

Connecting to Faster Growth Markets



Capital Markets Event, Netherlands, April 2018

Cautionary statement

This presentation contains forward looking statements that are subject to risk factors associated with, amongst other things, the economic and business circumstances in countries and sectors in which Croda operates. It is believed that the expectations reflected in these statements are reasonable but they may be affected by a wide range of variables which could cause actual results to differ materially from those currently anticipated. You are cautioned not to place any undue reliance on such forward looking statements. No statement in this presentation is intended to be a profit forecast.

Objectives for our Capital Markets Event

Consumer Markets

- **Growing the Core:**
Deep dive into Life Sciences & Personal Care
- **Stretching the Growth:**
Technology opportunities

Executing Strategy

- Investing in faster growth markets
- Investing in faster growth technologies

Our Team

- Meet the senior team
- Informative discussions

Programme

Wednesday 11 April (Incotec)

13:30	Welcome	Steve Foots
	Growing the Core - Incotec	Erik-Jan Bartels
	Incotec insight tour	
19:30	Drinks and dinner discussions (Hotel Krasnapolsky)	Croda management team

Thursday 12 April (Hotel Krasnapolsky)

08:30	Delivering our Strategy	Steve Foots
	Growing the Core – Crop Care	Dr Dave Cherry
	Growing the Core - Personal Care	Sandra Breene and team
	Stretching the Growth - Technology Opportunities	Anthony Fitzpatrick, Dr Damian Kelly, Maarten Heybroek & Chris Sayner
	Wrap-up	Steve Foots
12:45	Close and lunch	

Meet members of our Senior Team

Board



Steve Foots
Group Chief Executive



Jez Maiden
Group Finance Director



Maarten Heybroek
President
PTIC



Sandra Breene
President
Personal Care



Dr Nick Challoner
President
Life Sciences



Graham Myers
Group Financial
Controller



Anthony Fitzpatrick
President
Corporate Development

Senior management presenters



Erik Jan Bartels
Managing Director
Incotec



Dr Dave Cherry
Managing Director
Crop Care



Arnaud Fournial
Managing Director
Beauty Actives



Jenn Hart
Managing Director
Beauty Effects



Richard Butler
Managing Director
Beauty Formulation



Dr Damian Kelly
Head of Global R&D



Chris Sayner
VP Customer Alliances,
Corporate Sustainability

Connecting to Faster Growth Markets

Incotec - Primed for growth



Erik-Jan Bartels – Managing Director, Incotec

Connecting to Faster Growth Markets

Incotec

Seed Enhancement

- Why Seed Enhancement is attractive
- Superior growth opportunities
- Vegetables & Field Crops

Driving the Core

- Incotec & Croda
- Accelerating growth
- Key opportunities

Welcome to Incotec

Celebrating 50 years

IT ALL STARTED
BACK IN 1968 WHEN
A DUTCH PHARMACIST
SUCCEEDED IN COATING
ONE LETTUCE SEED



Welcome to Incotec

Enkhuizen: City of Seeds

- Enkhuizen founded in 1000 AD
- Flourished from 1500s due to shipping, fishing (herring) & trade
- Mid 19th century seed breeding and trade developed
 - Sluis & Groot → Syngenta
 - Royal Sluis → Monsanto and Incotec
 - Pop Vriend
 - ENZA
- Today tourism is the 2nd biggest industry (water sports)



Welcome to Incotec

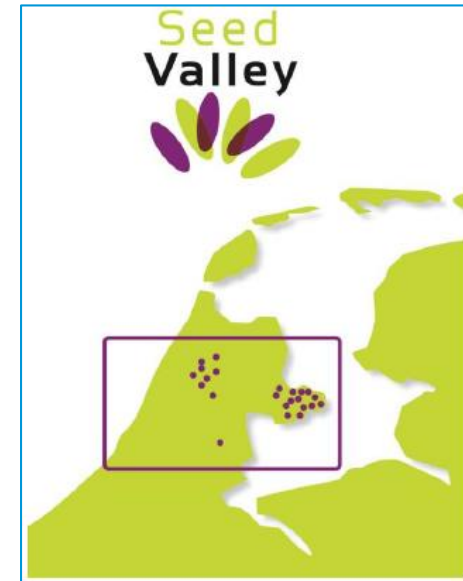
The Drom

- The “Dromedaris” (Dromedary) was built in 1540 as the city gate to Enkhuizen
- Used as defence tower, prison, storage room and post office
- City wall was broken down when city was enlarged
- Since 1959 used as a cultural centre with music, theatre, film



Welcome to Incotec Seed Valley

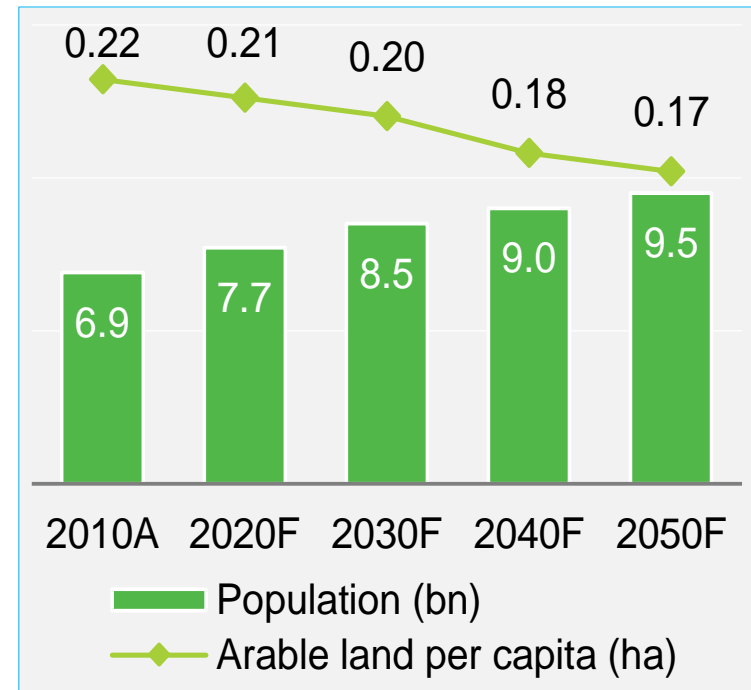
- Established in 2008 to connect West-Frisian seed companies
 - 38 companies
 - Incotec HQ located in the heart of the vegetable seed business
- Named “Seed Valley” because “green software” is developed
- Focus on education, skilled labour, image, infrastructure and joint innovation
- Seeds and seed technology are exported all over the world



