery of recovered carbon black (**rCB**) up to 10,000 metric tons annually by Pyrolyx was agreed and signed with the German based, world leading, tire production group Continental Tires in 2019.

# 4. Significant Changes in the state of affairs

Pyrolyx USA acquired J&R Tire Recycling Inc. (Indiana) as part of the company's vertical integration strategy as described above.

Zeppelin USA filed a mechanics lien on the Company's Terre Haute facility. In parallel Zeppelin USA filed a complaint in the United States Southern District of New York claiming breach of contract and seeking injunctive relief. The damages sought by Zeppelin, though denied by Pyrolyx, have been booked as liabilities of Pyrolyx. Pyrolyx has filed a complaint seeking significant damages from Zeppelin for non-performance on their contractual obligations regarding the completion of Terre Haute #1 as well as fraudulent inducement, misrepresentation and tortious interference. The cases are pending.

# 5. Principal activities

**Pyrolyx** has developed and operates a specialized process that transforms end-of-life tires into high-grade, valuable raw materials, primarily rCB. No significant change these activities occurred during the year.

### 6. Events after balance sheet date

In December the Management Board resolved and the Supervisory Board agreed an overall capital increase by way of contribution in cash for the issue of 645,850 registered shares of par value € 1.00 out of the existing Authorized Capital 2019/I at a share price of € 7.87. The overall volume of the capital increase does not to exceed 10% of share capital at resolution for the respective authorized capital and so the Management Board authorized the exclusion of the preemptive rights of existing shareholders. The first tranche of the issue with 286,438 new shares was entered into the commercial register on January 30, 2020 and the second tranche with 359,412 new shares is in process of being registered.

The management team of Pyrolyx was further strengthened by the appointment of new COO Mr. Al Cutrone, who joined the Pyrolyx group effective February 11, 2020.

### 7. Environmental issues

The operations of Pyrolyx are managed in compliance with all relevant local and national laws and regulations in relation environmental performance, management and reporting. No reportable incident was recorded in 2019.

### 8. Dividends

Pyrolyx did not pay any dividends in 2019.

# 9. Share options

# 9.1 Executive Stock Option Program

A stock option plan for employees and members of the management board (equity settled share-based payments) had been set up in August 2013 (tranche 2013) and August 2014 (tranche 2014). The two performance hurdles have not been met within the given time period thus none of the granted were executable by December 31, 2018.

Effective 2019 the company started a new equity-settled program based on operational and financial targets pertaining to business development in the United States. Initially entitled are members of Pyrolyx USA executive management only. The Annual General Meeting on June 7, 2019 resolved the new Stock Option Plan with the creation of Conditional Capital 2019/I.

# 9.2 Shareholder options (warrant) agreement

# a) Equity Portions from Warrants on Pyrolyx AG

Pyrolyx, AVIV Investments Pty Ltd, Galaxis Advisory SA. and M-Invest GmbH entered into a Novation Agreement in 2016 to convert their existing warrants into 1,005,817 new shares (AVIV Investments Pty Ltd, 899,657 new shares; Galaxis Advisory SA 89,227 new shares; and M-Invest GmbH, 16,933 new shares). This novation was subject to several conditions' precedent, which had been satisfied thus a shareholder options liability in respect of AVIV Investments Pty Ltd (899,657 new shares), Galaxis Advisory SA (89,227 new shares) and M-Invest GmbH (16,933 new shares) arose. On 6 May 2019 AVIV Investments Pty Ltd and Meder Invest GmbH participated with their warrants in a capital increase by contribution in kind and received 899,657 (AVIV) and 16,933 (M-Invest). Galaxis Advisory SA did not participate in this capital increase, and therefore a shareholder options liability (at fair value) exists in the amount of € 522k (89,227 potential shares multiplied by € 5.85 share price of as of 31 December 2019) (2018: € 4,989k).

# b) Issued shares and warrant on shares of Pyrolyx USA

On 5 November 2018 the Board of Directors of Pyrolyx USA, Inc. with approval from Pyrolyx AG increased authorized shares from 3,500 to 4,000. In December 2019 the Longbridge Trust exercised 94 warrants in order to subscribe 94 shares of Pyrolyx USA against payment of \$11,011.50 per share (total amount \$1,035k). After this transaction a total of 3,656 shares of Pyrolyx USA are outstanding as of 31st of December 2019.

In addition, 186 warrants are outstanding as of 31. December 2019, with the right to convert into 186 Pyrolyx USA shares. The warrants were issued in relation to shareholder loans and provide the beneficiaries with the right to purchase one share of Pyrolyx USA per warrant issued. Each warrant is exercisable with a price of \$11,011.50 per share with a term of 10 years from issue date.

The following beneficiaries received warrants in 2018 and 2019:

- TSAL PTY LTD received 154 warrants in relation to the loan agreement dated December 4,
   2018 Pyrolyx USA Inc. all exercisable by AVIV Investment, a TSAL related organization.
- Reklaim INC. received 5 warrants in December 2018 in as an anti-dilutive measure.
- RPSCO PTY LTD received in total 94 warrants in relation to the loan agreements with Pyrolyx USA Inc. in December 2018, April 2019 and September 2019 which where all assigned to Longbridge Trust. All of these Warrants were exercised by the Longbridge Trust on December 5, 2019. Thus, none of the issued warrants were outstanding at December 31, 2019.
- RPSCO PTY LTD received additional 3 warrants in relation to the loan agreement with Pyrolyx USA Inc. in September 2019 and assigned them to The Perpetual Horizons Trust.
- RPSCO PTY LTD received further 6 warrants in relation to the loan agreement with Pyrolyx USA Inc. in September 2019 and assigned them to The Platinum Peak Trust.
- Leroma Pty Ltd received 6 warrants in relation to the loan agreements with Pyrolyx dated
   September 11, 2019
- Johalius Investments Pty Ltd received 6 warrants in relation to the loan agreements with Pyrolyx dated September 11, 2019
- Scawton Limited received, 6 warrants in relation to the loan agreements with Pyrolyx dated
   September 23, 2019

# 10. Indemnifying director, officer or auditor

During the financial year 2019, Pyrolyx has paid insurance premiums in respect of a director's and officers' liability insurance contract (**D&O**). The contract insures each person who is or has been a director or officer of the company against certain liabilities arising in the course of their duties to the company and its subsidiaries.

# 11. Proceedings of behalf of the company

No person has applied for leave of the Court to bring proceedings on behalf of the company or intervene in any proceedings to which the company is party for the purpose of taking responsibility on behalf of the company for all or any part of those proceedings.

Pyrolyx was not party of any such proceedings during the year.

Perth, February 27, 2020

For the Supervisory Board: David Steele (Chairman)

For the Management Board: Michael Triguboff (CEO)

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Pyrolyx AG Munich

**Appendix 4E Final Report** 

for the year ended December 31, 2019

**Pyrolyx AG** 

Landshuter Allee 8-10 D-80637 Munich www.pyrolyx.com

# Group Management Report for the period January 1 to December 31, 2019

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### 1. Principles and introduction

Pyrolyx AG is the parent company of a group of entities (jointly **Pyrolyx**) that developed and operates a specialized process which transforms end-of-life tires (**ELT**) into high-grade, valuable raw materials, primarily recovered carbon black (**rCB**). Carbon black is used in the manufacture of tires, and mechanical rubber products, as well as plastics and pigments. Pyrolyx's process delivers compelling benefits when compared to the traditional manufacture of carbon black, including reduced carbon dioxide emissions.

The basis of Pyrolyx's business model is the implementation of sustainability principles to the manufacture of industrial commodities such as rCB in a profitable manner. Every ton of rCB manufactured saves approximately 2.7 tons of CO2 compared to production and use of traditional carbon black. Additionally, every 20 oven Pyrolyx facility consumes 4 million ELTs annually. These ELTs would otherwise be destined for landfills or burning.

Due to regulatory activity and sustainability efforts, major retailers, auto companies, tire manufacturers and masterbatch producers are increasingly seeking to utilize recycled inputs in their products. For example, in the EU, Directive 2000/53/EC sets a target of recycling 95% of all car components.

The core principle under which Pyrolyx operates is the premise that these sustainability benefits can be achieved in a way that is profitable to both investors, partners, and customers.

### 1.1 Business model

Pyrolyx's objective is to establish its technologies for the sustainable recycling of end-of-life tires, initially in the USA and ultimately globally through commercial industrial plants to be built and run by Pyrolyx companies and/or licensees.

Pyrolyx AG currently holds interests directly or indirectly in various companies, which are consolidated below her (together the 'Pyrolyx Group'). Pyrolyx holds no other investments in any other companies. Pyrolyx AG is not included in the scope of consolidation of any other company and is the management holding company at the helm of the Pyrolyx Group.

Pyrolyx AG 20% 100% 100% Pyrolyx International 60% Pyrolyx Invent GmbH cct Stegelitz GmbH GmbH ~88.4% Pyrolyx USA, Inc. 100% 100% 100% 100% Pyrolyx Transportation Pyrolyx Tire Recycling Pyrolyx USA Indiana, Pyrolyx Indiana Rail, LLC.

The corporate structure of the Pyrolyx group as of December 31, 2019, is:

Pyrolyx AG's business model is to develop, own and operate facilities utilizing its technology around the world. The first example of the development of this business plan is the financing and construction of the Company's first large scale facility in Terre Haute, Indiana.

Pyrolyx Invent GmbH (founded August 2013) holds the intellectual property and patents of the group.

Pyrolyx International GmbH was founded in 2015 in connection with the acquisition of cct Stegelitz GmbH and is intended to be the parent company of future subsidiaries.

Pyrolyx USA, Inc. is a joint venture between Pyrolyx International GmbH and Reklaim, Inc. for the purpose of owning and operating the Group's facilities for rCB in the USA and Canada.

Pyrolyx Indiana LLC was set up as the operating company for the Pyrolyx production plant in Terre Haute, Indiana, USA, the construction of which began in August 2017 and commercial operations began in January 2020. It is the entity that owns and operates Pyrolyx's first US facility in Terre Haute, Indiana. (**Terre Haute #1**). Pyrolyx Indiana, LLC is also currently developing a second facility (**Terre Haute #2**) that will be co-located with Terre Haute #1 on the property at 4150 East Steelton Avenue in Terre Haute, Indiana.

Pyrolyx Rail LLC owns a section of rail track which connects to main rail infrastructure which allows the shipment via bulk rCB filled rail cars to customers.

In September 2019, Pyrolyx USA acquired the assets of J&R Tire Recycling, Danville IL. The assets were subsequently organized into 2 separate newly founded companies: Pyrolyx Transportation LLC, which is responsible for the collection and hauling of ELTs, and Pyrolyx Tire Recycling LLC, which collects and recycles ELTs including the delivery of tire shreds for further processing at Pyrolyx Indiana (see 1.2).

### 1.2 2019 Corporate Strategic Activities

In September 2019 Pyrolyx USA purchased the assets of J&R Used Tire Recycling of Danville Illinois, and incorporated a new Indiana entity called Pyrolyx Tire Recycling, LLC ("PTR"). PTR collects and processes end of life tires to supply the Pyrolyx facility in Terre Haute, Indiana.

In December 2019 Pyrolyx USA Indiana, LLC received approval from the City of Terre Haute for the creation of up to \$70 million bonds to fund the construction of Terre Haute #2. If built, the second facility will be co-located with the existing Pyrolyx Indiana, LLC Terre Haute facility and will have the same annual rCB capacity as the existing facility.

In November 2019 Pyrolyx signed a 5-year agreement for the supply of rCB to Continental's facilities around the world. This supply agreement contracts the delivery of 10,000 metric tonnes per year of rCB to Continental. This agreement will support Pyrolyx's growth with additional manufacturing facilities in North America and Eastern Europe, and specifically details sales over the next five years rising to 10,000 metric tonnes per year. This agreement highlights the commitment of Continental and Pyrolyx to creating environmentally sustainable supply chains for tire manufacturing.

### 1.3 Research & development

For a technology company such as Pyrolyx, research and development are key activities to achieve and maintain a market leading position.

Pyrolyx has the advantage of nearly 10 years of experience manufacturing and selling rCB from its Stegelitz Germany manufacturing facility and research from its associated laboratory as well as the Reklaim facility in the USA.. This strong focus on research and development is one of the reasons that Pyrolyx is seen by customers as one of the technology leaders in the rCB industry.

Pyrolyx's research and development in 2019 concentrated on the following areas:

- Material tests with leading companies in the tire, technical rubber, plastics and masterbatch industries with the aim of acquiring new key accounts and securing existing ones.
- Assisting in the development of global ASTM (ASTM International is an international standards
  organization that develops and publishes voluntary consensus technical standards for a wide
  range of materials, products, systems, and services) standard for rCB including the identification
  of unambiguous test methods to analyze the behavior of rCB in various industrial applications so
  that internationally recognized test methods and specifications can be developed and defined on
  this basis.
- Development of advanced testing capabilities at the newly developed laboratory at Terre Haute #1. These laboratory capabilities allow Pyrolyx to both monitor and maintain produce quality during ongoing rCB production, but to also develop improved manufacturing techniques.

### 1.4 Control system

Risk management involves identifying the types of risk exposure within the company, measuring those potential risks, proposing means to control, transfer, hedge, insure or mitigate some of the risks and estimating the impact of various risks on the future earnings of the company.

For Pyrolyx the key focus areas are in particular

- Implementation of a Companywide Enterprise Resource and Planning System ("ERP"). Pyrolyx has chosen to work with Syspro ERP, a medium sized ERP provider with a focus on manufacturing clients.
- Terre Haute commissioning and startup as the main investment object is closely monitored with project management processes and financial reviews.
- cct Stegelitz production as an operational site for supply and Research & Development is systematically reviewed based on an integrated management system (EN ISO 9001 and 14001 certified).
- Liquidity and cost management given the current dependency on external funding with a high frequency of reporting and reviews as well as tight cost control.
- Development of existing customers, including tire manufacturers, specialty rubber manufacturers and plastic master batch manufacturers.

System support is being further strengthened to accommodate the expected growing volume of business.

The Management team only assumes reasonable, manageable and controllable risks if they are likely to result in an increase in the company's value. Important decisions are only taken after consulting the Supervisory Board.

If specific risks are identified, a tailored risk assessment is provided, and financial and non-financial performance indicators are reported to the Chairman of the Supervisory Board and then assessment is provided to the Supervisory Board to ensure a transparent and solid basis for the assessment of risks and opportunities. As a result, the Management Board and other executives can take appropriate action to ensure the stable control of the company.

### 2. Course of Business

### 2.1 2019 Activities for Terre Haute #1

The year 2019 was dominated by the completion of construction and the initiation of commissioning of Terre Haute #1. Once fully operational Terre Haute #1 will allow the Company to achieve operational profitability.



Terre Haute #1 - photo taken June 2019

Pyrolyx and its suppliers completed the majority of construction tasks by the end of June 2019. After completion of the major construction tasks, Pyrolyx cold commissioned the manufacturing systems. Cold commissioning is the powering up and operating all systems and equipment in the facility without products in order to verify that the manufacturing process is functioning as intended.

### Terre Haute #1 - Oven Cold Commissioning

Because of issues with Pyrolyx's main contractor, Zeppelin, the cold commissioning tasks took longer than planned and additional expertise had to be resourced by Pyrolyx directly. Cold commissioning was complete by the end of the 4<sup>th</sup> quarter, 2019.

Hot commissioning is the process of introducing product to the manufacturing system in order to tune and adjust the equipment to achieve the quality and output goals of the facility. For Pyrolyx, the most significant tasks for hot commissioning are oven operations and the rCB post-processing system.





Oven hot commissioning involves the introduction of Pyrolyx's ELT feedstock to the ovens. Each oven load is approximately 2,000 kilograms of ELT, which will yield approximately 666 kilograms of char (to be turned into rCB), 1,220 kilograms of oil (to be sold) and approximately 160 kilograms of metal (to be sold).

When fully commissioned, the Indiana plant will process approximately 40,000 metric tons of end-life-tires annually and have an annual output of approximately 13,000 metric tons of rCB, 17,500 metric tons of pyrolysis oil and 6,200 metric tons of steel. Engineering work has also commenced on the definition and approvals for the second plant in Terre Haute.

### 2.2 2020 Planned Activities for Terre Haute #2

During initial development of Terre Haute #1 a second plant, Terre Haute #2, on the same facility location was anticipated. Sufficient land was acquired and major utilities, including water and natural gas, electricity scaled for two facilities on the same location.

Additionally, sufficient land was originally acquired to support two facilities on the same location in Terre Haute, Indiana.



Terre Haute #2 – Facility Location (Terre Haute #1 visible to right)

During 2019, Pyrolyx progressed with the design and budget development for Terre Haute #2. Taking advantage of the lessons learned during the construction, commissioning, and startup of Terre Haute #1 will be critical to the efficient development of Terre Haute #2. Pyrolyx has retained several engineering and construction companies to support the design and construction of Terre Haute #2.

In January 2020, the Terre Haute Economic Development Commission and the Terre Haute City Council approved a bond ordinance that allows the financing of up to \$70,000,000 of tax-exempt bonds for the construction and startup of Terre Haute #2. As currently approved, these bonds are of identical structure to the tax-exempt bonds used to finance Terre Haute #1.

### 2.3 Economic outlook for rCB

The global carbon black market is expected to reach an estimated \$20.2 billion by 2023 with a CAGR of 5.6% from 2019 to 2023.<sup>1</sup>

The major growth drivers for this market are increasing tire production, and rising demand for specialty carbon black in plastic, ink, and coating applications.

In the US four of the five largest traditional carbon black manufactures announced price increases or pricing changes that increased the price of traditional carbon black.

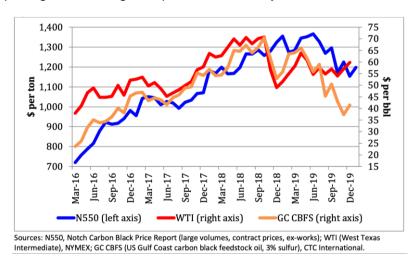
Cabot - July 5, 2019, increase of \$154 per metric ton (approximately 12%)<sup>2</sup>

Siehe unter: <a href="https://www.marketwatch.com/press-release/carbon-black-market-2020-global-industry-analysis-by-trends-size-share-company-overview-growth-and-forecast-by-2026-latest-research-report-by-industry-research-2020-01-23</a>

Siehe unter: http://investor.cabot-corp.com/news-releases/news-release-details/cabot-corporation-increase-prices-rubber-carbon-black-products-0

- Sid Richardson July 15, 2019 increase of \$132 per metric ton (approximately 10%)<sup>3</sup>
- Orion July 24, 2019 increase of \$176 per metric ton (approximately 14%) <sup>4</sup>
- Birla July 29, 2019 switch to low sulphur fuel oil as index (approximately 10%) 5

Pyrolyx commissioned Notch Consulting of Massachusetts, US to perform an independent market evaluation of traditional carbon black and rCB. This study included estimates of future traditional carbon black and rCB growth rates and pricing and found that the market for carbon black in general remains strong and is expected to continue to increase over the coming years. Carbon black pricing, and therefore rCB pricing tracks the global price of oil closely.