Macro trends

Growing world population

- At present around 7.4 billion people
- Estimation for 2050: 9.5 billion
- Less arable land per capita
- Over the next 30 years, agricultural productivity must increase by 60%



Source: United Nations Population Division and Food & Agriculture Organisation

Macro trends

Threats to food production

- Human-induced disasters
 - War
 - Political intervention
 - Pollution
- Natural disasters/climate change
 - Flooding
 - Drought
 - Salination
 - Desertification
 - **Pests and diseases**



Industry trends

We have to do More with Less

- More product per hectare
- More regulatory pressure
 - Less chemical protection against pests and diseases
- Less water



Industry trends

Implications for the Seed Industry

- Need for improved genetic material
- Need for better (biological) actives
- Need for improved **seed enhancement**
 - Seed health and plantability
 - Effective use of seed space and innovative delivery systems
 - Full and uniform germination

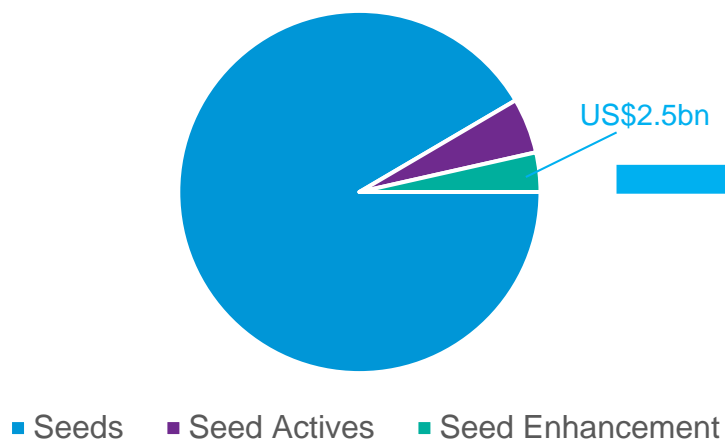


Industry trend

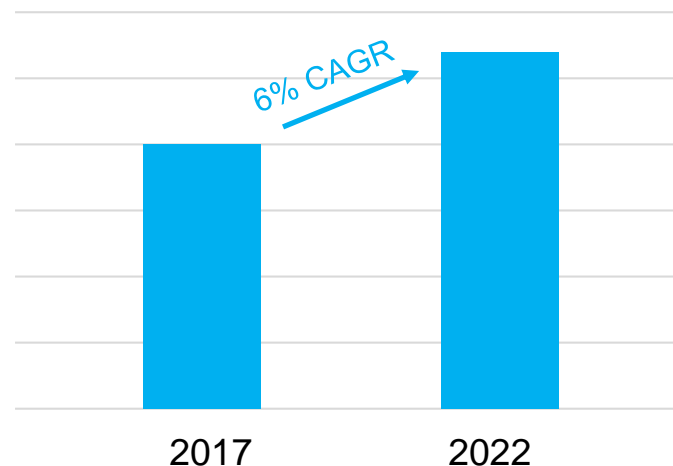
Driving growth in Seed Enhancement

Seed Enhancement: treatments applied to seeds between harvest and sowing

Seed Industry revenue
2016: US\$70bn



Superior growth rate in
Seed Enhancement



Sources: International Seed Federation, Business Wire, European Seeds, Mordor intelligence, Markets & Markets

Two key markets for Incotec

High value seeds
Low volume
Multiple treatments



Low value seeds
High volume
No treatments

Vegetables

Up to €80,000/kg

Flowers



Field Crops

€5 - 15/kg



Cereals



Forage / Grass

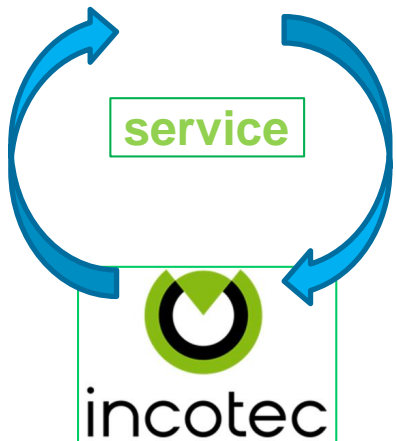
< €1/kg



Business model in Vegetable seeds



Seed company



Nursery



Grower



Logos sourced from company websites

Business model in Field Crops seeds



Seed/Crop
company



Cooperative



Farmer



Processor



Retailer



product



Logos sourced from company websites

Market leader in Seed Enhancement

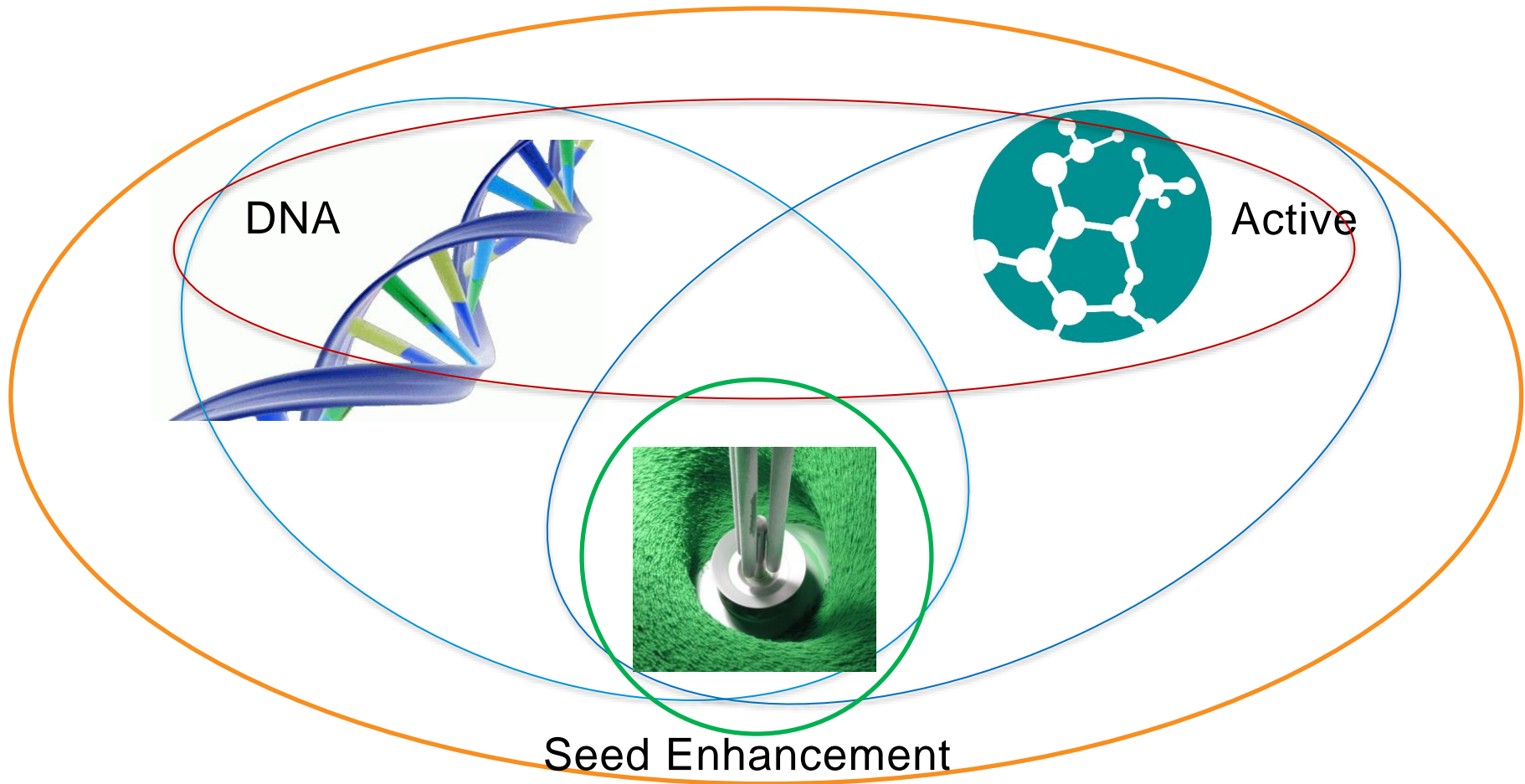
- Dedicated to seed enhancement
- Unique / differentiated products and services
- Widest range of technologies
- High quality, expertise and trust
- Local presence in all global regions
- Strong in all core technologies