### 2.5 2019 Corporate Development

Sales grew 204% from €579K to €1,765K in 2019, below Pyrolyx' production targets due to the delay in start-up operations of Terre Haute #1 into early 2020. The addition of Pyrolyx Tire Recycling, LLC (PTR) through an acquisition added revenues of €930K. Total revenues for PTR are forecast at €4 million for 2020. Sales for the full year for rCB are expected to grow to over €9M.

### Interest in other entities

Pyrolyx International GmbH decreased its stake in Pyrolyx USA, Inc. from 90.7% to 88.4% as part of a financing transaction in Q2 2019 and Q4 2019. For further explanation see Notes 4.11c.

<sup>3</sup> Siehe unter: https://notchconsulting.files.wordpress.com/2018/06/sidrich-pr-price-increase-june-2018.docx

Siehe unter: <a href="https://www.rubbernews.com/suppliers/orion-increase-carbon-black-prices-north-america">https://www.rubbernews.com/suppliers/orion-increase-carbon-black-prices-north-america</a>

<sup>&</sup>lt;sup>5</sup> Siehe unter: <a href="https://birlacarbon.com/birla-carbon-north-america-price-index-change/">https://birlacarbon.com/birla-carbon-north-america-price-index-change/</a>

### Liquidity management and financing

Pyrolyx has not generated positive cash flows and has invested significant funds in the construction of the Indiana plant (TH1). This is expected to change as Terre Haute #1 becomes fully operational in early 2020.

Project financing for Terre Haute was secured in 2017 and is held as restricted cash with payments following an audited process agreed with the lender. Additional restrictions for cash on Pyrolyx USA accounts apply as a reserve to funding change orders and cost overruns. As previously disclosed, it is expected that the original budget will be exceeded; current estimate net of reserves is USD 17million for which funds have been reserved.

Due to the delay in startup of operations of TH1, the company has not complied with the financial covenants of the bond agreement. See related comments under 'Development of the asset and capital structure'.

### **Patents**

Pyrolyx was granted patents related to "blending of rCB directly in the furnace CB" and "Pyrolyx process and cleaning system" in various countries, notably USA, China, and Russia (US 14/411,405 and US 15/589,425), Russia (RU 2015100232) and China (CN 201380034851). Patents are pending in other jurisdictions.

### Supervisory Board

As of December 31, 2019, the Supervisory Board has the following members:

- Dave Steele was elected effective July 20, 2019 and was appointed Chairman April 17, 2019
- William Best was appointed effective January 28, 2019.
- Stephen Roberts was appointed effective January 28, 2019.
- Bernhard Meder re-appointed February 18, 2019.

There were the following changes to the Supervisory Board during 2019:

- David Groves was Member of the Board from July 20, 2018 until April 17, 2019, thereof he was Chairman from July 20, 2018 until April 16, 2019.
- Dr. Lars Franken was Member of the Board from July 20, 2018 until January 31, 2019.
- Guido Veit was Member of the Board from April 17, 2018 until January 31, 2019.

There are two active committees with the Supervisory Board:

- Audit & Risk Committee: Stephen Roberts, Chair, and Dave Steele
- Remuneration Committee: William Best, Chair, and Bernhard Meder

### **Management Board**

The Management Board has the following member:

• Mr. Michael Triguboff, Chief Executive Officer (CEO), appointed December 15, 2018.

There were the following changes to the Management Board during 2019:

• Bernhard Meder was CEO of the Pyrolyx AG from July 16, 2018 until December 15, 2018; he resigned from the Management Board on February 18, 2019 and was at the same date automatically re-appointed to the Supervisory Board.

### **Shareholder Meetings**

The company held its Annual General Meeting on June 7, 2019 with the following topics:

- Presentation and discussion of the annual report and the results for 2018
- Discharge of the management board for 2018 was granted to Bernhard Meder and Michael Triguboff
   and was not granted to Nils Raeder, Sven Eric Molzahn und Fikret Dülger.
- Discharge of the supervisory board for 2018 was granted to Michael Carapiet, Dr. Lars
  Franken, David F. Groves, Dr. Amelia Hill, Michael Triguboff, David Steele and Guido Veit and
  was not granted to Mr. Alexis Gurdijan and Mr. Robert Machinist.
- Appointment of Mrs. Jeanette Lichtenstern (Landsberg/Lech (Germany)) as group auditor for 2019.
- Amendment to Articles of Association in terms of number of supervisory boards members to five seats, a three year term for each member and an annual renumeration of EUR 30,000 per member and EUR 80,000 for the Chairman.
- Election and appointment of the members of the new supervisory board:
  - Dave Steele, Chairman
  - Bill Best
  - Bernhard Meder
  - Stephen Roberts
  - Michael Triguboff with condition precedent for resignation from Management Board
- Revocation of Authorized Capital 2018/I and resolution for new Authorized Capital of Euro 3,448,729.00 Mio. (2019/I).
- Resolution for Capital Increase of Euro 20,000.00 against contribution in kind of Euro 110,000.00 renumeration of former CEO Bernhard Meder.
- Resolution for new Stock Option Plan for Members of Management Board of Pyrolyx USA and an Authorization for a Contingent Capital of Euro 400,000.00.

- Resolution about the lack of confidence in former CFO Sven Eric Molzahn
- Resolution and discussion of additional agenda points requested by shareholders, such as a special audit of management activities since August 2018 concerning the capital increase of Euro 916,590.00 against contribution in kind and the Euro 760,000.00 compensation payment for AVIV.

On September 18, 2019 the company held another Extraordinary General Meeting with the following topics:

- Revocation of Shareholder Resolution on AGM dated June 7, 2019 concerning a special audit
  of management activities since August 2018 for the capital increase of Euro 916,590.00
  against contribution in kind and the compensation payment for AVIV of Euro 760,000.00.
- Revocation of Shareholder Resolution on AGM dated June 7, 2019 concerning the Revocation of authorized capital 2018/I and the resolution for the Authorized Capital 2019/I and a new Resolution concerning a new Authorized Capital 2019/II of Euro 3,613,339.00 Mio.
- Revocation of Shareholder Resolution on AGM dated June 7, 2019 and a new Resolution concerning the Stock Option Plan for Members of Management Board of Pyrolyx USA and an Authorization for a Contingent Capital 2019/II of Euro 400,000.00.

### 2.6 Development of the Asset and Capital Structure

At 31 December 2019, the subscribed share capital of the company totaled € 7,226,678.00, divided into 7,226,678 no-par-value registered shares each with a notional value of € 1.00 per share capital. All 7,226,678 shares issued are fully paid-up.

Since August 2017 Pyrolyx CHESS Depository Interests (CDIs) have been quoted on the Australian securities exchange (ASX), with 15 CDIs representing one Pyrolyx registered share locked in a trust account. As per December,31, 2019 a total of 43,582,665 CDIs is in existence, which are equivalent to 2,905,511 ordinary registered shares.

### **Changes in Shareholder Capital**

In 2019 three capital increases from authorized capital were finalized - one against cash and two against contributions in kind. In total 1,265,809 new registered shares were issued in 2019 (see below table):

Legal Basis	Subscribed	Commercial Register		
Resolution Date		New Capital	Total Capital	Entry Date
21.03.2019 from Authorized Capital 2018 / I AGM on 20.07.2018	Capital increase against contribution in kind	€ 936,590.00	€ 6,897,459.00	06.05.2019
14.04.2019 from Authorized Capital 2018 / I AGM on 20.07.2018	Capital increase against contribution in cash	€ 222,222.00	€ 7,119,681.00	14.06.2019
02.06.2019 from Authorized Capital 2018 / I AGM on 20.07.2018	Capital increase against contribution in kind	€ 106,997.00	€ 7,226,678.00	05.08.2019

Pursuant to Section 186(3), sentence 4 AktG German Stock Corporation Act, the cash capital increase from Authorized Capital 2018/I took place with exclusion of shareholders' pre-emptive rights and was based on the following conditions:

Resolution Date	No. shares	Issued Price	Total proceeds
14.04.2019	222,222.00	€ 9.00	€ 1,999,999.00

### **Authorized Capital**

The Management Board was empowered by the Annual General Meeting held on September 18, 2019 to increase the share capital of the company on one or more occasions by September 17, 2024 subject to the approval of the Supervisory Board by a total of up to € 3,613,339,00 by issuing up to 3,613,339 new no-par-value registered shares in return for cash and/or contributions in kind (Authorized Capital 2019/II).

As per December 31,2019 the remaining Authorized Capital 2019/II amounts to € 3,613,339,00. Subject to the approval of the Supervisory Board, the Management Board is authorized to exclude shareholders' preemptive rights in the following cases:

- a) if the capital increase in return for cash contributions does not exceed 10% of the share capital and the issue price is not significantly below the market price of shares in the company,
- b) in connection with fractional amounts resulting from the subscription ratio
- c) if the new shares are issued in connection with a capital increase in return for contributions in kind by creditors for investments, assets or receivables against the company.

The Management Board is authorized, subject to the Supervisory Board's approval, to decide the conditions under which shares are issued, including the issue price and the content of share rights.

### **Contingent Capital 2019/II**

At 31 December 2019, Pyrolyx AG held the following *contingent capital:* 

- Contingent Capital 2013/II amounting to € 179,850.00 to cover stock options under the 2013 Share Option Program (Note: Performance parameters were not achieved within the allotted time therefore no stock options can be exercised)
- Contingent Capital 2017/I amounting to € 895,207 to cover convertible bonds and/or bonds with warrants with a total nominal value of up to € 90 million issued with the authorization of the company EGM on 21 February 2017 (Note: No bonds were issued to date)
- Contingent Capital 2019/I amounting to € 400,000.00 to cover stock options under the 2019 Share
   Option Program (Note: 375,000 stock options have been granted, none of them have vested)

## Development of the asset and capital structure

(figures rounded up or down to the nearest €1,000 may result in discrepancies)

### Consolidated balance sheet

As of 31 December 2019

€'000	31 December 2019	%	31 December 2018	%	Change vs previous period	Change (%)
ASSETS						
Current assets						
Cash and cash equivalents	3,358	4%	3,648	6%	-290	-8%
Trade receivables	397	1%	152	0%	245	161%
Inventories	37	0%	80	0%	-43	-54%
Other current assets	141	0%	153	0%	-12	-8%
Prepaid expenses	226	0%	152	0%	74	49%
Total current assets	4,159	6%	4,185	7%	-26	-1%
Non-current assets	•		•			
Restricted cash and cash equivalents	3,077	4%	8,322	14%	-5,245	-63%
Intangible assets	6,472	9%	6,045	10%	427	7%
Fixed assets	61,599	82%	40,097	68%	21,502	54%
Right-of-use asset	77	0%	· -	0%	77	n.m.
Financial assets	-	0%	-	0%	-	n.m.
Total non-current assets	71,225	94%	54,464	93%	16,761	31%
Total assets	75,384	100%	58,649	100%	16,735	29%
	10,001	10070	30,0.0	.0070	,	2070
LIABILITIES AND EQUITY						
Current liabilities						
Trade payables	7,202	10%	565	1%	6.637	1175%
Project financing loan	24,200	32%	1,792	3%	22,408	1250%
Convertible bonds	,	0%	-,	0%	,	n.m.
Liabilities due to banks	502	1%	340	1%	162	48%
Lease liability	35	0%	-	0%	35	n.m.
Other financial liabilities	7,918	11%	8,986	15%	-1,068	-12%
Other non-financial liabilities	3,034	4%	1,675	3%	1,359	81%
Provisions	-	0%	1,070	0%	1,555	n.m.
Total current liabilities	42,891	57%	13,358	23%	29,533	221%
Non-current liabilities	72,031	37 70	10,000	2070	23,333	22170
Project financing loan		0%	-21548	37%	-21,548	-100%
Liabilities due to banks	- 1,291	2%	-21546 719	1%	572	80%
Lease liability	46	0%	0	0%	46	
Other financial liabilities	23,733	31%	11,934	20%	11,799	n.m. 99%
Other non-financial liabilities	23,733 950	1%	255	20% 0%		273%
Provisions		0%	129		-695	
	109			0%	20	-16%
Deferred income	2,595	3% 38%	2,546	4% 63%	49	2%
Total non-current liabilities	28,724	38%	37,131	63%	-8,407	-23%
Equity Share conital	7.007	100/	F 004	400/	4.000	040/
Share capital	7,227	10%	5,961	10%	1,266	21%
Treasury shares	-	0%	-	0%	- 7.400	n.m.
Additional paid-in capital	50,417	67%	43,221	74%	7,196	17%
Retained earnings	-59,551	-79%	-42,163	-72%	-17,388	
Other components of equity	-115	0%	-469	-1%	354	-75%
Equity attributable to shareholders of Pyrolyx AG	482	1%	6,550	11%	-6,068	n.m.
Equity attributable to non-controlling interests	3,287	4%	1,610	3%	1,677	n.m.
Total equity	3,769	5%	8,160	14%	-4,391	n.m.
Total liabilities and equity	75,383	100%	58,649	100%	16,734	29%

Fixed Assets (€61.6million, +54%, +21.5million) grew significantly as building Terre Haute plant 1 (TH #1) continued. TH#1 began full operations in February 2020. Total investment for this project exceeds \$52Million. Financing is completely secured.

The continued investment in TH#1 has consumed all remaining restricted cash funds within the project financing (IRB Bond). Other Financial Liabilities reflect additional debt financing at Pyrolyx USA, Inc. Several shareholders provided new lines of credit in the total amount of €13.3 million into Pyrolyx AG (€6 million) and Pyrolyx USA (€7.3 million). This money is intended to complete TH#1, fund the current negative operating cash flow and initial engineering for Terre Haute #2. These lines of credit (€ 13.3 million) are reflected under "Other Financial Liabilities".

The company secured lines of credits as part of the asset purchase agreement with J&R Tire Recycling through Illinois and Indiana based commercial banks: US\$1.25 million plus through a private lender in the amount of US\$1.75 million. The seller of J&R Recycling provided owner financing of US\$1 million

As of December 31, 2019, the total amounts drawn against all lines of credit were €16.9 million (US\$ loans converted). Meanwhile the company continued to amortize the bank loans associated with cct Stegelitz.

All loans were current with all obligations met as December 31, 2019. Due to the delay in startup of operations of TH1, the company has not complied with the financial covenants of the bond agreement. However, the company is current to meet all her debt obligations within the bond agreement. Due to IFRS and US GAAP accounting standards the complete liability from the bond must be classified as 'current'. Management has actively communicated with the bondholders and provided a plan to bring the company into compliance with the financial covenants during fiscal year 2020.repeated above- we only need to state once

As of 31.12.2019, share capital increased by € 1,265,809.00 through cash as well in-kind contributions to € 7,226,678 total registered shares.

On December 31, 2019 Pyrolyx AG (XETRA German stock listing) listed closed at €5.85 per share. Pyrolyx CDIs listed on the Australian Exchange (ASX) closed at AUD \$0.80 per CDI.

### 2.7 Earnings and Financial Position

#### Consolidated income statement

For the financial years ended 31 December 2019

€'000	2019	2018	Change (€)	Change (%)
Sales revenues	1,765	579	1,186	205%
Increase or decrease of finished goods and				
work in progress	-29	-151	122	-81%
Own work capitalised	1,146	1,005	141	14%
Other operating income	443	176	267	152%
Material expenditure	-1,087	-518	569	110%
a) Expenses for raw materials, consumables and supplies				
and for purchased goods	-912	-518	-394	76%
b) Cost of purchased services	-175	0	-175	n.m.
Personnel expenses	-3,843	-3,227	-616	19%
a) Wages and salaries	-3,219	-2,800	-419	15%
b) Social charges, old age pension costs and welfare				
expenses	-624	-427	-197	46%
Depreciation and amortisation	-6,364	-1,798	-4,566	254%
Impairment of inventory	-1	-132	131	-99%
Other operating expenses	-5,777	-4,015	-1,762	44%
Interest and similar income	6,143	5,232	911	17%
Interest and similar expenses	-10,107	-2,087	-8,020	384%
Loss before income tax expense	-17,711	-4,936	-12,775	259%
Income tax expense	-	-	-	n.m.
Loss after income tax expense	-17,711	-4,936	-12,775	259%
Thereof attributable to shareholders of Pyrolyx AG	-17,218	-4,810	-12,408	258%
Thereof attributable to non-controlling interests	492	-126	618	-490%
Earnings per share in € (basic)	-2.55	-0.84	-1.71	203%
Earnings per share in € (diluted)	-2.55	-0.84	-1.71	203%

Sales year over year increased by € 1.19 million (+205%) to € 1.77 million. Sales through the facility in Stegelitz were € 0.82 million, Sales from Pyrolyx Tire Recycling (PTR) were € 0.93 million (PTR effective from 30.9.2019). Personnel expenses increased with the build-up of staffing at Terre Haute #1. Depreciation was increased by extraordinary depreciation on cct assets by € 3.95 million. IFRS/IAS 16 Property, Plant Equipment accounting rules require that the company recognizes a correction in company asset values if a restructuring of these assets appears likely. See further comments in the Notes in this regard. Other operating expenses increased by € 1.76 million. The largest increase year-on-year was legal expenses of € 1.18 million (€ 0.44 million). The company incurred a charge of € 0.76 million by TSAL. This expenditure was incurred as compensation for the delayed conversion of Warrants. Other operating expenses relate mostly due to the cost build up for Terre Haute #1 such as insurance, maintenance, recruiting. Interest and similar income of € 6.14 million in 2019 were related to valuation adjustments of shareholder warrants (TSAL, M-Invest), which were converted to equity in May 2019. The increase in interest and similar expenses is related to the beginning of interest payments related to the Industrial Revenue Bond for Terre Haute #1. In addition, the company raised additional financing through new lines of credit with various shareholders, private lenders and commercial banks. The associated interest payment obligation increased by € 8.03 million.

### 2.8 Cash flow Statement

Up to 2018 Pyrolyx used the indirect method to reconcile cash flows. Starting in 2019 Pyrolyx has used the direct method to calculate cash flow primarily due reporting requirements of the Australian Stock Exchange.

Cash Flow Statement	1.1 31.12.2019	1.1 31.12.2018
	TEUR	TEUR
Cash flows from operating activities		
+ Receipts from customers	1,604	617
- Payments for goods and services	-9,555	-7,907
- Interest received	104	247
- Interest and other costs of finance paid	-1,348	-2,350
+ Income taxes paid	0	0
- Government grants and tax incentives	0	0
-/+ Other Income or Expenses	505	704
Net Cash flows from operating activities	-8,690	-8,689
Cash flows from Investing activities		
- Cash payments to acquire intangible assets	0	0
- Cash payments to acquire property, plant and equipment	-13,509	-14,891
+ Proceeds from disposal of interest in a subsidiary	0	0
- Interest received	0	0
+ Other non current assets	0	800
Cash flows from Investing activities	-13,509	-14,091
Cash flows from financing activities		
+ Cash proceeds from issuing shares or other equity	5,441	2.373
+ Proceeds from borrowings	13,272	5,138
- Repayments of borrowings	-2,072	-1,720
- Transaction costs related to loans and borrowings	0	-23
- Transaction costs related to issues of shares, convertible	0	20
	0	
Cash flows from financing activities	16,641	5,768
Not become Advances because and and analysis between	F. F.F.O.	47.040
Net increase / decrease in cash and cash equivalents	-5,559	-17,012
Cook and cook assistants of the best of the marks (*)	44.070	00.010
Cash and cash equivalents at the beginning of the period*)	11,970	28,012
Effect of changes in foreign currency rates on cash and		<u> </u>
cash equivalents	23	971
Cash and cash equivalents at the end of the period*)	6,435	11,970

During 2019 total cash decreased by € 5.6 million. € 13.5 million of funds were invested in building Terre Haute #1. These cash flows were funded by restricted cash from the Indiana Revenue Bond (MRB) plus cash generated from financing activities, equity € 5.4 million and debt € 13.2 million. Operating activities produced negative cash flows as in the prior year and required € 8.7 million in cash, a near identical sum compared to 2018. The company is expecting positive cash flows from Terre Haute #1 in 2020.

# 2.9 Statement of Changes in Equity

Attributable to shareholders of Pyrolyx AG

		At	tributable to shareno	piders of Pyrolyx P	IG			
€'000	Share capital	Treasury shares	Additional paid-in capital	Retained earnings	Other components of equity	Total	Non-controlling interests	Total equity
Balance at 1 January 2018	3,165	-112	7,290	-16,378	-	-6,035	-8	-6,043
Issuance of shares, net of transaction costs and								
tax	2,450	-	33,574	-	-	36,024	-	36,024
Treasury shares sold	-	-112	675		-	787	-	787
Equity-settled share-based payment	-	-	-504	620	-	116	-	116
Loss after tax				-21,595		-21,595	-30	-21,625
Acquisition of non-controlling interests without								
change in control			-1,280			-1,280	1280	0
Net exchange differences recognised in other								
comprehensive income					-1,340	-1,340	-81	-1,421
Balance at 31 December 2018	5,961	-	43,221	-42,163	-469	6,550	1,610	8,160
Issuance of shares, net of transaction costs and								
tax	1,266	-	9,038	-	-	10,304	-882	11,186
Treasury shares sold	-	-	-	-	-	-	-	-
Equity-settled share-based payment	-	-	1,851	-	-	-1851	0	1,851
Loss after tax	-	-	-	-17,387	-	-17,387	-492	-17,879
Acquisition of non-controlling interests without								
change in control	-	-	-1,189	-	-	-1,189	1,189	
Net exchange differences recognised in other						·		
comprehensive income	-		-		-354	-354	99	453
Balance at 31 December 2019	7,227		52,921	-59,551	-115	482	3,288	3,771

### 3. Opportunities, Risks and Outlook

### 3.1 Opportunities in plastics and tires

Over the last several years, there has been a steady move by large manufacturing companies to focus on incorporating recycled, or post-consumer content, raw materials into their supply chains. There are several important reasons for this new pressure on raw materials, the strongest of which is the recognition that waste plastics in the environment have become a serious issue across both the developed and the developing world. This pressure, when combined with the global focus on greenhouse gas emissions, and the rise of millennials as a political force have created a situation where the manufacturers of plastic raw-materials and packaging have started to change their procurement practices.

This change has included the development of demand for post-consumer content raw materials for plastic manufacturers.<sup>8</sup> While there are opportunities for the use of recycled plastic polymers, Pyrolyx represents one of the primary ways in which black plastic masterbatch manufacturers and black pigment manufactures can achieve a significant proportion of post-consumer content in their products. For example, a black plastic master batch manufactured using Pyrolyx's rCB could be up to 40% post-consumer content simply due to the volume of rCB contained within the formulation. This ability to achieve large percentages of post-consumer content in a product, without sacrificing product performance represents a significant opportunity both for Pyrolyx, as well as for its black plastic masterbatch customers.

Through its growth plan, Pyrolyx is working to take advantage of these opportunities, both the development of customer demand and the ability to obtain higher pricing for its rCB due to the fact that Pyrolyx rCB brings these benefits to customers.

Through its acquisition of J&R Tire Recycling in September 2019, Pyrolyx has entered directly into the supply chain where further significant environmental benefits can be achieved. Pyrolyx is working directly with global tire manufactures to develop rCB products that are used directly in passenger car and other types of tires. An important aspect of environmental management that global companies are facing in many countries is the demand that the entities that are generating tires take responsibility for managing those tires once they have come to the end of their useful life. In addition to the regulatory requirements in some regions, many global companies have internal sustainability goals that include specific items for end of life tire management, including zero waste to landfill and no incineration of waste.<sup>9</sup>

https://www.businessinsider.com/companies-using-recycled-plastic-in-products

https://www.unilever.com/sustainable-living/reducing-environmental-impact/waste-and-packaging/rethinking-plastic-packaging/

https://www.ellenmacarthurfoundation.org/assets/downloads/GC-Report-June19.pdf

https://images.hertz.com/pdfs/Hertz\_Sustainability\_Report\_2012.pdf

Pyrolyx's process provides a significant opportunity for these entities that wish to improve their management of end of life tires because Pyrolyx's process allows for the re-use of these materials in an environmentally sustainable way.

#### 3.2 **Risks**

There are several areas that pose a potential risk to Pyrolyx's business model and prospects. As the largest generator of feedstock and the largest potential market for rCB, global tire demand is key to Pyrolyx's business model. A significant, sustained drop in global tire demand would negatively impact Pyrolyx's business through both a reduction in the volume of available feedstock, but also in the demand for carbon black in general and rCB specifically. Fortunately, global tire demand is expected to continue its steady increase over the next several years. 10 In the North American market, tire manufacturing has been growing strongly over the last several years, which points to strong continued demand for Pyrolyx's rCB. 11

Another risk to Pyrolyx is a significant and sustained drop in global oil prices. Traditional carbon black is priced largely based on the price of the underlying heavy-oil feedstock that traditional carbon black manufacturers use to make their product. As can be seen above, over the long-term carbon black pricing parallels oil pricing. Because rCB is used as a substitute product for traditional carbon-black. many of Pyrolyx's customers use the comparative price of traditional carbon black when thinking about price they are willing to accept for rCB.

In addition to rCB pricing, global oil pricing also affects the revenue that Pyrolyx is able to achieve from the sales of pyrolysis oil. Generally, Pyrolyx's oil pricing mechanism is set as a comparable to either crude oil pricing or some derivative thereof.

While oil prices are difficult to predict, there are several sources and analysts who report that oil prices are expected to remain at current or higher levels for the foreseeable future. 12

Terre Haute #1 started production in late 2019. Beginning to operate a brand-new plant bears risks of start-up failures. Certain errors and omissions during construction may only be come noticeable and have an impact when the plant ramps up to full capacity. Any such impacts risk budgeted sales and profit targets as well as expected deliveries to customers. Management of Pyrolyx believes that Terre Haute #1 production scope of rCB on a very large industrial scale rivals any such facility around the globe. Plans are to build additional plants in the future.

Pyrolyx continues to focus on improving its products and processes and thereby also increasing the barriers to entry of rCB production.

https://www.freedoniagroup.com/industry-study/world-tires-3357.htm.

https://www.autonews.com/suppliers/tire-makers-are-rolling

https://www.forbes.com/sites/daneberhart/2019/12/04/conditions-right-for-oil-market-rally-post-2020/#313abf1f359f https://knoema.com/yxptpab/crude-oil-price-forecast-2020-2021-and-long-term-to-2030

Securing enough liquidity continues to be a risk until Terre Haute #1 is at full production and generating cash flow. Financing both capital expenditures and operating expenses until production is a significant undertaking also affected by unforeseen charges and unplanned events. Should this prove difficult for the company, it could have substantial repercussions for the company's net assets, financial position and results of operations and might jeopardize its going concern.

The company is publicly listed on XETRA (Germany) and ASX (Australia) stock exchanges which avails the opportunity through raising funds through capital increase and selling shares. We also have several sources who have provided funds through loans on aggressive but acceptable financing terms. The aim is to become operationally profitable mid-term and self-financing to facilitate further growth.

The company is currently involved a variety of lawsuits. Most of this litigation stems from reorganization efforts involving former service providers, staff and management.

Zeppelin USA filed a mechanics lien on the Company's Terre Haute facility. In parallel Zeppelin USA filed a complaint in the United States Southern District of New York claiming breach of contract and seeking injunctive relief. The damages sought by Zeppelin, though denied by Pyrolyx, have been booked as liabilities of Pyrolyx. Pyrolyx has filed a complaint seeking significant damages from Zeppelin for non-performance on their contractual obligations regarding the completion of TH1 as well as fraudulent inducement, misrepresentation and tortious interference. The cases are pending.

### 3.3 Outlook

Pyrolyx was established with the vision of providing a sustainable, economic and environmentally friendly solution to the material and growing problem of disposing of end-of-life tires. Based on the view of management and the supervisory board of Pyrolyx, the company is developing a significant first mover advantage and scalable technology that enables it to develop strong growth opportunities.

Pyrolyx is now focusing on the following areas:

- Commissioning and startup of Plant 1 in Terre Haute and development of subsequent plants.
- The development of existing key customer accounts by (i) increasing customer tonnages and (ii) joint product (further) development. This applies to all three core markets: tires, industrial rubber and plastics.
- Operational profitability.
- Pursuing vertical integration targets for the procurement of feedstock.
- Continued product and operating process development.

In 2020 Pyrolyx is expecting total sales of €12.5 Million, when Terre Haute #1 is fully operational based on strong current customer demand forecast (including signed off-take agreements) for rCB, oil, steel and gas.

To finance capital and operational expenditures for Terre Haute #1 and to begin Terre Haute #2, Pyrolyx plans to continue to raise funds through capital increases (sales of shares) and through further debt financing (private placement loans, plus a new revolving line of credit through a bank).

Munich, February 27, 2020

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Michael P. Triguboff, Chief Executive Officer

# 1 Basis of preparation

Pyrolyx AG (the Company or Pyrolyx) is a listed stock company incorporated under German law with its registered office in Munich, Germany. Pyrolyx AG's legal address was Nymphenburger Str. 70, Munich/Germany until 28. February 2019 and is now as follows: Landshuter Str. 8-10, Munich, Germany. Pyrolyx AG is listed with its shares on the OTC market in Germany and with CDI's on the Australian securities exchange (ASX).

Pyrolyx AG is the parent company of a group of entities (the Group) that has developed and operates a specialised process that transforms waste tires into high-grade, valuable raw materials, primarily recovered carbon black (rCB). Carbon black is used in the manufacture of tires and mechanical rubber products, as well as plastics and pigments. Pyrolyx's process delivers compelling benefits compared to the traditional manufacture of carbon black, including reduced carbon dioxide emissions.

The Group prepares its consolidated financial statements in accordance with the rules of the International Accounting Standards Board (IASB), London, United Kingdom, applicable on the reporting date. It complies with the International Financial Reporting Standards (IFRS) as well as the interpretations of the International Financial Reporting Standards Interpretations Committee (IFRS IC), as adopted by the European Union, as well as with the supplementary commercial law regulations of Article 315a (1) of the German Commercial Code (HGB).

The accounting policies used in these consolidated financial statements are based on the accounting policies used in the prior fiscal year 2018 consolidated financial statements, where these policies are discussed in detail. Except for the amendments to and new requirements of IFRS effective starting in 2019, these accounting policies have been applied consistently in these consolidated financial statements. Please see the discussion on IFRS 16 Leases, which is applicable effective 1 January 2019.

In compiling financial statements in accordance with IFRS, management exercises judgment in making estimates and assumptions. Such estimates and judgments are unchanged from the matters described in the consolidated financial statements of the Pyrolyx Group as at and for the year ended 31 December 2018.

Processes and systems of group companies ensure appropriate recognition of income and expenses on the accrual basis. As amounts (in  $\leq$  '000 =  $\leq$ K) and percentages have been rounded, rounding difference may occur.

The consolidated financial statements have been prepared on the historical cost basis except for certain financial instruments that are measured at revalued amounts or fair values at the

end of each reporting period, as explained in the accounting policies in Note 12, shareholder options (warrants) in Note 4.12 a) and cash-settled share-based payments (Note 7.2).

Historical cost is generally based on the fair value of the consideration given in exchange for goods and services.

# 2 Interest in other entities

#### 2.1 Subsidiaries

Pyrolyx is the ultimate parent entity of the following fully consolidated subsidiaries:

		Equity interest held by the group		
	Place of business /			
	country of	31 December		31 December
in %	incorporation	2019		2018
Subsidiaries				
Pyrolyx Invent GmbH	Munich, Germany	100.00		100.00
Pyrolyx International GmbH	Munich, Germany	100.00		100.00
cct Stegelitz GmbH	Moeckern, Germany	80.00	1)	80.00
Pyrolyx USA, Inc.	Wilmington, USA	88.40	2)	90.68
Pyrolyx USA Indiana, LLC	Indianapolis, USA	88.40		90.68
Pyrolyx Indiana Rail, LLC	Indianapolis, USA	88.40		90.68
Pyrolyx Tire Recycling, LLC	Indianapolis, USA	88.40		-
Pyrolyx Transportation, LLC	Indianapolis, USA	88.40		

<sup>1)</sup> As of the reporting date Pyrolyx holds 80% of the shares on issue in cct Stegelitz GmbH. The remaining 20% shares on issue currently held by cct AG are to be transferred to Pyrolyx upon payment of final amounts under the loan agreement and respective share purchase agreement. Considering all facts and circumstances, all material opportunities and risks lie with Pyrolyx and Pyrolyx has 100% power to affect the amount of its returns from cct Stegelitz GmbH. Therefore, cct Stegelitz GmbH is included in the consolidated financial statements based on a 100% interest.

In April 2018, Pyrolyx Indiana Rail, LLC was set-up as a wholly owned subsidiary of Pyrolyx USA Indiana, LLC established to contract and manage the rail infrastructure for the plant in Terre Haute, Indiana, USA.

<sup>2)</sup> On 5 November 2018 the Board of Directors of Pyrolyx USA, Inc. increased its share capital from 3,500 to 4,000. In December 2019 The Longbridge Trust exercised 94 warrants and subscribed 94 shares of Pyrolyx USA against payment of USD 11,011.50 per share (total amount TUSD 1,035). After this transaction a total of 3,565 shares of Pyrolyx USA were outstanding as of 31st of December 2019. In addition, a total number of 183 warrants are issued with the right to convert them into 183 Pyrolyx USA shares (see Note 4.15).

In September 2019, Pyrolyx Tire Recycling, LLC and Pyrolyx Transportation, LLC were set-up as a wholly owned subsidiary of Pyrolyx USA, Inc. established to acquire the assets of J&R Tire Recycling Inc. Pyrolyx Transportation is a tire collection and hauling company and Pyrolyx Tire Recycling an end-of-life tire (ELT) recycling company. This was a strategic acquisition in order to supply sufficient ELT feedstock for TH1 and in future for TH2.

# 2.2 Non-controlling interests

Per 31. December 2019 a significant accumulated amount of net assets held by Pyrolyx subsidiaries is attributable to non-controlling interests in an amount of €2,169K (2018: €2,778K) as well as a portion of the total comprehensive income is attributable to non-controlling interest in an amount of minus €547K (2018: minus €93K). As set out in below summarised financial information the amounts disclosed include intercompany eliminations within the USA subgroup including Pyrolyx USA, Inc., Pyrolyx USA Indiana, LLC and Pyrolyx Indiana Rail, LLC, however, do not include intercompany eliminations between the USA subgroup and other group companies of the Group.

#### Non-controlling interests

	31 December	31 December
€'000	2019	2018
Summarised balance sheet		
Current assets	2,019	4,265
Non-current assets	69,112	57,747
Current liabilities	33,458	2,965
Non-current liabilities	19,056	29,242
Net assets	18,617	29,805
Accumulated non-controlling interests	2,169	2,778
€'000	2019	2018
Summarised statement of comprehensive		
income		
Revenue		-
Profit after tax	-4,702	-1,349
Other comprehensive income	10	894
Total comprehensive income	-4,692	-455
Profit allocated to non-controlling interests	-547	-93

# 3 Income statement items

# 3.1 Other operating income

€'000	2019	2018
Revaluation contingent purchase price	307	0
Foreign currency gains	0	4
Rents and leases	0	56
Insurance compensation	0	20
Subsidies	-	0
Other	135	97
Total	442	177

The revaluation gains of the contingent purchase price in 2019 relates to the contingent purchase price for cct Stegelitz GmbH. In 2018 the company recorded an expense. For further details see Note 4.12 b).

"Other" pertains to a refund received from a vendor and a reversal of provisions from non-periodic charge from the prior year.