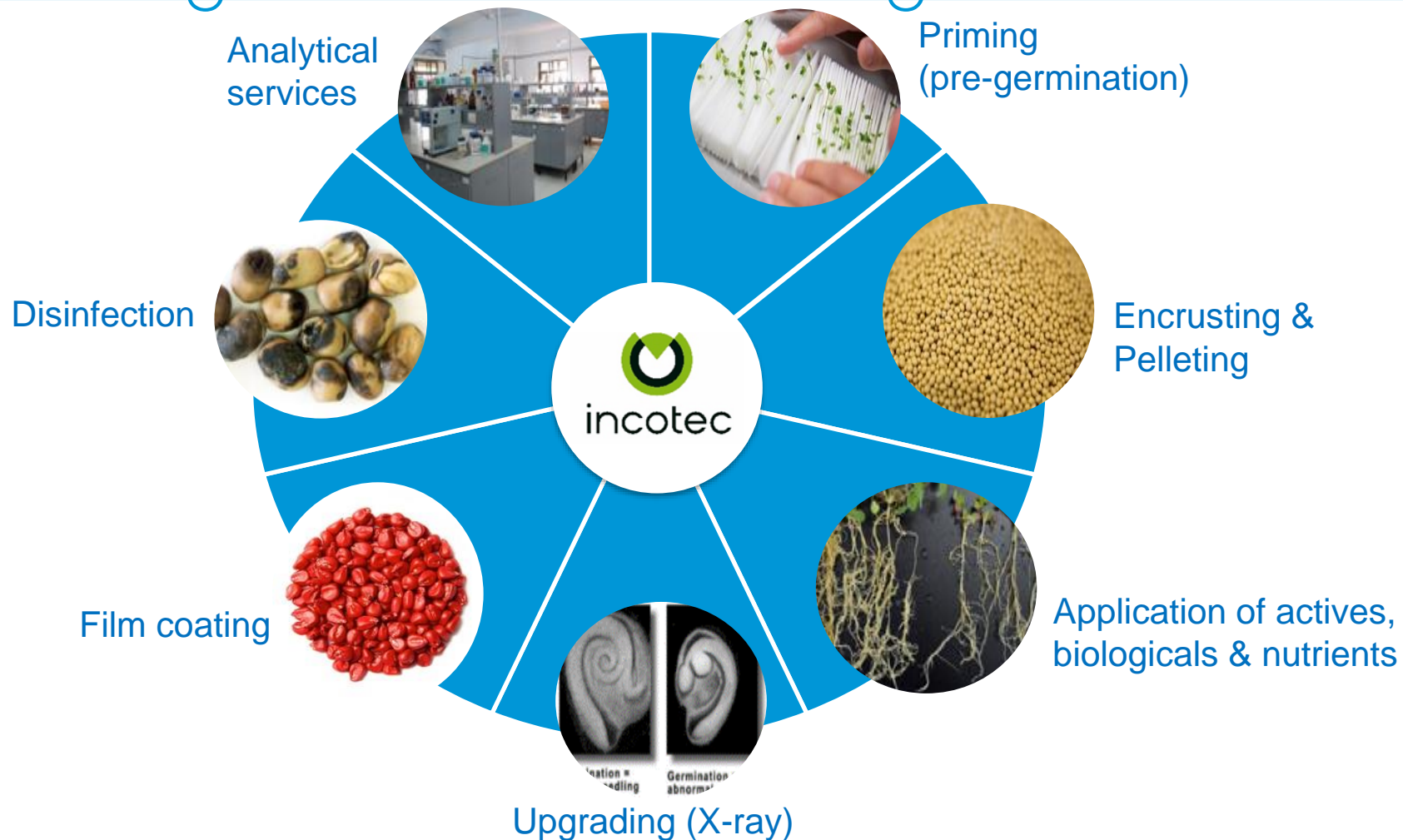


incotec
the seed enhancement company
Part of Croda International Plc

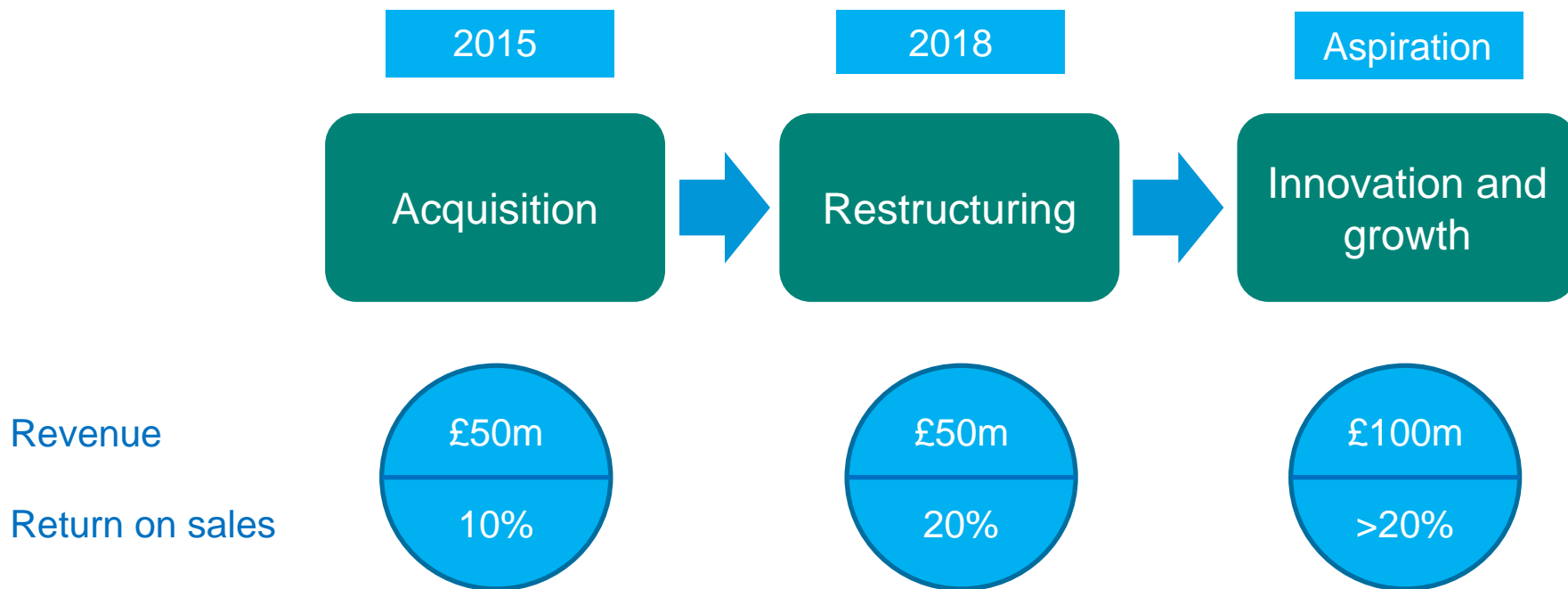
Dedicated to Seed Enhancement



Strong in all core technologies



Incotec and Croda



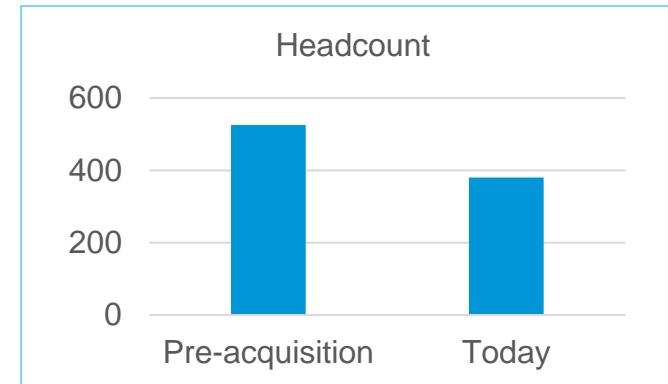
Return on sales target of 20% by end 2018

Incotec and Croda

2 stage development

Restructuring

- Purification of the business
 - Geographic market focus
 - Site consolidation
 - Headcount and cost reduction