# 3.2 Other operating expenses

#### Other operating expenses

€'000	2019	2018
Public Listings' costs	217	188
Consulting fees	1,810	994
Financial reporting costs	401	377
Travel expenses	414	293
Maintenance costs	237	208
Insurance	203	178
Rent and incidental rental costs	198	-4
Production costs	112	221
Directors remuneration	154	129
Marketing	150	117
Vehicle costs	60	115
Other administration costs	164	136
Communication	96	62
Recruitment	140	49
Foreign currency losses	313	341
Patent costs	2	3
Revaluation contingent purchase price	0	87
Compensation fee	760	0
Other	346	520
Total	5,777	4,014

Public Listings' costs (2019: €217K; 2018: €188K) pertain to expenses to listing costs and maintenance at Duesseldorf, Frankfurt and Munich (Germany) and ASX (Australia). Travel costs are affected by frequent trips between Germany (Munich, Stegelitz) and the USA (Terre Haute). Consulting fees were mainly composed of legal fees €1.18 Million. In 2019 the company reclassified occupancy costs associated with the Terre Haute plant project to construction capital costs. The compensation fee relates to a reimbursement to TSAL for the belated conversion of warrants to shares (Issued 2016, converted May 2019). The revaluation expense of the contingent purchase price in 2018 relates to the contingent purchase price for cct Stegelitz GmbH. In 2019 the company recorded a loss. For further details see Note 4.12 b. The increase in Dollar vs Euro currency development hast lead to foreign currency losses.

# 3.3 Interest and similar expense

#### Interest and similiar expenses

€'000	2019	2018
Financial liabilities at fair value through profit and		
loss		
- Designated on initial recognition	263	7.317
Financial liabilities measured at amortised cost -		
interest expense	9.844	38.569
	10.107	45.886

Shareholder Warrants, Shareholder Options and the Arena & Shareholder loans to the US entities are measured at Fair Value (FVTPL), the rest of the liabilities are valued to historical costs less amortization. In May 2019 M-Invest and TSAL converted warrants to share equity through an in-kind capital increase measure. This capital increase lead to corresponding entries to interest expense €6,427 thousand and interest income €6,135 thousand.

#### 3.4 Income taxes

#### a) Current tax Germany

The tax currently payable is based on taxable profit for the year. Taxable profit differs from loss before income tax expense as reported in the consolidated statement of profit or loss because of items of income or expenses that are taxable or deductible in other years and items that are never taxable or deductible. The Group's current tax is calculated using tax rates that have been enacted or substantively enacted by the end of the reporting period.

The Company and its German subsidiaries are subject to corporate income tax, solidarity surcharge and trade tax.

Deferred tax was calculated based on the following rates for 2019 and 2018:

Affiliate	Place of buisness / country of incorporation	Tax rate 2019	Tax rate 2018
Pyrolyx AG	Munich, Germany	32.98 %	32.98 %
Pyrolyx Invent GmbH	Munich, Germany	32.98 %	32.98 %
Pyrolyx International GmbH	Munich, Germany	32.98 %	32.98 %
cct Stegelitz GmbH	Moeckem, Germany	28.23 %	28.25 %
Pyrolyx USA Inc.	Wilmington, USA	26.63 %	27.50 %
Pyrolyx USA Indiana LLC	Indianapolis, USA	26.63 %	26.88 %
Pyrolyx Indiana Rail LLC	Indianapolis, USA	26.63 %	27.50 %
Pyrolyx Tire Recycling LLC	Indianapolis, USA	26.63 %	n/a
Pyrolyx Transportation LLC	Indianapolis, USA	26.63 %	n/a

As a result of the losses incurred by the Group companies, so far no income taxes were incurred. As of 31 December 2019, the Group companies had cumulative tax loss carry forwards in Germany amounting to €58,766K (2018: € 51,885K) and in the USA of € 3,855K (2018: € 3,678K). The Group's loss carry-forwards hence totalled € 62,621 (2018: € 55,563K), of which € 21,421 was accounted for by cct Stegelitz GmbH (2018: € 18,527K).

From 2004 onwards, German tax law restricts the offset of taxable income against existing tax loss carry forwards to an annual amount of € 1M plus 60% of taxable income above € 1M. According to the German Corporation Tax Act (Körperschaftsteuergesetz (KStG)), taxes may be carried forward indefinitely. The deduction of tax losses carried forward is excluded if the Company loses its economic identity. A company is deemed to have lost its economic identity if both the following criteria are met simultaneously:

- More than 50% of the shares in the company have been transferred
- The company continues or relaunches its operations with predominantly new assets

Regarding equity transfers, this provision is to be replaced by Section 8c KStG to reflect the reform of corporation tax. Any transfer of more than 50% of the subscribed capital triggers total of tax losses carried forward. The continuation of operations with predominantly new assets is no longer relevant. The regulation on tax loss carry forwards (both Section 8(4) KStG and Section 8c KStG) is generally regarded as uncertain for companies taxable in Germany. Under German tax law, loss carry forwards can be subject to tax audits.

# b) Tax reconciliation

The tax rate used for the 2019 and 2018 reconciliations above is the corporate tax rate of 32.98 % payable by corporate entities in Munich, Germany on taxable profits under tax law in that jurisdiction.

€'000	31 December 2019	31 December 2018
Loss before income tax expense	-17.713	-3.615
Income tax expenses recognised in profit or loss		
Income tax expense calculated at 32.98 % (2018: 32.98%)	-5.841	-1.628
Effect of income that is exempt from taxation	0	110
Effect of expenses that are not deductible in determining taxable profit	26	217
Effect of different tax rates of subsidiaries operation in toher jurisdictions	305	308
Effect of convertible loans	2.319	-1.719
Effect of impairment	1.331	0
Effect of depreciation	0	
Effect of PPA	-8	269
Effect of unused tax losses and tax offsets not recognised as deferred tax	2.833	3.466
Effect of business interest limitation	-1.372	
Effect of start-up costs	447	
Effect of fair value valuation	80	
Effect of project financing loan	0	-529
Effect of local GAAP provisions	0	-535
Others	-121	41
Total of income tax expense recognised in profit or loss	0	0

# c) Current tax USA

The company has not owed or paid any incomes taxes in the United States to date. From 2019 onwards, federal tax loss carry-forwards in the United States for Pyrolyx USA et al are available to carry forward indefinitely and do not expire. They are available to offset future income by up to 80% in any future year. The usage of loss carry-forwards is limited if a company undergoes an ownership change. An ownership change for purposes of this limitation is defined as a shift in owners or equity structure after which there is a greater than 50% change in the value of stock owned by five percent shareholders during a defined testing period.

# 3.5 Earnings per share

The following table shows the calculation of basic and diluted earnings per ordinary share attributable to shareholders of Pyrolyx. Due to a net loss for the year (negative profit after tax (PAT), dilutive loss per share is the same as basic.

#### Earnings per share

		2019	2018
Loss after income tax expense attributable to			
shareholders of Pyrolyx AG	€'000	-17,218	-4,809
Weighted average number of ordinary shares to			
calculate earnings per share			
Basic	Number	6,742,762	5,698,224
Diluted	Number	7,258,125	6,816,477
Earnings per share			
Basic	€	-2.55	-0.84
Diluted	€	-2.55	-0.84

# 4 Balance sheet items

#### 4.1 Cash and cash equivalents

Reconciliation cash: Balance Sheet to Cash Flow Statement

€'000	31 December 2019	31 December 2018
Cash and cash equivalents in the balance		
sheet	3.358	3.648
Restricted cash and cash equivalents	3.077	8.322
Cash and cash equivalents in the cash flow		
statement	6.435	11.970

# 4.2 Restricted cash and cash equivalents

Restricted cash relates to the project financing loan agreement entered into with the City of Terre Haute, Indiana, USA (for details on the project financing loan agreement see Note 4.8). Under such loan agreement all loan proceeds are restricted in use for the construction of the USA plant in Terra Haute, Indiana, USA and for debt services under the loan agreement. Restrictions will expire with the last payment under the loan agreement in 2028. As such restricted cash is classified as non-current and not available for general use by the Company.

# 4.3 Trade receivables

The following table shows the carrying amount of trade receivables:

# Carrying amounts of trade receivables

€'000	31 December 2019	31 December 2018
Gross carrying amount Allowance for doubtful accounts charged to	439	170
expense	-42	-18
Carrying amount trade receivables, net	397	152

The table below shows the maturity structure of trade receivables that were not impaired as of the reporting date:

€'000	31 December 2019	31 December 2018
Not past due and not individually impaired	290	60
Past due but not individually impaired		
Past due 1 to 30 days	42	5
Past due 31 to 120 days	16	6
Past due 121 to 365 days	1	22
Past due over 365 days	87	76
Total past due but not individually impaired	439	170
Individually impaired, net of allowances	-42	-18
Carrying amount of trade receivables, net	397	152

Where trade receivables are neither impaired nor past due, there are no indications as of the reporting date that the debtors would not meet their payment obligations. With regards to the trade receivables that were past due as of the reporting date but not impaired, based on the customers' credit history and current credit rating, there are no indications that they are not able to meet their obligations.

The allowances on trade receivables report the following changes:

# Movements in the provision for impairment of trade receivables

€'000		
31.12.2018	18	
Addition	24	
31 December 2019	42	

The additions to and reversals of bad debt allowances for impaired receivables are presented under other operating expenses and other operating income. Utilisation covers the derecognition of former written down receivables.

# 4.4 Inventories

€'000	31 December 2019	31 December 2018
Raw materials, consumables and supplies	16	30
Work in progress	0	0
Finished goods	21	50
Prepayments	0	0
Total	37	80

All inventories in the amount of €37K are pledged under the liabilities to banks.

# 4.5 Intangible assets

Changes in intangible assets as of 31 December 2019 and 2018:

		Self generated		
	Purchased rights,	_	Prepayments and	
	concessions and	concessions and	assets under	
€'000	similiar rights	similiar rights	development	Total
Cost				
Balance at 1 January 2018	7,907	695	-236	8.838
Additions	28	-2		631
Disposals	-14	_	-	-14
Balance at 31 December 2018	7.921	693	-841	9.455
Accumulated amortisation				
Balance at 1 January 2018	-2.307	-247		-2.554
Additions	-800	-70	_	-870
Disposals	-14	-	-	-14
Reversal of impairment	-	_	-	-
Balance at 31 December 2018	-3.093	-317	•	-3.410
Net book amount as of 1 January 2018	5.600	448	-236	6.284
Net book amount as of 31 December 2018	4.828	376	-841	6.045
Cost				
Balance at 1 January 2019	7.921	693	-841	9,457
Currency translation differences	-52	_	-	-52
Additions	1.176	-	94	1.271
Balance at 31 December 2019	9.149	695	936	10.780
Accumulated amortisation				
Balance at 1 January 2019	-3.094	-317	-	-3.412
Currency translation differences	-2	-	-	-2
Additions	-825	-70	_	-895
Balance at 31 December 2019	-3.921	-387	_	-4.308
Net book amount as of 1 January 2019	4.826	378	841	6.046
Net book amount as of 31 December 2019	5.227	308	936	6.472

Purchased rights, concessions and similar rights include fabrication technologies for the manufacturing of pyrolysis granulate. As of the reporting date the carrying amount of the production technologies is  $\leqslant 3,946$ K (31 December 2018:  $\leqslant 4,568$ K) with a remaining amortisation period of 5.5 years (31 December 2018: 6.5 years).

All intangible assets are being amortised on a straight-line basis over their respective estimated useful life.

In the reporting period amortisation of intangible assets amounted to €895K (2018: €870K) and they are recorded under "Depreciation".

#### 4.6 Fixed assets

Changes in property, plant and equipment as of 31 December 2019 and 2018:

	Technical	1 3 1 3 - 1-4		Prepayments and	
€'000	equipment and machinery	Land, land rights	Equipment and	assets under	*-4-1
6 000	macmmery	and buildings	furniture	construction	Total
Cost					
Balance at 1 January 2018	8,937	1,257	494	15,149	25,837
Currency translation differences	-	-13	-	1,194	1,207
Additions	21	38	8	16,521	16,588
Reclassifications	-	•	51	-51	-
Disposals	_	_	-40	0	-40
Balance at 31 December 2018	8,958	1,308	513	32,813	43,592
Accumulated amortisation					
Balance at 1 January 2018	-2,211	-127	-271	•	-2,609
Currency translation differences		- 14.1	-271	_	-2,003
Additions	-830	-45	-54		-929
Disposals	-2	-	39	_	41
Reversal of impairment	-	-	-	_	-
Balance at 31 December 2018	-3,039	-172	-286	•	-3,497
Net book amount as of 1 January 2018	6,726	1,130	223	15,149	23,228
Net book amount as of 31 December 2018	5,919	1,136	227	32,813	40,095
Cont					
Cost Balance at 1 January 2019	8,958	1,308	513	22 044	42 502
Currency translation differences	<b>0,930</b> 76	•		32,814	43,592
Additions	1,727	37	•	1,593	1,705
Reclassifications	593	695	1	22,80 <i>4</i> -593	25,226
Disposals	593	•	- -111	-593	-
Balance at 31 December 2019	11,353	2.039	402	56,618	-111 70,412
Datance at 51 December 2013	11,000	2,035	402	30,010	70,412
Accumulated amortisation					
Balance at 1 January 2019	-3,039	-172	-285	-	-3,496
Additions	-1,042	-42	-43	•	-1,127
Addition impairment	-4,176	-	-93	•	-4,269
Disposals	-		86		86
Balance at 31 December 2019	-8,263	-215	-335		-8,813
Net book amount as of 1 January 2019	5,919	1,136	228	32,814	40,096
Net book amount as of 31 December 2019	3,090	1,824	67	56,618	61,599
		.,,4.4		00,010	01,000

Except for assets under construction fixed assets are being depreciated on a straight-line basis over their respective estimated useful life. For assets under construction depreciation will not begin until the assets are available for use.

In the reporting period prepayments and assets under construction mainly relate to the construction of the Group's first USA plant in Terre Haute, Indiana, USA. Continuous operations had not begun as of 31.12.2019 – therefore fixed assets were not reclassified from Construction in Progress (CIP) to standard property, plant and equipment (PPE) categories.

As the borrowing costs for the project financing loan are directly attributable to the construction of the USA plant, all interest expense incurred in the reporting period for the project financing loan net of any investment income on the temporary investment of those borrowings has been capitalised.

In the reporting period depreciation on fixed assets amounted to €1.127K (2018: €929K) and addition impairment for assets € 4,176K (2018: €0K). The extraordinary depreciation is connected with the mothballing of cct Stegelitz GmbH. The company is exploring different strategic alternatives to the continuing current deficitary cct operations.

All fixed assets in the reporting period in the amount of €91,926K (31 December 2018: € 40,096K) are completely pledged for the project financing loan, liabilities due to banks, shareholder loans (TSAL and RPSCO) and the purchase price loan.

# 4.7 Leasing: Right-of-use assets

€'000	Technical equipment and machinery	Land, land rights and buildings	and	Total
Cost				
Balance at 1 January 2019	-		-	••
Currency translation differences	1	-	-	1
Additions	72	42	28	142
Balance at 31 December 2019	73	42	28	143
Accumulated amortisation				
Balance at 1 January 2019	-	-	-	-
Currency translation differences	-	-	_	_
Additions	-19	-29	-18	-65
Balance at 31 December 2019	-19	-29	-18	-65
Net book amount as of 1 January 2019		_	_	<del>-</del>
Net book amount as of 31 December 2019	54	14	10	77

The Group leases several assets including buildings, plant and IT equipment. The average lease term is 2 years.

#### Amounts recognised in profit and loss

€'000	31 December 2019
Depreciation expense on right-of-use asset	65
Interest expense on lease liabilities	9
Payments for lease liability recognized in the current period	71
Variable lease expenses which are not included in the lease liability	0
Lease expenses for "Low-Value" contracts	0
Lease expense for "Short-Term" contracts	106
Total amount of lease expenses for the current period	252

At December 31 2019, the Group is committed to € 205K for short-term leases.

Total cash outflow for leases in the reporting period was €189 K. In the reporting period additions to right-of-use assets amounted to €142K.

Last year the Company entered into a leasing contract for a gas generator requiring the Company to pay \$ 15 thousand per month for a period of 126 month after the installation of the gas generator. At the reporting date the gas generator had not yet been installed.

# **Lease Liability**

Information on lease liability and corresponding maturity

€'000	31 December 2019
Lease liability due <= 1 year	35
Lease liability due > 1 year <= 2 years	27
Lease liability due > 2 years <= 3 years	13
Lease liability due > 3 years <= 4 years	5
Lease liability due > 4 years	0
Total	81

# 4.8 Trade payables

As of the reporting date trade payables include current trade payables in the amount of €7,202K (31 December 2018: €565K). One open payable (\$5.6 million) is to Zeppelin USA for unpaid invoices related to TH1 project. All Zeppelin invoices are being challenged by the company in court. Another payable (\$0.6 million) is to Zachry Engineering for work on TH2 project. An agreement exists to pay these invoices in Q1 and Q2 of 2020. All open payables were incurred during fiscal 2019.

# 4.9 Project financing loan

In order to meet the project funding requirements for the construction of the first USA Plant, Pyrolyx USA Indiana, LLC has received a project financing loan from the city of Terre Haute, Indiana, USA on 21 August 2017. The city of Terre Haute issued tax-exempt project finance bonds with the proceeds loaned to Pyrolyx USA Indiana, LLC pursuant to a loan agreement (project financing loan). The senior project debt amount being €25,665K (US\$30,185K) – comprised of €25,508K (US\$ 30,000K) related to the Series 2017A bonds tranche and €157K (US\$185K) related to the Series 2017B bonds tranche.

The loan was recognized at fair value (€ 22,105K) on the date of acquisition on 21 August 2017. Transaction costs directly attributable to the issue of the bonds in the amount of €1,082K have been deducted from the fair value. The capitalization rate used to calculate the fair value of the bond is 10.19%. Due to the interest rate below market rate the loan is considered to include a government grant. Upon inception the amount of the government grant (€ 2,478K) has been determined by subtracting the fair value of the loan from the loan proceeds less transactions costs and has been recognized as deferred income. For accounting of the government grant see Note 12.11.

The loan was valued at the reporting date based on fair value less the corresponding transaction costs at the time of acquisition at amortized cost using the effective interest method.

The terms of that loan agreement correspond to the bond purchase agreement. The key terms are:

The proceeds of the senior project debt may only be used to: (i) acquire, construct, equip and install a tyre recycling facility that will reclaim carbon black from used tyres located in the City of Terre Haute (the facility); (ii) fund a debt service reserve fund for the bonds; (iii) finance capitalised interest in connection with the project; and (vi) pay the costs of issuing the bonds (collectively, the **project**).