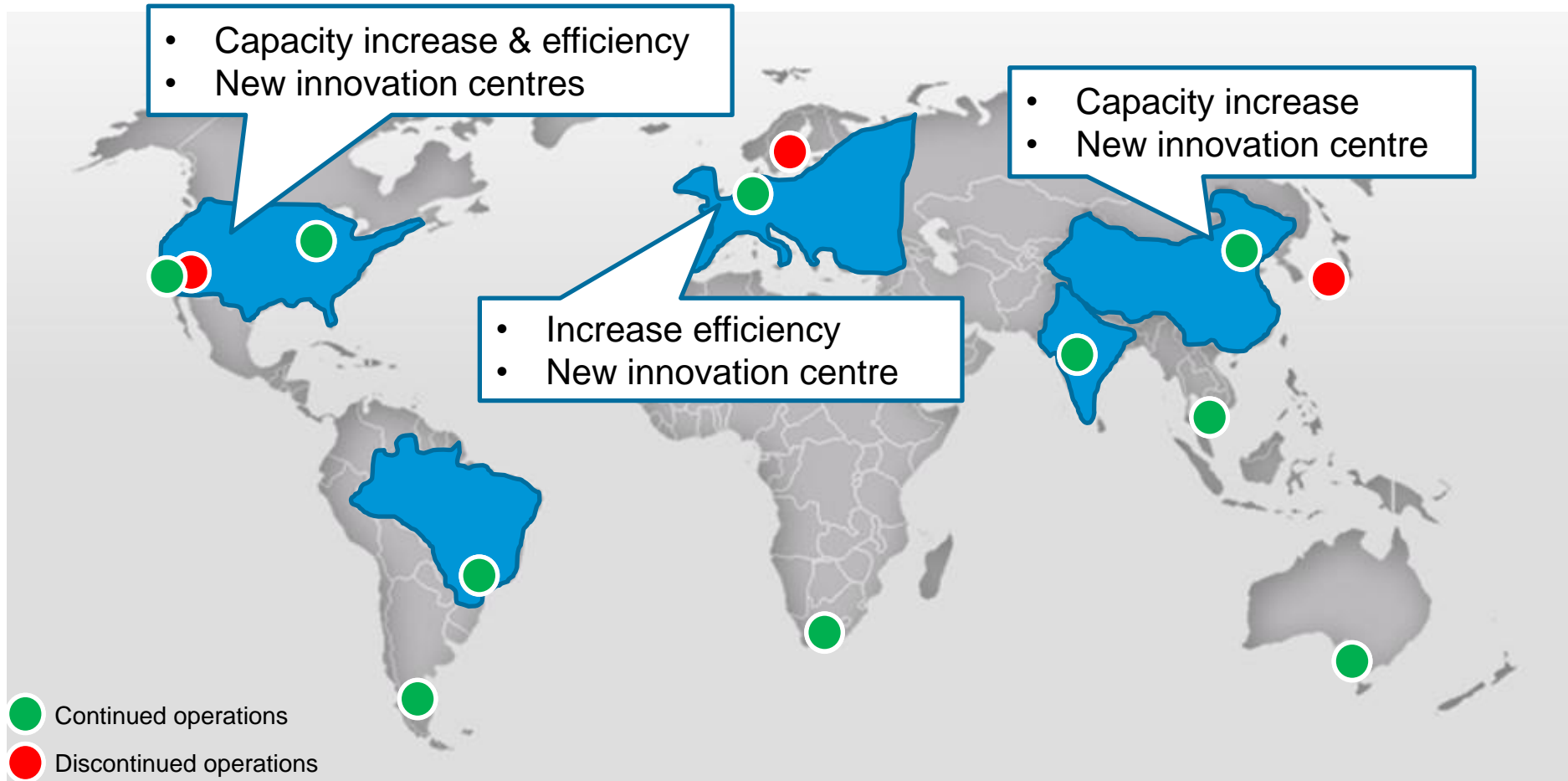


Innovation and Growth

- New investments
 - Innovation centres – customer centric
 - Capacity increase in key markets
 - SAP implementation
- Synergies
 - R&D → new products with Croda inside
 - Global reach with Croda's sales network

Incotec and Croda

Focus on 5 key markets



Incotec and Croda

Accelerating growth



Growth through innovation
in film coatings



Application of
biologicals



Data to demonstrate
product value



Maximise benefits of
Croda infrastructure



Encrustment in field
crops



Capitalise on/diversify
vegetables know-how

Accelerating growth

Key opportunities



Technology acquisitions



Expanding R&D



Premium niches

STRETCHING THE GROWTH



Leveraging Croda synergies



Delivering regional opportunities



Improving operations

LEVERAGING CRODA

Key opportunities

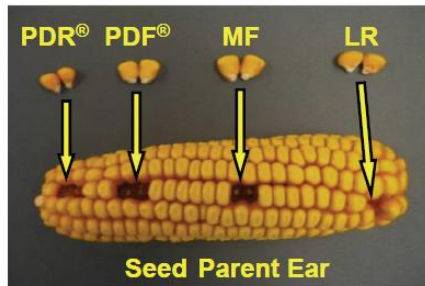
Premium niches

Premium niches



Encrustment in Field Crops

- Increase size/weight of small seeds
- Create more seed space for actives / nutrients
- Improve plantability
- Improve cosmetic appearance



Biologicals

- Sustainability trend
- Need for innovative delivery systems
- Combination with encrustment (seed space)
- Shelf life

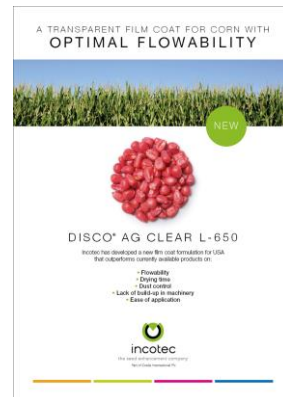


Key opportunities Leveraging Croda synergies



Film Coatings

- Using Croda know-how to improve quality
- Opportunity: < 10% share in film coatings
- New film coatings developed with '**Croda inside**'
- Next generation based on Croda chassis



Marketing the CrodaWay

- Step changes in branding and marketing
- Better benefits and effects

Key opportunities

Delivering regional opportunities

Regional opps.



Vegetables in China

- World's biggest producer and consumer of vegetables
- Starting mechanisation and specialization (nurseries)
- Almost no local expertise in quality seed treatment
- Increasing market share for supermarkets

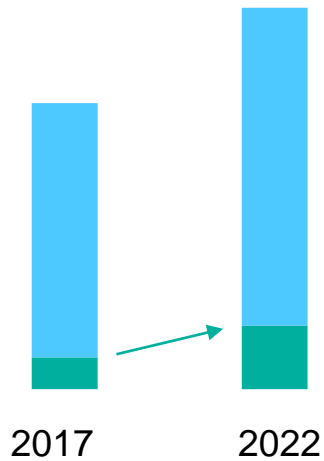


Rice in Asia

- Large market (40m Ha), 50% suffer from snails
- New film coating to retain actives during pre-soaking
- Exclusive partners in chemical and biological actives

Incotec - Primed for growth

Summary



Increase market share
in growing market



Accelerating innovation
and acquisition



Application of
Biologicals

Questions ?

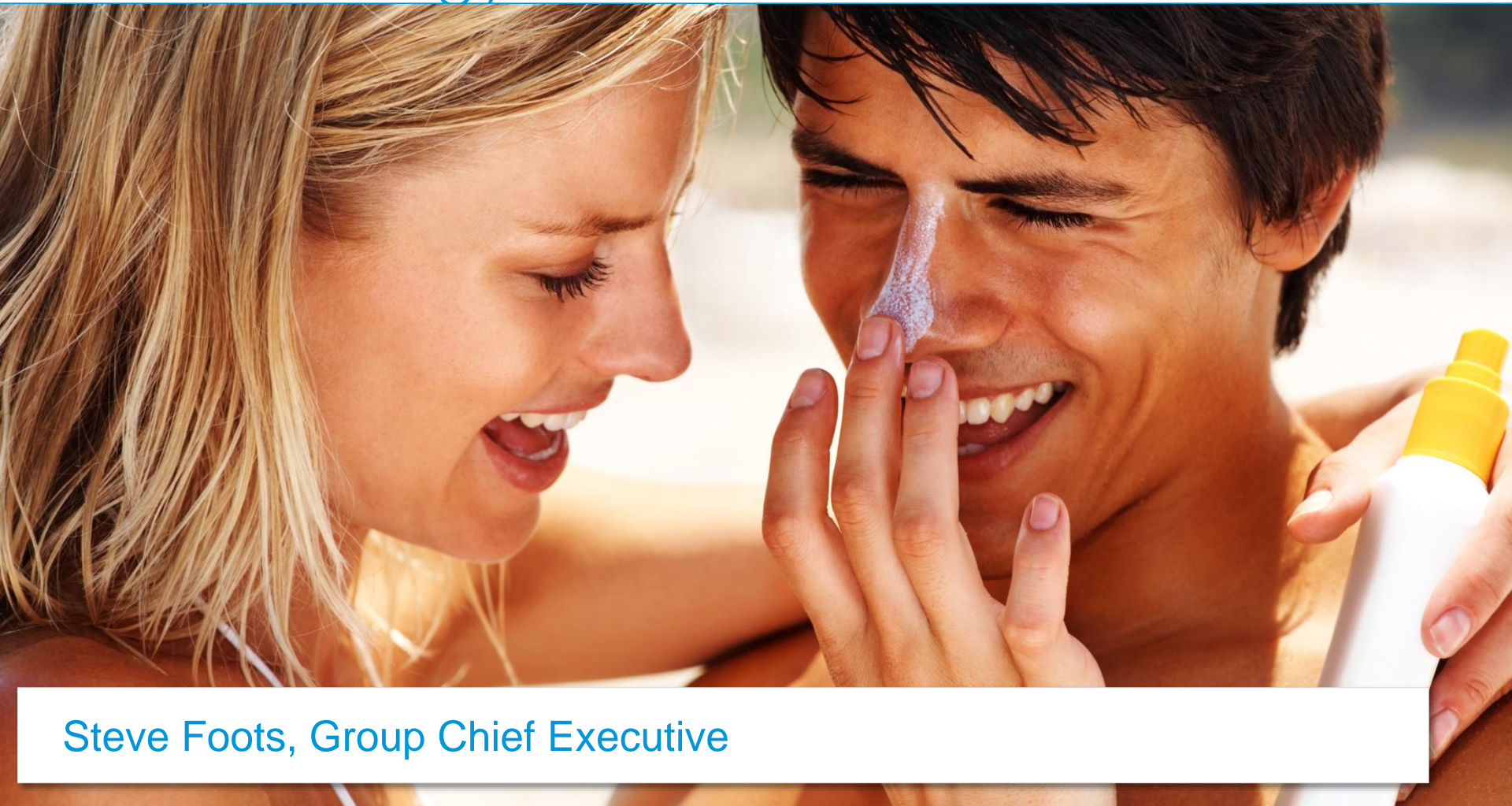
Contributing to feeding the
world, by getting the utmost
out of seed

Site tour with 8 Stops



Connecting to Faster Growth Markets

Our Strategy



Steve Foots, Group Chief Executive

Delivering Our Strategy

Where have we come from?

- Strong Executive team
- Strong track record
- Shareholder value creation

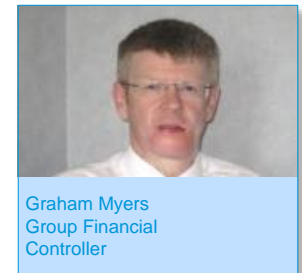
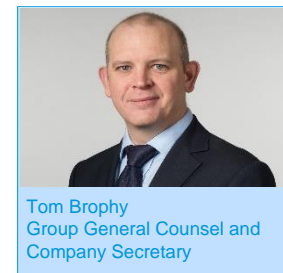
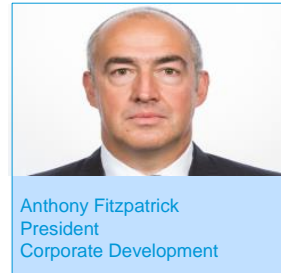
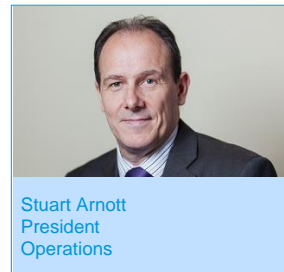
How are we doing?

- 2016 CME revisited
- Business model
- Core strengths

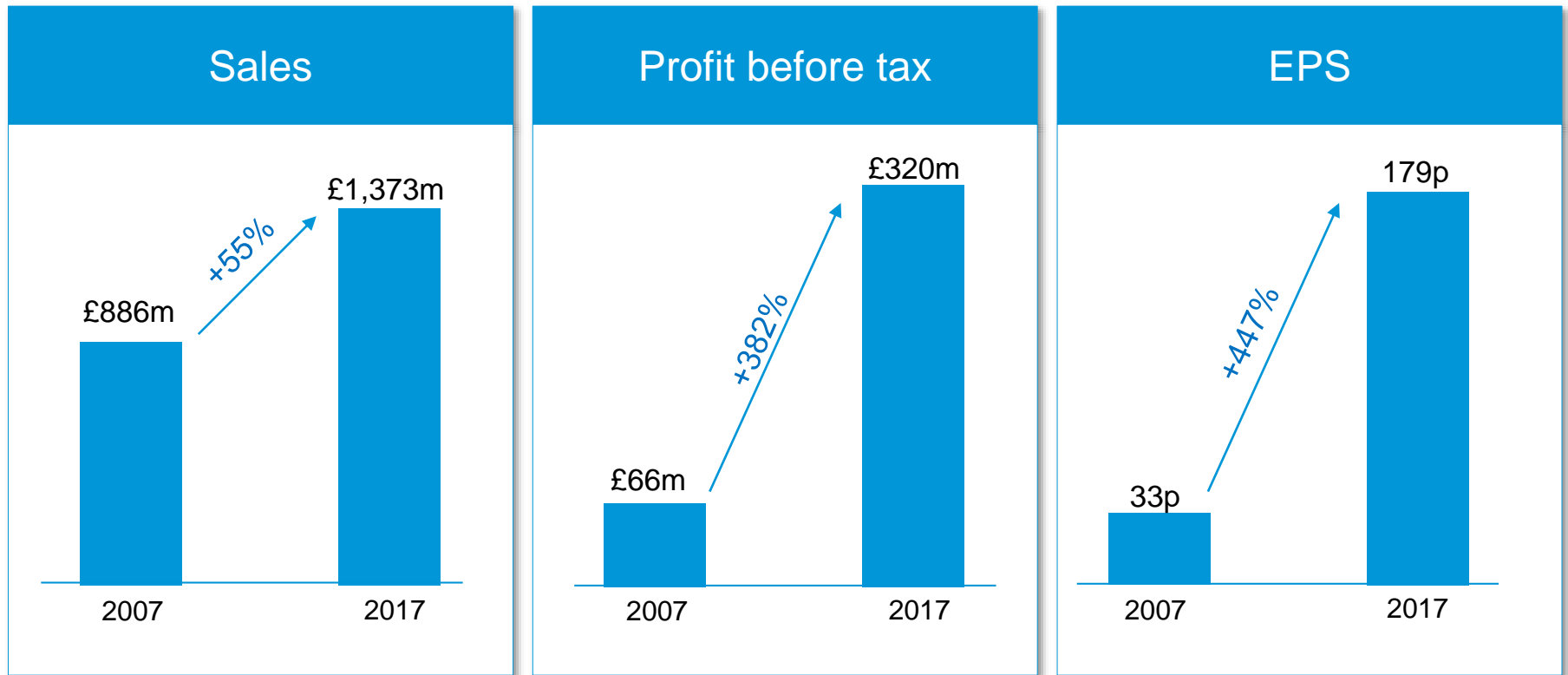
Where are we going?