The Series 2017A bonds tranche matures on 1 December 2028 and the Series 2017B bonds tranche on 1 December 2020. Principal payments must be made annual beginning 1 December 2020 through 1 December 2028 based on a 10-year level debt service schedule.

The nominal interest rate is 7.25% with interest accruing from the date of issue. Interest is payable semi-annually on 1 June and 1 December based on the outstanding balance of the senior project debt amount. The interest amounts are capitalized costs to the assets in constructions and will be amortized once the plant has begun operations.

The loan is secured by (i) a first lien security interest in all assets of the project; (ii) a pledge of a mortgage covering the project; (iii) a pledge of the limited liability company interests of Pyrolyx USA, Inc. in the Borrower; (iv) a collateral assignment of all agreements, contracts, warranties, licenses (including Pyrolyx technology licenses), permits and rights related to construction, ongoing operation, equipment, procurement, feedstock and offtake for/of the Project; and (v) gross revenue pledge: all revenues escrowed with debt service payable first.

The Series 2017A bonds tranche is to be repaid with a total of nine repayments. The Series 2017B bonds tranche is to be repaid in full at its maturity date. Under the terms of the loan, Pyrolyx USA Indiana, LLC is required to adhere to certain debt covenants on quarterly basis, such as debt service coverage, distribution test requirements and days cash on hand. Pyrolyx USA Indiana, LLC has not complied to some extend with the debt covenants and has not received waivers from the lenders in cases the covenants had been in violence during 2019.

Regarding classifying the industrial revenue bond (IRB) as a current liability (<1J) and applicable International Financial Reporting Standard (IFRS) rules: The terms of the industrial revenue bond (IRB) require compliance with certain debt covenants that must be met on a quarterly basis. Since respective covenant violations with regard to the IRB terms have occurred as of December 31, 2019, which in turn give the lender the right to call the debt at their discretion, then under these facts and circumstances, the borrower must classify the obligation as current.

#### 4.10 Convertible bonds

On 11 November 2013, the Company issued convertible bonds. The five-year convertible bonds bore interest at the rate of 10% p.a. from the date of issue, which was due in a lump sum at maturity. The expiry date was 11. November 2018. 95% of the bonds was converted to shares in previous years. The remainder was repaid in 2018. Concerning the Early Conversion Fee see note 4.11.

# 4.11 Liabilities due to banks

Liabilities due to banks comprise the drawn amounts under the respective credit facilities.

The loans require monthly or quarterly repayment instalments and interest payments.

The loans are each secured by (amongst other things) uncertified land charges totalling €2,500K on the cct Stegelitz GmbH real property in Stegelitz and Burg, Germany, transfers by way of security of certain assets (e.g. pyrolysis machine) of cct Stegelitz GmbH and transfers of claims under bank guarantees totalling € 3,500K.

Under the terms of the loans, cct Stegelitz GmbH is required to maintain certain financial ratios. Furthermore, cct Stegelitz GmbH may not, without consent of the bank, sell material fixed assets or company parts or acquire companies or company parts. cct Stegelitz GmbH has not complied with the financial covenants of its bank borrowing facilities during 2019. Pyrolyx AG has issued a letter of comfort to cct GmbH giving a comprehensive financial guarantee to support all debts and liabilities.

In the reporting period the Company entered into a prolongation agreement with respect to the MBG loan (31 December 2019: €762K). Under this agreement the initial repayment date 30 June 2018 was prolonged to 30 June 2021 with repayment in monthly instalments of €14K and a last instalment of €510K on repayment date.

#### 4.12 Other financial liabilities

€'000	31 December 2019	31 December 2018
Shareholder options	0	4.989
Purchase price loan	4.308	4.808
Contingent purchase price liabilities	1.068	1.076
Shareholder loans including accrued interest	19.278	5.058
Third party loans including accrued interest	5.964	4.142
Early conversion fee	247	848
Other	784	0
Total	31.649	20.921
thereof		
current	7.918	8.986
non-current	23.733	11.935

# a) Shareholder options (warrant) agreement

#### Warrants of Pyrolyx AG, Germany

Pyrolyx AG, AVIV Investments Pty Ltd, Galaxis Advisory SA. Cayman Islands, and M-Invest GmbH entered into a Novation Agreement to convert their existing warrants into 1,005,817 new shares in 2016. This novation was subject to several conditions' precedent, which had been satisfied thus a shareholder options liability in respect of AVIV Investments Pty Ltd (up to 899,657 new shares), Galaxis Advisory SA (up to 89,227 new shares) and M-Invest GmbH (up to 16,933 new shares) arose. On 6 May 2019 AVIV Investments Pty Ltd and Meder Invest GmbH participated with their warrants in a capital increase by contribution in kind. Galaxis Advisory SA did not participate in this capital increase, but the fair value of the shareholder options is shown under Equity (see Note 4.15).

# Warrants of Pyrolyx USA Inc., USA

In December 2019 The Longbridge Trust exercised 94 warrant and subscribed 94 shares of Pyrolyx USA against a payment of USD 11,011.50 per share (TUSD 1,035 in total). As of 31<sup>st</sup> of December 2019 a total of 3,656 shares of Pyrolyx USA are outstanding.

In addition, in September 2019 a total number of 183 warrants were issued in relation to loan agreements with Pyrolyx shareholders and third-party lenders. Each warrant provide the right to purchase one share of Pyrolyx USA within 10 years from issue date. As of 31. December 2019 the following beneficial hold warrants of Pyrolyx USA:

- TSAL PTY LTD received 154 warrants in relation to the loan agreement dated December 4, 2018 Pyrolyx USA Inc. all exercisable by AVIV Investment
- The Perpetual Horizons Trust received in total 3 warrants in relation to the Loan Agreement dated September 11, 2019
- The Platinum Peak Trust received in total 3 warrants in relation to the Loan Agreement dated September 11, 2019
- Leroma Pty Ltd Johalius Investments Pty Ltd and Scawton Limited each received 6 warrants in relation to the loan agreements dated September 11, 2019 and September 23, 2019

A binomial model was used to value the warrant, which considers the warrant's exercisability during its term. Input parameters for the valuation model are the value and volatility of the value of Pyrolyx USA Inc., the risk-free return for the term of the warrant and the exercise price of the warrant.

Pyrolyx USA Inc. is not listed on the stock exchange. Therefore, the value of a share in the company must be estimated alternatively. For valuation the following considerations were made:

Pyrolyx USA Inc. is, according to the information available, the value-determining element of Pyrolyx AG, whose shares are listed on the stock exchange. The market capitalization of the Pyrolyx shares amounts to approximately EUR 31 million. Considering 3,562 outstanding shares at the issued date, Pyrolyx USA Inc. has a total value of approximately USD 39,2 million or approximately EUR 34,6 million per share of USD 11,010.50 (exchange rate EUR per USD as at 31 December 2019: 0.8902). Against this background, the company considers the exercise price agreed in the contract concluded shortly before the balance sheet date of December 31, 2019 to be a suitable estimator for the value of a stake in Pyrolyx USA Inc.

**Volatility**: As Pyrolyx USA Inc. is not listed on the stock exchange, the stock exchange price cannot be used to determine volatility. The company has therefore used the historical share

price performance of the parent company, Pyrolyx AG, as an aid to estimating volatility. If the volatility is considered on the basis of (1) daily data for a period of 2700 days, an annualized volatility of 76.21 % - 76.55 % results, (2) if the volatility is considered on the basis of weekly data for a period of 520 weeks, an annualized volatility of 72.87 % - 73.24 % results, and (3) if the volatility is considered on the basis of monthly data for a period of 120 months, an annualized volatility of 70.65 % - 70.72 % results.

Since the volatility tends to be lower when considering shorter historical periods, the company has taken the value of 70.65 % - 70.72 % at the lower end of the calculated range of volatilities into account when valuing the warrant.

The risk-free interest rate was between 1.74 % - 2.26 % by issued date and between 1.91 % - 1.95 % as of 31 December 2019. This interest rate was derived using the Svensson method for a remaining term of the warrant of 10 years for the valuation as of issued date and of round about 9 years as of 31 December 2019. The company obtained the necessary Svensson parameters from the US Federal Reserve Board.

**Value of the warrants:** The value of each warrant, using a binomial model and considering the parameters presented, amounts to USD 7,357.19 or EUR 6,552.32 as at 31 December 2019 (EUR price per USD as at 31 December 2019: 0.8902).

**Financial impact:** The company recognized the value of each warrant and created a financial transaction expense with the credit going to equity ("additional paid in capital") in the total amount of \$807K (€719K).

# b) Purchase price loan and contingent purchase price liabilities

The purchase price loan and the contingent purchase price liabilities relate to the acquisition of the interest in cct Stegelitz GmbH in 2015. The interest on the purchase price loan is payable on a quarterly basis.

The contingent purchase price liabilities are measured at fair value considering the forecast Group income after income tax expense in 2024 as well as an appropriate discount rate. Based on the Group plant roll-out plan, the fair value of the contingent purchase price liabilities was adjusted upward in 2019.

#### c) Shareholder loans

The Company is party to several shareholder loan agreements. Shareholder financing (including accrued interest) increased to €20,8M (2018: €5,1M) primarily to support building the plants in Terre Haute, Indiana and assure sufficient working capital funds.

On December 4, 2018 Pyrolyx USA Inc. entered into a loan agreement with TSAL PTY LTD (the lender) a company associated with the Triguboff family. The credit facility of the loan amounts to €2M for 3 years at 15% interest p.a., compounded quarterly, which can be drawn down by Pyrolyx (the borrower) in 3 instalments. As of the reporting date Pyrolyx had drawn down under the loan agreement three instalments totalling €2M. As an inducement to lend the terms of the loan include 154 Warrants to purchase shares in Pyrolyx USA. At reporting date, the outstanding loan instalments including accrued interest amounts to € 2,314 thousand.

On December 20, 2018 Pyrolyx USA Inc. entered into a loan agreement with RPSCO PTY LTD (the lender). The credit facility of the loan amounts to \$4.55M for 3 years at 15% interest p.a., compounded quarterly, which can be drawn down by the Company (the borrower) in 2 instalments. As of the reporting date the Company had drawn down under the loan agreement two instalments totalling \$4.55M. An inducement to lend the terms include 32 Warrants to purchase shares in Pyrolyx USA. At reporting date, the outstanding loan instalments including accrued interest amounts to USD 5,262 thousand.

On 29. March 2019 for costs & damages incurred by TSAL Pty Ltd in relation to the delay in share conversion relative to the contractually agreed on terms of warrants, TSAL issued an invoice to Pyrolyx AG in the amount of €760K. This compensation is due retroactive September 1, 2017. The invoice and a corresponding loan to finance the liability were approved by the Supervisory Board on 30. May 2019. Interest for the loan was agreed to be 10% p.a. and it was calculated from day of inception of the liability. The value of the loan including accumulated interest as of date of reporting amounts to €905 thousand. The loan matures on September 1, 2020 but TSAL is prepared to prolong the maturity date by 12 months.

On April 30, 2019 Pyrolyx USA Inc. entered into a second loan agreement with RPSCO PTY LTD (the lender). The credit facility of the loan amounts to €4M at 11% interest p.a. with quarterly cash settlement. The loan can be drawn down by Pyrolyx (the borrower) in two instalments. As of the reporting date the Company had drawn down under the loan agreement two instalments totalling €4M. As an inducement to lend the terms of the loan include 50 Warrants to purchase shares in Pyrolyx USA. At reporting date, the outstanding loan instalments including accrued interest amounts to € 4,000 thousand.

On September 11, 2019 Pyrolyx USA Inc. entered into a third loan agreement with RPSCO PTY LTD and other lenders (Johalius Investments Pty. Ltd., Leroma Pty. Ltd., Scawton Ltd.). The credit facility of up to €3,500 thousand with 9% interest p.a. and quarterly cash settlement. The loan was paid to the borrower in five instalments of € 3,300 thousand in total. As an inducement for the loan a total of 39 warrants to purchase shares in Pyrolyx USA have been issued at the order of the lenders. At reporting date, the outstanding loan instalments including accrued interest amounts to € 3,300 thousand.

In October 2019 Pyrolyx AG entered into loan agreements with Johalius Investments Pty. Ltd (€ 1,900 thousand), Gracemere Enterprises (Aust) Pty LTD (€ 300 thousand) and Meder Holding AG (€ 300 thousand). The three credit facilities amounting together to € 2,500 thousand with 10% interest p.a. The loan was paid to the borrower in one instalment each. As an inducement for the loan a commitment fee of 10% and a repayment fee of 10% were agreed. At reporting date, the outstanding loan instalments excluding accrued interest amounts to € 2,500 thousand.

On November 29, 2019 Pyrolyx AG entered into loan agreements with TSAL Pty Ltd amounting to € 500 thousand with 10% interest p.a. The loan was paid to the borrower in one instalment each. As an inducement for the loan a commitment fee of 10% and a repayment fee of 10% were agreed. At reporting date, the outstanding loan instalments excluding accrued interest amounts to € 500 thousand.

# d) Third Party Loans

The third-party loans comprise of two parts. One part is related to the financing of cct Stegelitz GmbH and a previous pilot plant by various parties and the other part is related to a loan agreement with Arena Growth Holding, LLC, Wayne/USA (Arena loan) in which the Company entered within the reporting period.

#### Arena loan

In April 2018 Pyrolyx International GmbH entered into a loan agreement with Arena Growth Holding, LLC, Wayne/USA. The credit facility of the Arena loan amounts to € 5M and which could be drawn down by the Company in instalments. As of the reporting date the Company has drawn down under the Arena loan agreement two instalments totalling € 1M. Each drawdown instalment under the Arena loan is due at its nominal value in a lump sum at maturity, which means five years after drawdown, respectively. The Arena loan bears interest at the rate of 14 % p.a. (first 24 months capitalized, then payable quarterly in arrears) from drawdown date.

As security and collateral for the Arena loan, Pyrolyx International pledged her shares of ownership in Pyrolyx USA, Inc. The Company has the right to initiate the repayment of the Arena loan (instalments) without being obliged to pay any pre-payment penalty to Arena Growth Holding, LLC. Therefore, the Arena loan represents a hybrid contract containing a call option. As the values of the loan component and the call option are closely related, the instrument must be measured at fair value. Since the loan is callable by the issuer it can be valued using callable bond valuation methodology.

The fair value is determined in a first step by discounting the contractually agreed future payments of the Arena loan (instalments) with an interest rate customary for a comparable loan without any call option. In this context, the default risk of the issuer must also be considered. In a second step the fair value of the prepayment option is determined by using an interest rate structure model. This model considers strike interest rates and information about expected interest rate development (forward rates, interest rate volatilities).

At reporting date, the fair value of the Arena loan instalments including the call options amounts to €1,252K. The capitalization rate used to calculate the fair value of the Arena loan (instalments) at the reporting date is 14.61 %.

Despite numerous attempts by the Company to draw further tranches from this loan, Arena has refused to live up to their contractual agreements and are in breach. The Company is exploring legal options to see the contract obligations fulfilled.

#### Gibson loan

On September 27, 2019 Pyrolyx Transportation LLC and Pyrolyx Tires Recycling LLC (together the borrower) entered into a loan agreement with Gregory Gibson – a private citizen. Mr. Gibson is not a shareholder. The loan is amounting to \$1,750 thousand with 20 % interest p.a.. It can be repaid at any time without penalty.

# e) Early conversion fee

The Convertible Bond 2013/2018 expired on 11. November 2018. 95% of the bondholders had converted to shares in previous years. The company had agreed, in lieu of the forfeiture of accrued interest that occurs on early conversion, to pay an amount equivalent to 15% of the nominal value of the convertible bonds to the converting holders (the "early conversion fee"), shown in other financial liabilities. The early conversion fee became payable on the repayment date (November 11, 2018) but could - at the request of the Company - and was decided to be paid in shares of Pyrolyx AG by capital increase through contribution in kind. The capital increase was partially executed in 2019.

# 4.13 Other non-financial liabilities

The split of other non-financial liabilities is as follows:

€'000	31 December 2019	31 December 2018
Liabilities to employees	719	706
Liabilities to suppliers	698	437
Liabilities to supervisory board members	269	101
Wage and church tax	26	29
Other	2.273	656
	3.985	1.929
thereof		
current	3.035	1.674
non-current	950	255

"Liabilities to employees" include expenses amongst others costs related restructuring measures. 'Other' signifies an increase in accruals for pending litigation and lawyer's fee.

# 4.14 Provisions

At 31 December 2019 provisions include liabilities in connection with the cash-settled share-based payments (virtual shares) to certain employees as outlined in Note 7.2.

# **Provisions**

For the years ended December 31, 2019 and 2018

€'000	Virtual shares
1 January 2018	
Provisions made during the year	129
Provisions used during the year	-
Provisions reversed during the year	-846
31 December 2018	-129
Provisions made during the year	-
Provisions used during the year	
Provisions reversed during the year	-20
31 December 2019	109

#### 4.15 Deferred income

The Group has been awarded a government grant in the form of the project financing loan from the City of Terre Haute, Indiana, USA bearing interest at below market rate. The amount of the government grant has been determined by subtracting the fair value of the loan upon inception from the loan proceeds less transactions costs and been recognized as deferred income TUS\$2.914 (converted 2019: T€ 2,595; 2018: T€ 2,546).

Parts of the grant relating to the purchase of property, plant and equipment will be amortized over the useful life of the plant once operation of the plant has started. The parts of the grant that compensate the Group for expenses incurred will be recognized in profit or loss on a systematic basis in the periods in which the expenses are incurred.