- Growing the Core & Stretching the Growth
- Priorities
- Investment case

We have a strong and experienced Executive team...



With a strong track record of consistently delivering...

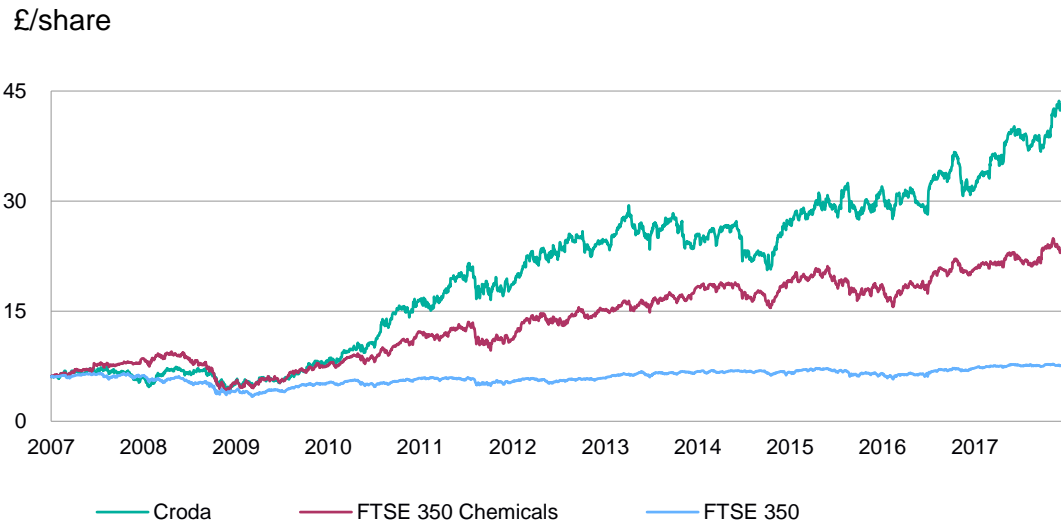


Reported currency

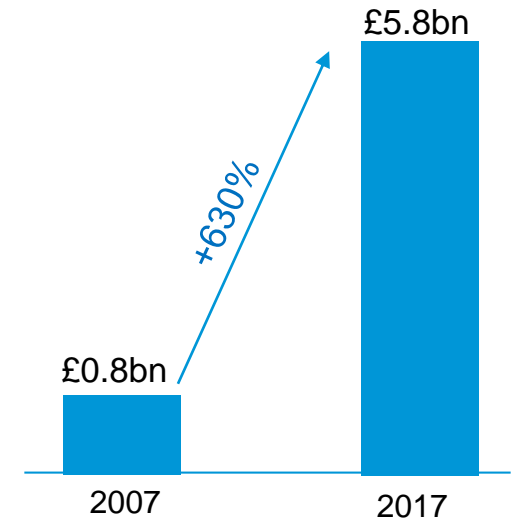
Profit and EPS are on an adjusted basis, as defined in the 2017 Results