# Pyrolyx AG Appendix 4E – Preliminary Financial Report for the year ended 31 December 2017

Notes to the consolidated financial statements (continued)

4.16 Equity

# a) Share capital, treasury shares and additional paid-in capital comprise the following:

							1	
€:000	Share capital	Treasury shares	shares Additional paid-in capital	Retained earnings	Other components of equity	Total	Non-controlling interests	Total equity
Balance at 1 January 2018	3,165	-112	7,290	-16,378	*	-6,035	8-	-6.043
Issuance of shares, net of transaction costs and								
tax	2,450	•	33,574	ı		36,024	,	36,024
Treasury shares sold		-112	675			787	,	787
Equity-settled share-based payment	•	-	-504	620	- The state of the	116	-	116
Loss after tax				-21,595		-21,595	-30	-21.625
Acquisition of non-controlling interests without		· · · · · · · · · · · · · · · · · · ·						
change in control			-1,280			-1.280	1280	C
Net exchange differences recognised in other								The state of the s
comprehensive income					-1,340	-1,340	-81	-1.421
Balance at 31 December 2018	5,961	1	43,221	-42,163	-469	6,550	1.610	8,160
Issuance of shares, net of transaction costs and								
tax	1,266		9,038	•	•	10,304	-882	11,186
Treasury shares sold	ı	-	•	1		-	1	•
Equity-settled share-based payment	1	·	1,851	1		-1851	0	1,851
Loss after tax	*	ı	•	-17,387	-	-17,387	-492	-17.879
Acquisition of non-controlling interests without				The Property of the Control of the C				
change in control	•	•	-1,189	1	•	-1,189	1.189	1
Net exchange differences recognised in other								
comprehensive income	-	*	ŧ	•	-354	-354	66	453
Balance at 31 December 2019	7,227	1	52,921	-59,551	-115	482	3,288	3,771

# b) Share capital

# Issued shares Pyrolyx AG

The total number of Pyrolyx AG shares was 7,226,678 on December 31, 2019. The annual general meeting on 7 June 2017 approved the conversion at Pyrolyx from bearer shares to registered shares. Each registered share is fully paid-in, shows no-par-value and has a notional value of € 1.00, carries one vote per share and is entitled to dividends.

During the reporting period three capital increases from authorized capital finalized - one against cash contribution and two against contributions in kind. In total 1,265,809 new registered shares were issued in 2019, the following table provides an overview of these capital increases:

	Incre	ease in	
in € '000	Share capital	Additonal paid-in capital	Total capital increase
6. May 2019 21.03.2019 from Authorized Capital 2018 / I AGM on 20.07.2018	937	3.981	4.917
14 June 2019 14.04.2019 from Authorized Capital 2018 / I AGM on 20.07.2018	222	1.778	2.000
<b>5 August 2019</b> 02.06.2019 from Authorized Capital 2018 / I AGM on 20.07.2018	107	770	877
Fotal capital increase in 2019	1.266	2.548	2.877

Three capital increases occurred in 2019. On May 5, TSAL and M-Invest converted Warrants into shares — Total value €916,590. M-Invest converted a receivable to the company for 20.000 to shares. On June 14, 2019 Longbridge, Australia, signed 222,222 shares for a total cash contribution of €2 Million at €9/share. On August 5, 2019 through a contribution in kind various shareholder loans and the remainder payable from the early conversion fee of the convertible bond (4.11e) in the total amount of €877,495.82 were converted to equity at an average share price of €8.20.

#### authorized capital

At December 31, 2019, Pyrolyx AG held the Authorized Capital 2019/I of € 3,619,339.00, which was resolved by the annual general meeting (AGM) on 18.09.2019 with a total volume of € 3,619,339.00. The previous Authorized Capital 2017/II amounting to € 2,064,030.00 was revoked at the same time.

#### Contingent capital

At December 2019, Pyrolyx AG held the following contingent capitals:

Contingent Capital 2019/I amounting to € 400,000.00 to cover stock options under the 2019 Share Option Program for Management of Pyrolyx USA.

Contingent Capital 2013/II amounting to € 179,850.00 to cover stock options under the 2013 Share Option Program (Note: Performance parameters were not achieved within the allotted time therefore no stock options can be exercised.).

Contingent Capital 2017/I amounting to € 895,207.00 to cover convertible bonds and/or bonds with warrants with a total nominal value of up to € 90 million issued with the authorization of the company EGM on 21 February 2017 (Note: No bonds were issued to date.).

#### Issued shares Pyrolyx USA

On 5 November 2018 the Board of Directors of Pyrolyx USA, Inc. with approval from Pyrolyx AG increased authorized shares from 3,500 to 4,000.

In December 2019 The Longbridge Trust exercised 94 warrants in order to subscribe 94 shares of Pyrolyx USA against payment of USD 11,011.50 per share (total amount TUSD 1,035). After this transaction a total of 3,565 shares was outstanding as of 31<sup>st</sup> of December 2019. In addition, a total number of 183 warrants are issued with the right to purchase 183 shares of Pyrolyx USA.

# Equity Portions from Warrants

Pyrolyx, AVIV Investments Pty Ltd, Galaxis Advisory SA. Cayman Islands, and M-Invest GmbH entered into a Novation Agreement to convert their existing warrants into 1,005,817 new shares in 2016. This novation was subject to several conditions' precedent, which had been satisfied thus a shareholder options liability in respect of AVIV Investments Pty Ltd (up to 899,657 new shares), Galaxis Advisory SA (up to 89,227 new shares) and M-Invest GmbH (up to 16,933 new shares) arose. On 6 May 2019 AVIV Investments Pty Ltd and Meder Invest GmbH participated with their warrants in a capital increase by contribution in kind and received 899,657 (AVIV) and 16,933 (M-Invest). Galaxis Advisory SA did not participate in this capital increase, and therefore a shareholder options liability (at fair value) in the amount of € 522K (89,227 potential shares multiplied by € 5,85 share price of as of 31. December 2019 (2018: € 4,989K).

# 5 Cash flow information

Cash Flow Statement	1.1 31.12.2019	1.1 31.12.2018
	TEUR	TEUR
Cash flows from operating activities		
+ Receipts from customers	1,604	617
- Payments for goods and services	-9,555	-7,907
- Interest received	104	247
- Interest and other costs of finance paid	-1,348	-2,350
+ Income taxes paid	0	2,000
- Government grants and tax incentives	0	0
-/+ Other Income or Expenses	505	704
Net Cash flows from operating activities	-8,690	-8,689
0.10.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4		
Cash flows from Investing activities		
- Cash payments to acquire intangible assets	0	0
- Cash payments to acquire property, plant and equipment	-13,509	-14,891
+ Proceeds from disposal of interest in a subsidiary	0	0
- Interest received	0	0
+ Other non current assets	0	800
Cash flows from Investing activities	-13,509	-14,091
Cash flows from financing activities		
+ Cash proceeds from issuing shares or other equity	E 441	0.070
+ Proceeds from borrowings	5,441	2,373
- Repayments of borrowings	13,272	5,138
- Transaction costs related to loans and borrowings	-2,072	-1,720
- Transaction costs related to issues of shares, convertible	0	-23
Transaction cools related to loaded of shares, convertible	0	
Cash flows from financing activities	16,641	5,768
Net increase / decrease in cash and cash equivalents	-5,559	-17,012
Cash and cash equivalents at the beginning of the period*)	11,970	28,012
Effect of changes in foreign currency rates on cash and	11,070	20,012
cash equivalents	23	971
Cash and cash equivalents at the end of the period*)	6,435	11,970

Operations: Receipts from customers increased largely from the purchase of J&R Tire Recycling company and the incorporation of ELT tire collection sales. Payments for goods and services increased as the operations for TH1 commenced. Investing: Payments for PPE continued to finalize construction and hot commissioning of TH1. Financing: In order to create sufficient liquidity positive cash flow was largely generated from financing activities both through debt financing (shareholder loans) and equity measures through capital raises. See related commentaries for further detail.

# 6 Additional disclosures regarding financial instruments

The table below shows the carrying amounts of financial assets and liabilities as well as fair values in accordance with the levels of the fair value hierarchy. The three levels based on the input factors used for the determination of the fair value are defined as follows:

Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities.

**Level 2:** Inputs other than quoted market prices included within level 1 that are observable for the asset or liability either directly or indirectly.

Level 3: Inputs for the asset or liability that are not based on observable market data.

Financial instruments by class and category in accordance with IFRS 7.8

€'000	31 December 2019		31 December 2018		
	amount	Value	amount	Fair Value	per IFRS
Financial assets, by class					
Cash and cash equivalents	3.358	3.648	3.648	3.648	
Trade receivables - current1)	397	152	152	152	
Restricted cash and cash equivalents - non-current	3.077	8.322	8.322	8.322	
Financial liabilities, by class					
Trade payables - current	7.202	7.202	565	565	
Project financing loan - current	24.200	21.736	1.792	1.790	2
Convertible bonds - current	-		_	-	2
Liabilities due to banks - current	502	394	341	374	2
Other financial liabilities - current					
Shareholder options - current	-	-	4.989	4.989	1
Shareholder Loans - current	5.903	5.283	n/a	n/a	2
Other other financial liabilities - current	2.015	1.871	3.997	4.020	2
Project financing loan - non-current	-	-	21.548	21.355	2
Liabilities due to banks - non-current	1.291	1.048	719	672	2
Other financial liabilities - non-current					
Contingent purchase price liabilities	768	768	1.076	1.076	3
Mezzanine bond - non-current	1.541	1.242	1.252	1.252	2
Shareholder Loans - non-current	13.375	13.726	n/a	n/a	2
Other other financial liabilities	8.048	5.038	9.607	8.115	2

As of 31 December 2019, and 2018 the fair values of cash and cash equivalents, trade receivables, restricted cash and cash equivalents and trade payables were assumed to correspond to their book value.

On trade receivables Pyrolyx calculates bad debt allowances to reflect expected defaults based on the measurement results.

# Project financing loan

For the project financing loan, the fair value was calculated using the discounted cash flow method. The capitalisation interest rate applied at 31 December 2019 is 13.11 %. The fair value can be assigned to level 2 of the fair value hierarchy according to IFRS 13.

# Liabilities due to banks

For fixed-interest loans, the fair value of liabilities to banks was calculated using the discounted cash flow method. The capitalization interest rates applied at 31 December 2019 is 11.50%. They are classified as level 2 fair values in the fair value hierarchy.

For variable-interest loans, the fair value of liabilities to banks was calculated only for disclosure purposes and carried at the value of the outstanding nominal amount.

In the measurement of the contingent purchase price liabilities the main unobservable input parameter is the expectation regarding the purchase price component still to be paid.

#### Contingent purchase price liability

€'000	2019	2018
Opening balance	1.076	989
Total result for the period reported		
in income statement under		
"other operating income/expenses"	-307	87
Closing balance	769	1.076
Change in unrealised gains (-)/ losses (+) for the period included in the income statement under "other operating income/expenses" for contingent purchase price liabilities		
at the end of the reporting period	-307	87

#### Other financial liabilities

The fair value for the other financial liabilities (without the shareholder options and contingent purchase price liabilities) is based on discounted cash flow models using current market interest rates. The fair value can be assigned to level 2 of the fair value hierarchy according to IFRS 13.

The shareholder options are recognised and reported at fair value on the reporting date and can be assigned to level 1 of the fair value hierarchy according to IFRS 13. For details on the shareholder options see Note 4.11 a).

The contingent purchase price liabilities are recorded at fair value and are assigned to level 3 of the fair value hierarchy according to IFRS 13.

#### Financial instruments by class and category in accordance with IFRS 7.8

		31 Decem	December 2019 31 December 2018		
€'000	Category IFRS 7.8 per IFRS 9	•	Carrying amount		Carrying amount
Financial assets, by class				****	
Cash and cash equivalents	Amortised cost		3.358		3.648
Trade receivables - current1)	Amortised cost		397		152
Restricted cash and cash equivalents - non-current	Amortised cost		3.077		8.322
Financial liabilities, by class					
Trade payables - current	FLAC		7.202		565
Project financing loan - current	FLAC		24.200		1.792
Liabilities due to banks - current	FLAC		502		341
Other financial liabilities - current			7.918		8.986
Shareholder options - current	FVTPL	-		4.989	
Shareholder Loans - current	FLAC	5.903		-	
Other other financial liabilities - current	FLAC	2.015		3.997	
Project financing loan - non-current	FLAC		_		21.548
Liabilities due to banks - non-current	FLAC		1.291		719
Other financial liabilities - non-current			23.733		11.935
Contingent purchase price liabilities	FVTPL	768		1.076	
Arena bond - non-current	FVTPL	1.541		1.252	
Shareholder Loans - non-current	FVTPL	13.375		n/a	
Other other financial liabilities	FLAC	8.048		9.607	
Financial assets at amortised cost (Amortised cost) Loans and receivables (LaR)	Amortised cost		6.832		12.123
Financial liabilities at amortised cost (FLAC)  Financial liabilities at fair value through profit or less	FLAC		49.161		38.569
Financial liabilities at fair value through profit or loss (FVTPL)/	FVTPL		15.685		7.317
Summary by category			71.677		58.008

# 7 Share-based payments

# 7.1 Equity-settled share-based payments

The annual general meeting (AGM) of the Company on April 4, 2019 has resolved a new stock option plan (STOP) for members of the management board of Pyrolyx USA and has set-up a respective contingent capital of up to € 400,000. 375,000 stock options have been granted, with vesting periods ending between January 1, 2024 and January 1, 2028.

The company recognized the value of each stock option and created a financial transaction expense with the credit going to equity ("additional paid in capital") in the total amount of €322K.

# 7.2 Cash-settled share-based payments

In 2018 and 2019 certain members of the management board of the Company have been granted entitlement to variable share-based remuneration (also known virtual stock options). The calculation of the potential payment is directly linked to the Company's share price performance and the instruments are exercisable until 31.12.2021.

The following table shows the maximum number the virtual shares issued by December 31, 2019, including the entitlement and the allocation date:

#### Virtual shares issued by 31 December 2019

Number	Exercise Price
138.330	
138.330	€ 11,00
21.283	€ 11,00
-	-
-	-
-	-
138.330	€ 11,00
138.330	€ 11,00
	138.330 138.330 21.283 - - - 138.330

Certain members of the management board of the Company can claim a variable remuneration from the Company following the allocation of virtual shares but no later than midnight on 31 December 2021 (exercise period). Entitlements not claimed by this time shall be forfeited without compensation.

The underlying share price of one virtual share has been set at € 11.

The exercise price of a virtual share always corresponds to the average weighted market value of a company share determined for the 60 trading days preceding exercise.

As soon as variable remuneration is claimed, the underlying share price of virtual shares is compared to the exercise price. If the exercise price exceeds the underlying virtual purchase price per share, the variable remuneration entitlement equals the difference multiplied by the number of redeemed virtual shares after tax.

The fair value of the virtual shares was calculated using a binomial option pricing model (Black-Scholes-Merton-Modell "BSM"). The following table provides an overview of the relevant measurement parameters:

#### Virtual shares relevant measurement parameters

	31 December 2019	31 December 2018
Assessment parameters	2010	2010
Number of virtual share options	138.330	138.330
Shares for work already performed	138.330	138.330
Shares based on future work	0	0
Share price at the reporting date	€ 5,95	€ 5,00
Exercise price	€ 11,00	€ 11,00
Volatility	57%	61%
reporting date	-0,63%	-0,56%
Option term in years	2,0	3,0
Blocking period in years	· _	· · · · · · · · · · · · · · · · · · ·
Performance target	_	_
Fair value of virtual shares	€ 0,79	€ 0,93

**Volatility**: According to IFRS 2.B25, when estimating the expected volatility, the implied volatility from traded options, the historical volatility of the share price for the expected option term, the period since the shares of the company were traded, the tendency of the volatility towards its mean value and appropriate, regular intervals for price observations must be taken into account. Since no options are traded for the shares of Pyrolyx, implicit volatility cannot be considered. The company have therefore used historical data to estimate volatility. In doing so, the company considered various intervals in the price observations. When volatility is observed based on daily data for a period of 720 days, an annualized volatility of 53.52% is obtained, when weekly data are observed on a basis of 104 weeks, an annualized volatility of 56.58% is obtained, and when monthly data are observed for a period of 24 months, an annualized volatility of 57.15% is obtained.

The virtual shares were recognised as provisions on the balance sheet with respective expenses in personnel expenses (wages and salaries). See Note Provisons 4.13 for further information.

# 8 Critical estimates and judgements

The preparation of the consolidated financial statements requires judgements, estimates and assumptions for certain items that have an impact on the recognition and measurement of recognised assets, liabilities, income, expenses and contingent liabilities. These estimates and assumptions are based on historical data and other factors that are relevant and are reviewed on an ongoing basis. Actual amounts may differ from the estimates made.

Primary areas of application for judgements, estimates and assumptions are the following:

# Consolidation decision on cct Stegelitz GmbH

Note 2.1 describes that although the Group holds in cct Stegelitz GmbH only an 80% equity interest cct Stegelitz GmbH is included in the consolidated financial statements based on a 100% interest equity interest. Considering all facts and circumstances the management board of the Company concluded that all material opportunities and risks lie with Pyrolyx and Pyrolyx has 100% power to affect the amount of its returns from cct Stegelitz GmbH. See Note 2.1 for further information.

#### **Warrants**

The company has issued a number of warrants which have been offered as additional inducements to attract debt financing in the past, as well as part of the terms of new recent shareholder loans. These warrants need to be valued at Fair Value at issued date of the financial year with considerable effort. These notes describe the financial impact involved associated with these warrants respectively.

# **Deferred tax accounting**

In determining the recoverability of the carrying amount of deferred tax assets significant judgement is required with respect to the availability of sufficient taxable profits. For further details see Note 3.3.

# Subsequent accounting for intangible assets

The Group's purchased rights, concessions and similar rights include production technologies for the manufacturing of pyrolysis granulate. As of the reporting date the Group estimates the remaining useful life of the production technologies to be at least 5 years based on the expected technical obsolescence of such assets. However, the actual remaining useful live may be shorter or longer than 5 years, depending on technical innovations and competitor actions. For further details see Note 4.5.

# Accounting for project financing loan

Upon receipt of the cash proceeds for the project financing loan from the City of Terre Haute the Group had to derive the fair value of the project financing loan at inception based on an appropriate market interest rate with the difference between the initial carrying value of the loan at fair value and the proceeds received being the government grant part of the proceeds received. Significant judgement is required to determine such appropriate market interest rate. The interest rate used to discount the Project Financing Loan of Pyrolyx USA, Inc. has been determined on the basis of yields on 6 to 10 years USD bonds, taking into account the securitization. The management had to exercise significant discretionary decisions regarding the derivation of the market interest rate from the available data as there were significant differences in bond yields, although the features of the bonds were comparable. The management finally applied an interest rate of 10.19% at the time of acquisition. With regard to the derivation of the spread between secured and unsecured bonds, the resulting interest rates for appropriate rating classes were compared and thus an adjustment of -2.92% was determined for the securitization. For further details see Note 4.8.

# Fair value measurements and valuation process

Some of the Group's assets and liabilities are measured at fair value for financial reporting purposes. The chief financial officer of the Company determines the appropriate valuation techniques and inputs for fair value measurements.

In estimating the fair value of an asset or a liability, the Group uses market-observable data to the extent it is available. Where Level 1 inputs are not available, the Group engages third party qualified external valuers to establish the appropriate valuation techniques and inputs to the model. In determining the appropriate valuation techniques and inputs to the respective models' significant judgements is required.

Information about the valuation techniques and inputs used in determining the fair value of various liabilities are disclosed in Notes 4.9 convertible bonds, Note 4.11 a) shareholder options liabilities, Note 4.11 b) Purchase price loan and contingent purchase price liabilities, Note 6 additional disclosures regarding financial instruments and Note 7 share-based payments/ option programs.

#### Assessment of legal risks and contingent liabilities

The assessment of legal risks and contingent liabilities require significant judgement on the likelihood of a possible outflow of resources.

# 9 Capital management

The Group's capital management is especially aligned to ensure the Group's financing. Directly managed by the executive board, Pyrolyx AG is responsible for planning and monitoring the Group's liquidity as well as raising capital. Short-term liquidity management is carried out with a planning horizon of 90 days. Generally, the corresponding planning is updated once a week.

As of the reporting date, the capital structure is presented as follows:

€'000	2019 % of total equity and liabilities		2018 % of total equity and liabilities	
Current liabilities	42,891	57%	13,359	23%
Non-current liabilities	28,724	38%	37,132	63%
Liabilities	71,615	95%	50,491	86%
Total equity and liabilities	75,384	100%	58,650	100%

# 10 Financial Commitments

Obligations for purchasing commitments as of the reporting date amount to € 3.257 thousand (2018: €6.559 thousand).

# 11 Events after the reporting period

Based on Management Board resolution dated December 11, 2019 and the Supervisory Board resolution of the same day, the company did a capital increase against cash contribution from Authorised Capital 2019/I by € 286,438,00. On January 30, 2020, the transaction was finalised with the registration of the new share capital in the commercial register. The subscripted capital was increased through the issuance of 286,438 shares with par value € 1.00 per share at a share price of € 7.87 per share. Thus, the company raised € 2,254 thousand including agio and the money was received in 2019 already.

In addition, the Management Board and the Supervisory Board resolved on December 12, 2019 another capital increase against cash contribution from Authorised Capital 2019/I by  $\leqslant$  359,412.00 by issuance of 359,412 share at par value  $\leqslant$  1.00 per share at a share price of  $\leqslant$  7,87 and a fund raising total of  $\leqslant$  2,829 thousand. The company received parts of the subscription amounts in 2019 and the remainder in January 2020. The capital was entered in the commercial register on 28.2.2020.

Mr. Al Cutrone joined Pyrolyx USA effective February 11, 2020 as the new Chief Operating Officer based in Terre Haute, IN.

Management and Supervisory Board of Pyrolyx decided Pyrolyx will consolidate trading in its securities on the Australian ASX and delist in Germany. The delisting in Germany will become effective at the end of April 2020.

Management Board and Supervisory Board resolved in February 2020 a loan about € 500 thousand from M-Holding AG to cct Stegelitz GmbH. On 24.2.2020 cct Stegelitz GmbH entered into loan agreements with M-Holding AG about € 500 thousand with 8% interest p.a. As an inducement for the loan a commitment fee of 14% were agreed. At reporting date, the outstanding loan instalments excluding accrued interest amounts to € 500 thousand.

# 12 Summary of significant accounting policies

This note provides a list of the significant accounting policies adopted in the preparation of these consolidated financial statements. These policies have been consistently applied to all the years presented, unless otherwise stated. The financial statements are for the Group consisting of Pyrolyx and its subsidiaries.

# 12.1 Compliance with IFRS

The consolidated financial statements of Pyrolyx AG have been prepared in accordance with International Financial Reporting Standards (IFRS) and interpretations issued by the IFRS Interpretations Committee (IFRS IC) applicable to companies reporting under IFRS. The financial statements comply with IFRS as issued by the International Accounting Standards Board (IASB) and adopted by the EU.

#### 12.2 Historical cost convention

The financial statements have been prepared on a historical cost basis, except for certain financial assets and liabilities (including derivative instruments).

# 12.3 New and amended standards adopted by the group

The group has applied the following standards and amendments for the first time for their annual reporting period commencing 1 January 2019:

- o IFRS 16 Leases
- Amendments to IFRS 9 Prepayment Features with Negative Compensation
- o Amendments to IAS 28 Long-term Interests in Associates and Joint Ventures

- o Amendments to IAS 19 Employee Benefits Plan Amendment, Curtailment or Settlement
- IFRIC 23 Uncertainty over Income Tax Treatments
- o Annual Improvements 2015-2017 cycle

The group did not have to change its accounting policies and make certain retrospective adjustments following the adoption of IFRS 16.

In the current year, the Group has applied a number of amendments to IFRS Standards and Interpretations issued by the IASB that are effective for an annual period that begins on or after 1 January 2019. Their adoption has not had any material impact on the disclosures or on the amounts reported in these financial statements.

The Group initially applied IFRS 16 Leases from 1 January 2019. A number of other new standards are also effective from 1 January 2019 but they do not have a material effect on the Group's financial statements.

The Group has adopted IFRS 16 'Leases' which has become effective this year:

IFRS 16 'Leases' replaces IAS 17 'Leases' along with three Interpretations (IFRIC 4 'Determining whether an Arrangement contains a Lease', SIC 15 'Operating Leases-Incentives' and SIC 27 'Evaluating the Substance of Transactions Involving the Legal Form of a Lease'). The new Standard has been applied using the modified retrospective approach, with the cumulative effect of adopting IFRS 16 – if any - being recognised in equity as an adjustment to the opening balance of retained earnings for the current period. Prior periods have not been restated.

For contracts in place at the date of initial application, the Group has elected to apply the definition of a lease from IAS 17 and IFRIC 4 and has not applied IFRS 16 to arrangements that were previously not identified as lease under IAS 17 and IFRIC 4.

The Group has elected not to include initial direct costs in the measurement of the right-of-use asset for operating leases in existence at the date of initial application of IFRS 16, being 1 January 2019. At this date, the Group has also elected to measure the right-of-use assets at an amount equal to the lease liability adjusted for any prepaid or accrued lease payments that existed at the date of transition.

Instead of performing an impairment review on the right-of-use assets at the date of initial application, the Group has relied on its historic assessment as to whether leases were onerous immediately before the date of initial application of IFRS 16.

On transition, for leases previously accounted for as operating leases with a remaining lease term of less than 12 months and for leases of low-value assets the Group has applied the

optional exemptions to not recognize right-of-use assets but to account for the lease expense on a straight-line basis over the remaining lease term.

On transition to IFRS 16 the weighted average incremental borrowing rate applied to lease liabilities recognized under IFRS 16 for the German entities was 8.05% and for the US entities 10.32%.

The following is a reconciliation of total operating lease commitments at 31 December 2018 to the lease liabilities recognized at 1 January 2019:

#### €'000

Total operating lease commitments disclosed at 31 December 2018	
Recognition exemptions:	
- Leases of low value assets	-7
- Leases with remaining lease term of less than 12 months	-79
Operating lease liabilities before discounting	163
Discounted using incremental borrowing rate	-16
Total lease liabilities recognised under IFRS 16 at 1 January 2019	

#### Leases

As described in Note 16.3, the Group has applied IFRS 16 using the modified retrospective approach and therefore comparative information has not been restated. This means comparative information is still reported under IAS 17 and IFRIC 4.

For any new contracts entered into on or after 1 January 2019, the Group considers whether a contract is, or contains a lease. A lease is defined as 'a contract, or part of a contract, that conveys the right to use an asset (the underlying asset) for a period of time in exchange for consideration'.

To apply this definition the Group assesses whether the contract meets three key evaluations which are whether:

- the contract contains an identified asset, which is either explicitly identified in the contract or implicitly specified by being identified at the time the asset is made available to the Group
- the Group has the right to obtain substantially all of the economic benefits from use of the identified asset throughout the period of use, considering its rights within the defined scope of the contract
- the Group has the right to direct the use of the identified asset throughout the period of use.

The Group assess whether it has the right to direct 'how and for what purpose' the asset is used throughout the period of use.

#### Measurement and recognition of leases as a lessee

At lease commencement date, the Group recognizes a right-of-use asset and a lease liability on the statement of financial position. The right-of-use asset is measured at cost, which is made up of the initial measurement of the lease liability, any initial direct costs incurred by the Group, an estimate of any costs to dismantle and remove the asset at the end of the lease, and any lease payments made in advance of the lease commencement date (net of any incentives received).

The Group depreciates the right-of-use assets on a straight-line basis from the lease commencement date to the earlier of the end of the useful life of the right-of-use asset or the end of the lease term.

The Group also assesses the right-of-use asset for impairment when such indicators exist.

At the commencement date, the Group measures the lease liability at the present value of the lease payments unpaid at that date, discounted using the interest rate implicit in the lease if that rate is readily available or the Group's incremental borrowing rate.

Lease payments included in the measurement of the lease liability are made up of fixed payments (including in substance fixed), variable payments based on an index or rate, amounts expected to be payable under a residual value guarantee and payments arising from options reasonably certain to be exercised.

Subsequent to initial measurement, the liability will be reduced for payments made and increased for interest. It is remeasured to reflect any reassessment or modification, or if there are changes in in-substance fixed payments.

When the lease liability is remeasured, the corresponding adjustment is reflected in the right-of-use asset, or profit and loss if the right-of-use asset is already reduced to zero.

The Group has elected to account for short-term leases and leases of low-value assets using the practical expedients. Instead of recognizing a right-of-use asset and lease liability, the payments in relation to these are recognized as an expense in profit or loss on a straight-line basis over the lease term.

On the balance sheet, right-of-use assets have been included in property, plant and equipment and lease liabilities have been included in other financial liabilities.

# 12.4 New standards and interpretations not yet adopted

Certain new accounting standards and interpretations have been published that are not mandatory for 31 December 2019 reporting periods and have not been early adopted by the group. Their adoption has not had any material impact on the disclosures or on the amounts reported in these financial statements.

#### 12.5 Principles of consolidation

Subsidiaries are all entities over which the Group has control. The Group controls an entity when the Group is exposed to, or has rights to, variable returns from its involvement with the entity and can affect those returns through its power to direct the activities of the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Group. They are deconsolidated from the date that control ceases.

Intercompany transactions, balances and unrealised gains on transactions between group companies are eliminated. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the transferred asset. Accounting policies of

subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group.

Non-controlling interests in the results and equity of subsidiaries are shown separately in the consolidated income statement, statement of comprehensive income, balance sheet and statement of changes in equity respectively.

## 12.6 Changes in ownership interests

The group treats transactions with non-controlling interests that do not result in a loss of control as transactions with equity owners of the group. A change in ownership interest results in an adjustment between the carrying amounts of the controlling and non-controlling interests to reflect their relative interests in the subsidiary. Any difference between the amount of the adjustment to non-controlling interests and any consideration paid or received is recognised in a separate reserve within equity attributable to owners of Pyrolyx AG.

### 12.7 Foreign currency translation

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates (the functional currency). The consolidated financial statements are presented in euro (€), which is Pyrolyx AG's functional and presentation currency.

Foreign currency transactions are translated into the functional currency using the exchange rates at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation of monetary assets and liabilities denominated in foreign currencies at year end exchange rates are generally recognised in profit or loss.

Foreign exchange gains and losses are presented in the income statement within other income or other expenses.

The results and financial position of foreign operations (none of which has the currency of a hyperinflationary economy) that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

- assets and liabilities for each balance sheet presented are translated at the closing rate at the date of that balance sheet
- income and expenses for each income statement and statement of comprehensive income are translated at average exchange rates, and
- all resulting exchange differences are recognised in other comprehensive income.

On consolidation, exchange differences arising from the translation of any net investment in foreign entities, are recognised in other comprehensive income. When a foreign operation is sold, the associated exchange differences are reclassified to profit or loss, as part of the gain or loss on sale.

# 12.8 Business combinations

Business combinations are accounted for using the acquisition method. The consideration transferred in a business combination is measured at fair value, which is calculated as the sum of the acquisition date fair values of the assets transferred by the Group, liabilities incurred by the Group to the former owners of the acquiree and the equity interests issued by the Group in exchange for control of the acquiree. Acquisition related costs are recognised in profit or loss as incurred.

At the acquisition date, the identifiable assets acquired, and the liabilities assumed are recognised at their fair value, except that:

 Deferred tax assets or liabilities, and assets or liabilities related to employee benefit arrangements are recognised and measured in accordance with IAS 12 Income Taxes and IAS 19 Employee Benefits

Goodwill is measured as the excess of the sum of the consideration transferred, the amount of any non-controlling interests in the acquiree, and the fair value of the acquirer's previously held equity interest in the acquiree (if any) over the net of the acquisition-date amounts of the identifiable assets acquired and the liabilities assumed. If, after reassessment, a deficit arises, it is recognised immediately in profit or loss.

If the consideration transferred by the Group includes a contingent consideration, the contingent consideration is measured at its fair value at the date of acquisition. Subsequent changes to the value are recognised either through profit or loss or directly in equity.

#### 12.9 Fair value measurement

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, regardless of whether that price is directly observable or estimated using another valuation technique.

In estimating the fair value of an asset or a liability, the Group takes into account the characteristics of the asset or liability (e.g. the nature and location of the asset as well as limitations regarding its sale or use) if market participants would take those characteristics into account when pricing the asset or liability at the measurement date. Fair value for measurement and/or disclosure purposes in these consolidated financial statements is determined on such a basis, except for

- Share-based payment transactions that are within the scope of IFRS 2 Share-based Payment
- Measurements that have some similarities to fair value but are not fair value, such as net realisable value in IAS 2 Inventories or value in use in IAS 36 Impairment of Assets.

Fair value is not always available as market value and must often be determined on the basis of various valuation parameters. These are mainly quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date. In addition, quoted prices that are either directly observable for the asset or liability or can be indirectly derived from other prices can be consulted to determine fair value.

### 12.10 Revenue recognition

Revenue is measured at the fair value of the consideration received or receivable. Amounts disclosed as revenue are net of returns, trade allowances, rebates and amounts collected on behalf of third parties.

Revenue from the sale of goods is recognised when the following conditions are satisfied:

- The Group has transferred to the buyer the significant risks and rewards of ownership of the goods
- The Group retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold
- The amount of revenue can be measured reliably
- It is probable that the economic benefits associated with the transaction will flow to the Group
- The costs incurred or to be incurred in respect of the transaction can be measured reliably

Revenues include revenue from the sale of recovered carbon black, recovered steel, pyrolysis oil and credits for the recycling of end-of-life tires.

#### 12.11 Government grants

Grants from the government are recognised at their fair value where there is a reasonable assurance that the grant will be received, and the group will comply with all attached conditions.

Government grants relating to costs are deferred and recognised in the profit or loss over the period necessary to match them with the costs that they are intended to compensate.

Government grants relating to the purchase of property, plant and equipment are included in non-current liabilities as deferred income and are credited to profit or loss on a straight-line basis over the expected lives of the related assets.

# 12.12 Interest income and interest expenses

Interest income and interest expenses are recognised using the effective interest method.

#### 12.13 Income taxes

The income tax expense or credit for the period is the tax payable on the current period's taxable income based on the applicable income tax rate for each jurisdiction adjusted by changes in deferred tax assets and liabilities attributable to temporary differences and to unused tax losses.

The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the end of the reporting period in the countries where the Company's subsidiaries operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. It establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

Deferred income tax is provided in full, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. However, deferred tax liabilities are not recognised if they arise from the initial recognition of goodwill. Deferred income tax is also not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantially enacted by the end of the reporting period and are expected to apply when the related deferred income tax asset is realised, or the deferred income tax liability is settled.

Deferred tax assets are recognised only if it is probable that future taxable amounts will be available to utilise those temporary differences and losses.

Deferred tax liabilities and assets are not recognised for temporary differences between the carrying amount and tax bases of investments in foreign operations where the Company is able to control the timing of the reversal of the temporary differences and it is probable that the differences will not reverse in the foreseeable future.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets and liabilities and when the deferred tax balances relate to the same taxation authority. Current tax assets and tax liabilities are offset where the entity has a legally

enforceable right to offset and intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

Current and deferred tax are recognised in profit or loss, except to the extent that it relates to items recognised in other comprehensive income or directly in equity. In this case, the tax is also recognised in other comprehensive income or directly in equity, respectively.

### 12.14 Earnings per share

Basic earnings per share is calculated by dividing:

- · the loss attributable to owners of the Company
- by the weighted average number of ordinary shares outstanding during the financial year

Diluted earnings per share adjusts the figures used in the determination of basic earnings per share to take into account:

- the after-income tax effect of interest and other financing costs associated with dilutive potential ordinary shares, and
- the weighted average number of additional ordinary shares that would have been outstanding assuming the conversion of all dilutive potential ordinary shares.

#### 12.15 Impairment of assets

Assets that are subject to amortisation or depreciation are tested for impairment whenever events or circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying value exceeds its recoverable value. The recoverable amount is the higher of an asset's fair value less costs of disposal and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash inflows which are independent of the cash inflows from other assets or groups of assets (cash-generating units). Non-financial assets other than goodwill that suffered an impairment are reviewed for possible reversal of the impairment at the end of each reporting period.

#### 12.16 Investments and other financial assets

The group has applied IFRS 9 retrospectively but has elected not to restate comparative information. As a result, the comparative information provided continues to be accounted for in accordance with the group's previous accounting policy.

Financial assets and financial liabilities are recognised when a Group entity becomes a party to the contractual provisions of the instrument.

Financial assets are initially measured at fair value. Transaction costs that are directly attributable to the acquisition of financial assets (other than financial assets and financial liabilities at fair value through profit or loss) are added to or deducted from the fair value of the financial assets on initial recognition. Transaction costs directly attributable to the acquisition of financial assets at fair value through profit or loss are recognised immediately in profit or loss.

On initial recognition, a financial asset is classified as measured at: amortised cost; FVOCI – debt investment; FVOCI – equity investment; or FVTPL. Financial assets are not reclassified subsequent to their initial recognition unless the Group changes its business model for managing financial assets, in which case all affected financial assets are reclassified on the first day of the first reporting period following the change in the business model.

# a) Classification and measurement

From 1 January 2018, the group classifies its financial assets in the following measurement categories:

- those to be measured subsequently at fair value (either through OCI or through profit or loss), and
- those to be measured at amortised cost.

The classification depends on the entity's business model for managing the financial assets and the contractual terms of the cash flows.

For assets measured at fair value, gains and losses will either be recorded in profit or loss or OCI. For investments in equity instruments that are not held for trading, this will depend on whether the group has made an irrevocable election at the time of initial recognition to account for the equity investment at fair value through other comprehensive income (FVOCI). The group reclassifies debt investments when and only when its business model for managing those assets changes.

### b) Recognition and derecognition

Regular way purchases and sales of financial assets are recognised on trade-date, the date on which the group commits to purchase or sell the asset. Financial assets are derecognised when the rights to receive cash flows from the financial assets have expired or have been transferred and the group has transferred substantially all the risks and rewards of ownership.

#### c) Measurement

At initial recognition, the group measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss (FVPL), transaction costs that are directly attributable to the acquisition of the financial asset. Transaction costs of financial assets carried at FVPL are expensed in profit or loss.

Financial assets with embedded derivatives are considered in their entirety when determining whether their cash flows are solely payment of principal and interest.

#### Debt instruments:

Subsequent measurement of debt instruments depends on the group's business model for managing the asset and the cash flow characteristics of the asset. There are three measurement categories into which the group classifies its debt instruments:

- Amortised cost: Assets that are held for collection of contractual cash flows where those
  cash flows represent solely payments of principal and interest are measured at
  amortised cost. Interest income from these financial assets is included in finance
  income using the effective interest rate method. Any gain or loss arising on
  derecognition is recognised directly in profit or loss and presented in other
  gains/(losses) together with foreign exchange gains and losses. Impairment losses are
  presented as separate line item in the statement of profit or loss.
- FVOCI: Assets that are held for collection of contractual cash flows and for selling the financial assets, where the assets' cash flows represent solely payments of principal and interest, are measured at FVOCI. Movements in the carrying amount are taken through OCI, except for the recognition of impairment gains or losses, interest income and foreign exchange gains and losses which are recognised in profit or loss. When the financial asset is derecognised, the cumulative gain or loss previously recognised in OCI is reclassified from equity to profit or loss and recognised in other gains/(losses). Interest income from these financial assets is included in finance income using the effective interest rate method. Foreign exchange gains and losses are presented in other gains/(losses) and impairment expenses are presented as separate line item in the statement of profit or loss.
- FVPL: Assets that do not meet the criteria for amortised cost or FVOCI are measured at FVPL. A gain or loss on a debt investment that is subsequently measured at FVPL is recognised in profit or loss and presented net within other gains/(losses) in the period in which it arises.

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### **Equity instruments**

The group subsequently measures all equity investments at fair value. Where the group's management has elected to present fair value gains and losses on equity investments in OCI, there is no subsequent reclassification of fair value gains and losses to profit or loss following the derecognition of the investment. Dividends from such investments continue to be recognised in profit or loss as other income when the group's right to receive payments is established.

Changes in the fair value of financial assets at FVPL are recognised in other gains/(losses) in the statement of profit or loss as applicable. Impairment losses (and reversal of impairment losses) on equity investments measured at FVOCI are not reported separately from other changes in fair value.

### d) Impairment

From 1 January 2018, the group assesses on a forward looking basis the expected credit losses associated with its debt instruments carried at amortised cost and FVOCI. The impairment methodology applied depends on whether there has been a significant increase in credit risk.

For trade receivables, the group applies the simplified approach permitted by IFRS 9, which requires expected lifetime losses to be recognised from initial recognition of the receivables, see note 6 for further details.

# 12.17 Cash and cash equivalents

Cash and cash equivalents include cash on hand, bank balances and term deposits with original maturities of up to three months or less that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

#### 12.18 Restricted cash and cash equivalents

Restricted cash and cash equivalent balances are those which meet the definition of cash and cash equivalents but are not available for use by the group as certain restrictions are imposed on these cash and cash equivalent balances. E.g. they can arise from 'pledged' bank balances and amounts placed in escrow accounts.

# 12.19 Trade receivables

The carrying amount of trade receivables corresponds to their respective invoiced amount, less valuation allowances. If there is objective evidence that the receivables may be impaired, specific valuation allowances are recognised.

#### 12.20 Lease

The Group has applied IFRS 16 using the modified retrospective approach and therefore the comparative information has not been restated and continues to be reported under IAS 17 and IFRIC 4. The details of accounting policies under IAS 17 and IFRIC 4 are disclosed separately.

At inception of a contract, the Group assesses whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. To assess whether a contract conveys the right to control the use of an identified asset, the Group uses the definition of a lease in IFRS 16. This policy is applied to contracts entered into, on or after 1 January 2019.

#### As a lessee:

At commencement or on modification of a contract that contains a lease component, the Group allocates the consideration in the contract to each lease component on the basis of its relative stand-alone prices. However, for the leases of property the Group has elected not to separate non-lease components and account for the lease and non-lease components as a single lease component.

The Group recognises a right-of-use asset and a lease liability at the lease commencement date. The right-of-use asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any lease incentives received.

The right-of-use asset is subsequently depreciated using the straight-line method from the commencement date to the end of the lease term, unless the lease transfers ownership of the underlying asset to the Group by the end of the lease term or the cost of the right-of-use asset reflects that the Group will exercise a purchase option. In that case the right-of-use asset will be depreciated over the useful life of the underlying asset, which is determined on the same basis as those of property and equipment. In addition, the right-of-use asset is periodically reduced by impairment losses, if any, and adjusted for certain remeasurements of the lease liability.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Group's incremental borrowing rate. Generally, the Group uses its incremental borrowing rate as the discount rate.

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The Group determines its incremental borrowing rate by obtaining interest rates from various external financing sources and makes certain adjustments to reflect the terms of the lease and type of the asset leased.

Lease payments included in the measurement of the lease liability comprise the following:

- fixed payments, including in-substance fixed payments;
- variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;
- amounts expected to be payable under a residual value guarantee; and
- the exercise price under a purchase option that the Group is reasonably certain to exercise, lease payments in an optional renewal period if the Group is reasonably certain to exercise an extension option, and penalties for early termination of a lease unless the Group is reasonably certain not to terminate early.

The lease liability is measured at amortised cost using the effective interest method. It is remeasured when there is a change in future lease payments arising from a change in an index or rate, if there is a change in the Group's estimate of the amount expected to be payable under a residual value guarantee, if the Group changes its assessment of whether it will exercise a purchase, extension or termination option or if there is a revised in-substance fixed lease payment.

When the lease liability is remeasured in this way, a corresponding adjustment is made to the carrying amount of the right-of-use asset, or is recorded in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero.

The Group presents right-of-use assets that do not meet the definition of investment property in 'property, plant and equipment' and lease liabilities in 'loans and borrowings' in the statement of financial position.

#### Short-term leases and leases of low-value assets

The Group has elected not to recognise right-of-use assets and lease liabilities for leases of low-value assets and short-term leases, including IT equipment. The Group recognises the lease payments associated with these leases as an expense on a straight-line basis over the lease term.

At inception or on modification of a contract that contains a lease component, the Group allocates the consideration in the contract to each lease component on the basis of their relative standalone prices.

When the Group acts as a lessor, it determines at lease inception whether each lease is a finance lease or an operating lease.

To classify each lease, the Group makes an overall assessment of whether the lease transfers substantially all of the risks and rewards incidental to ownership of the underlying asset. If this is the case, then the lease is a finance lease; if not, then it is an operating lease. As part of this assessment, the Group considers certain indicators such as whether the lease is for the major part of the economic life of the asset.

When the Group is an intermediate lessor, it accounts for its interests in the head lease and the sub-lease separately. It assesses the lease classification of a sub-lease with reference to the right-of-use asset arising from the head lease, not with reference to the underlying asset. If a head lease is a short-term lease to which the Group applies the exemption described above, then it classifies the sub-lease as an operating lease.

If an arrangement contains lease and non-lease components, then the Group applies IFRS 15 to allocate the consideration in the contract.

The Group applies the derecognition and impairment requirements in IFRS 9 to the net investment in the lease (see Note 6.).

The Group further regularly reviews estimated unguaranteed residual values used in calculating the gross investment in the lease.

The Group recognises lease payments received under operating leases as income on a straightline basis over the lease term as part of 'other revenue'.

Generally, the accounting policies applicable to the Group as a lessor in the comparative period were not different from IFRS 16 except for the classification of the sub-lease entered into during current reporting period that resulted in a finance lease classification.

# 12.21 Intangible assets

### a) Goodwill

Goodwill is initially recognised and measured as set out above.

Goodwill is not amortised but is reviewed for impairment at least annually. For the purpose of impairment testing, goodwill is allocated to each of the Group's cash-generating units (or groups of cash-generating units) expected to benefit from the synergies of the combination. Cash-generating units to which goodwill has been allocated are tested for impairment annually,

or more frequently when there is an indication that the unit may be impaired. If the recoverable amount of the cash-generating unit is less than the carrying amount of the unit, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the unit and then to the other assets of the unit pro-rate on the basis of the carrying amount of each asset in the unit. An impairment loss recognised for goodwill is not reversed in a subsequent period.

On disposal of a cash-generating unit, the attributable amount of goodwill is included in the determination of the profit or loss on disposal.

# b) Intangible assets acquired separately

Intangible assets with finite useful lives that are acquired separately are carried at cost less accumulated amortisation and accumulated impairment losses. Amortisation is recognised on a straight-line basis over their estimated useful lives and reported as an expense in the income statement. The estimated useful life and amortisation method are reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for on a prospective basis.

Intangible assets with indefinite useful lives that are acquired separately are carried at cost less accumulated impairment losses.

The following useful lives are used in the calculation of amortisation:

# c) Self-generated intangible assets - research and development costs

Expenditure on research activities is recognised as an expense in the period in which it is incurred.

A self-generated intangible asset arising from development or from the development phase of an internal project is recognised if all the following have been demonstrated

- The technical feasibility of completing the intangible asset so that it will be available for use or sale
- The intention to complete the intangible asset and use or sell it
- The ability to use or sell the intangible asset
- How the intangible asset will generate probable future economic benefits
- The availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset
- The ability to measure reliably the expenditure attributable to the intangible asset during its development

The amount initially recognised for self-generated intangible assets is the sum of the expenditure incurred from the date when the intangible asset first meets the recognition criteria listed above. Where no internally generated intangible asset can be recognised or no intangible asset exists, development expenditure is recognised in profit or loss in the period in which it is incurred.

Subsequent to initial recognition, self-generated intangible assets and also acquired intangible assets are reported at cost less accumulated amortisation and accumulated impairment losses. Amortisation of capitalised development is generally recognised in the Group on a straight-line basis over a useful life of 5 years.

# d) Intangible assets acquired in a business combination

Intangible assets acquired in a business combination are recognised separately from goodwill and recognised at their fair value at the acquisition date.

Subsequent to initial recognition, intangible assets acquired in a business combination are reported at cost less accumulated amortisation and accumulated impairment losses, on the same basis as intangible assets that are acquired separately.

# e) Derecognition of intangible assets

An intangible asset is derecognised on disposal, or when no future economic benefits are expected from use or disposal. Gains or losses arising from derecognition of an intangible asset, measured as the difference between the net disposal proceeds and the carrying amount of the asset, are recognised in profit or loss when the asset is derecognised. They are recognised in the 'other gains and losses' line.

# 12.22 Property, plant and equipment

## a) Land and buildings

Properties in the course of construction for production, sale or administrative purposes or with no defined purpose are carried at cost, less any recognised impairment loss. Cost includes professional fees and, for qualifying assets, borrowing costs capitalised in accordance with the Group's accounting policy. Such properties are classified to the appropriate categories of property, plant and equipment when completed and ready for intended use. Depreciation of these assets, on the same basis as other property assets, commences when the assets are ready for their intended use.

Freehold land is not depreciated.

# b) Other tangible assets

Fixtures and equipment are stated at cost less accumulated depreciation and accumulated impairment losses.

Depreciation is recognised so as to write off the cost or valuation of assets (other than freehold land and properties under construction) less their residual values over their useful lives, using the straight-line method. The estimated useful lives, residual values and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis.

The following useful lives are used in the calculation of depreciation of property, plant and equipment:

An item of tangible assets is derecognised upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on the disposal or retirement of an item of tangible assets is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognised in profit or loss.

# 12.23 Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalisation.

Cash flows related to capitalised borrowing costs are classified as cash flows from investing activities.

All other borrowing costs are recognised in profit or loss in the period in which they are incurred and related cash flows are classified as cash flows from financing activities.

#### **12.24** Equity

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all its liabilities. Equity instruments issued by a Group entity are recognised at the proceeds received, net of direct issue costs.

Repurchase of the Company's own equity instruments is recognised and deducted directly in equity. No gain or loss is recognised in profit or loss on the purchase, sale, issue or cancellation of the Company's own equity instruments.

Financial liabilities and equity instruments issued by a Group company are classified as a financial liability or equity according to the economic content of the contractual agreement and the definitions.

#### 12.25 Financial liabilities

# a) Classification and subsequent measurement

Financial liabilities are classified as measured at amortized cost or FVTPL. A financial liability is classified as at FVTPL if it is classified as held-for-trading, it is a derivative or it is designated as such on initial recognition. Financial liabilities at FVTPL are measured at fair value and net gains and losses, including any interest expense, are recognized in profit or loss. Other financial liabilities are subsequently measured at amortized cost using the effective interest method. Interest expense and foreign exchange gains and losses are recognized in profit or loss. Any gain or loss on derecognition is also recognized in profit or loss.

# b) Derecognition

The Group derecognizes a financial liability when its contractual obligations are discharged or cancelled or expire. The Group also derecognizes a financial liability when its terms are modified and the cash flows of the modified liability are substantially different, in which case a new financial liability based on the modified terms is recognized at fair value.

On derecognition of a financial liability, the difference between the carrying amount extinguished and the consideration paid (including any non-cash assets transferred or liabilities assumed) is recognized in profit or loss.

# c) Financial guarantee contract

Financial guarantee contracts are recognized as a financial liability at the time the guarantee is issued. The liability is initially measured at fair value and subsequently at the higher of

- the amount determined in accordance with the expected credit loss model under IFRS
   9 Financial Instruments and
- the amount initially recognized less, where appropriate, the cumulative amount of income recognized in accordance with the principles of IFRS 15 Revenue from Contracts with Customers.

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The fair value of financial guarantees is determined based on the present value of the difference in cash flows between the contractual payments required under the debt instrument and the payments that would be required without the guarantee, or the estimated amount that would be payable to a third party for assuming the obligations.

Where guarantees in relation to loans or other payables of associates are provided for no compensation, the fair values are accounted for as contributions and recognized as part of the cost of the investment.

#### 12.26 Financial liabilities

Financial liabilities are recognised when a Group entity becomes a party to the contractual provisions of the financial instrument. They are classified as either financial liabilities 'at FVTPL' or 'other financial liabilities'.

Financial assets and financial liabilities are initially measured at fair value or amortised cost. Transaction costs that are directly attributable to the acquisition or issue of financial liabilities not assessed at fair value through profit or loss are deducted from the fair value of the financial liabilities on initial recognition. Transaction costs directly attributable to the issue of financial liabilities at fair value on initial recognition are recognised immediately in profit or loss.

#### a) Financial liabilities at FVTPL

Financial liabilities are classified as at FVTPL when the financial liability is held for trading, or it is designated as at FVTPL. A financial liability is classified as held for trading if:

- It has been incurred principally for the purpose of repurchasing it in the near term.
- On initial recognition it is part of a portfolio of identified financial instruments that the Group manages together and has a recent actual pattern of short-term profit taking; or
- It is a derivative that is not designated and effective as a hedging instrument.

A financial liability other than a financial liability held for trading may be designated as at FVTPL upon initial recognition if:

- Such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise;
- The financial liability forms part of a group of financial assets or financial liabilities or both, which is managed and its performance is evaluated on a fair value basis, in accordance with the Group's documented risk management or investment strategy, and information about the grouping is provided internally on that basis; or

• It forms part of a contract containing one or more embedded derivatives, and IAS 39 Financial Instruments: Recognition and Measurement permits the entire combined contract (asset or liability) to be designated as at FVTPL.

Financial liabilities at FVTPL are stated at fair value, with any gains or losses arising on remeasurement recognised in profit or loss. The net gain or loss recognised in profit or loss incorporates any interest paid on the financial liability and is included in the 'other gains and losses' line item.

# b) Other financial liabilities

Other financial liabilities (including borrowings and trade payables) are subsequently measured at amortised cost using the effective interest method.

The effective interest method is a method of calculating the amortised cost of a financial liability and of allocating interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments (including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the financial liability, or (where appropriate) a shorter period, to the net carrying amount on initial recognition.

#### c) Derecognition of financial liabilities

The Group derecognises financial liabilities if the Group's obligations are discharged, cancelled or have expired. The difference between the carrying amount of the financial liability derecognised and the consideration paid or payable is recognised in profit or loss.

# 12.27 Compound instruments

The component parts of compound instruments (e.g. convertible bonds) issued by the Company are classified separately as financial liabilities and equity in accordance with the substance of the contractual arrangements and the definitions of a financial liability and an equity instrument. A conversion option that will be settled by the exchange of a fixed amount of cash or another financial asset for a fixed number of the Company's own equity instruments is an equity instrument.

At the date of issue, the fair value of the liability component is estimated using the prevailing market interest rate for similar non-convertible instruments. This amount is recorded as a liability on an amortised cost basis using the effective interest method until extinguished upon conversion or at the instrument's maturity date.

The conversion option classified as equity is determined by deducting the amount of the liability component from the fair value of the compound instrument as a whole. This is recognised and

included in equity, net of income tax effects, and is not subsequently remeasured. In addition, the conversion option classified as equity will remain in equity until the conversion option is exercised; in which case the balance recognised in equity will be transferred to the capital reserves. When the conversion option remains unexercised at the maturity date of the convertible bond, the balance recognised in equity will be transferred to the capital reserve. No gain or loss is recognised in profit or loss upon conversion or expiration of the conversion option.

Transaction costs that relate to the issue of the convertible notes are allocated to the liability and equity components in proportion to the allocation of the gross proceeds. Transaction costs relating to the equity component are recognised directly in equity. Transaction costs relating to the liability component are included in the carrying amount of the liability component and are amortised over the lives of the convertible notes using the effective interest method.

# 12.28 Rounding of amounts

Unless otherwise stated, figures are generally presented in thousands of euros. The tables and information presented can contain differences due to rounding.

Munich, 27.02.2020

Pyrolyx AG

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