...reflected in our share price evolution

Share price

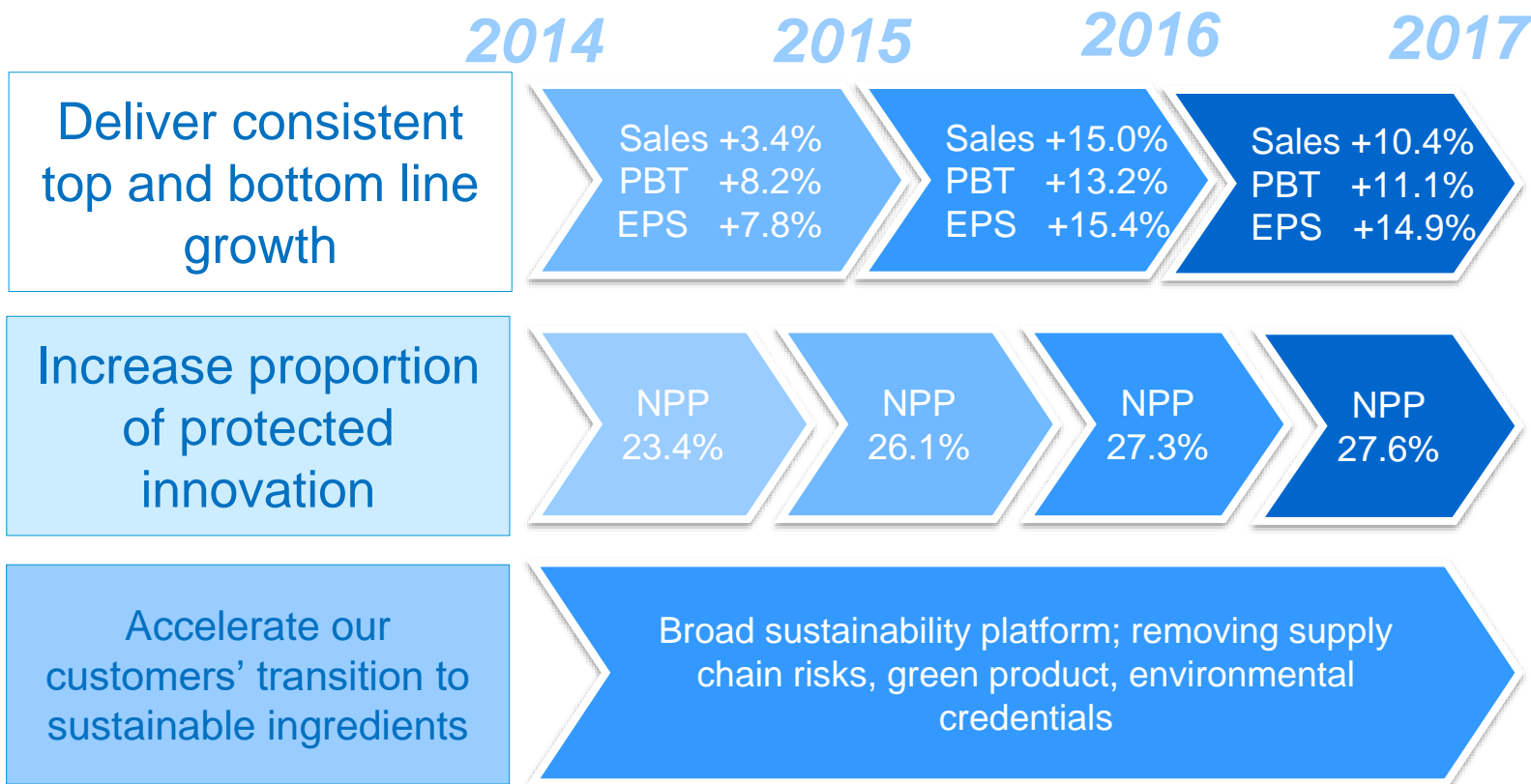


Croda market capitalisation



Outperformed Sector Index by 2.1x and Market Index by 20x




We are delivering year-on-year progress...



Reported currency. NPP is New & Protected Products

PBT and EPS are on an adjusted basis, as defined in the 2017 Results

With significant achievements since the last CME

Market	Increased capability 2015 – 17	Performance 2015 - 17
 Personal Care	<ul style="list-style-type: none"> • Asia • New technologies • R&D 	<ul style="list-style-type: none"> • Margin improved • NPP >40% • Profit +25%
 Life Sciences	<ul style="list-style-type: none"> • Asia, USA, Europe • Incotec • R&D 	<ul style="list-style-type: none"> • Margin restored post Incotec • NPP >30% • Profit +29%
 Performance Technologies	<ul style="list-style-type: none"> • USA, Asia, Latam • R&D • Operations 	<ul style="list-style-type: none"> • Double digit % profit growth each year • Sales +33% • NPP 18%

Created three strong legs of growth

Reported currency. CME refers to the Croda Capital Markets Event held in 2016

Profit is operating profit and both this and EPS are presented on an adjusted basis, as defined in the 2017 Results

Innovation you can build on™

CRODA

Driven by a powerful Business Model

Sustainable
sourcing



>60%

Raw materials
from natural
sources

Balanced
footprint



29

Production
sites

Dynamic
innovation engine



34

Innovation
centres

Local direct selling
model



>17,000

Customers
served

Unrivalled capabilities

Supported by core strengths

Customer intimacy



Unrivalled understanding of
unmet needs

People and culture



Entrepreneurial & agile spirit

Innovation



Broad, proprietary
technology base

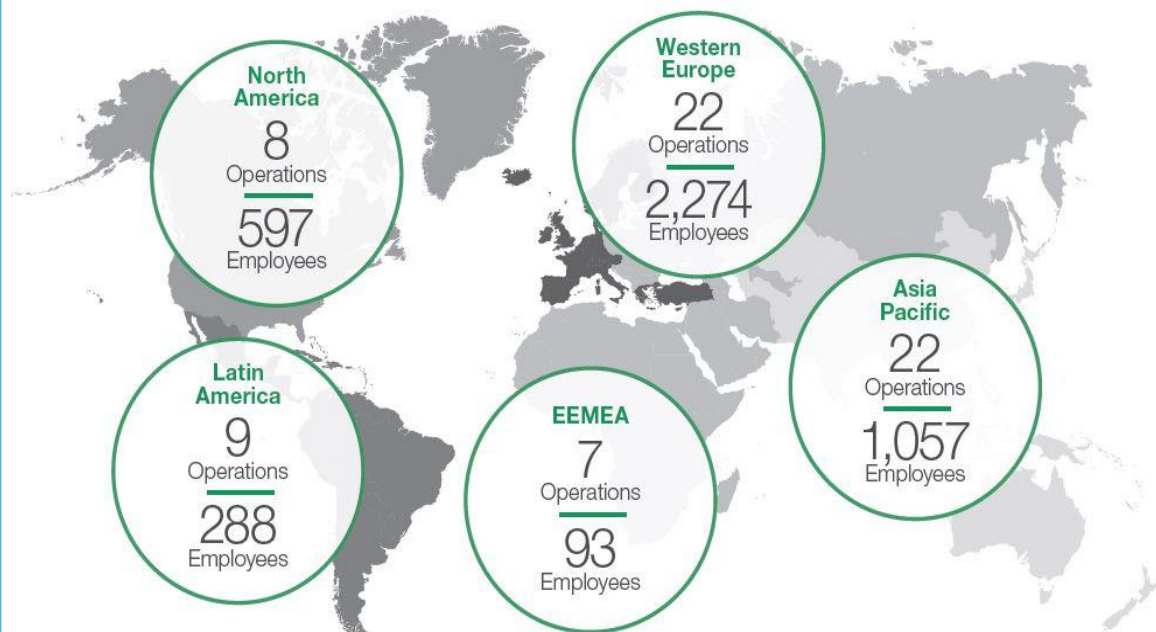
Croda is a relentless innovation machine

Croda at a glance

Highlights

- £1.37bn sales
- 4,300 employees
- Operating in 37 countries
- 68 operations
- 28% sales in new, patented & protected products

A global, balanced footprint



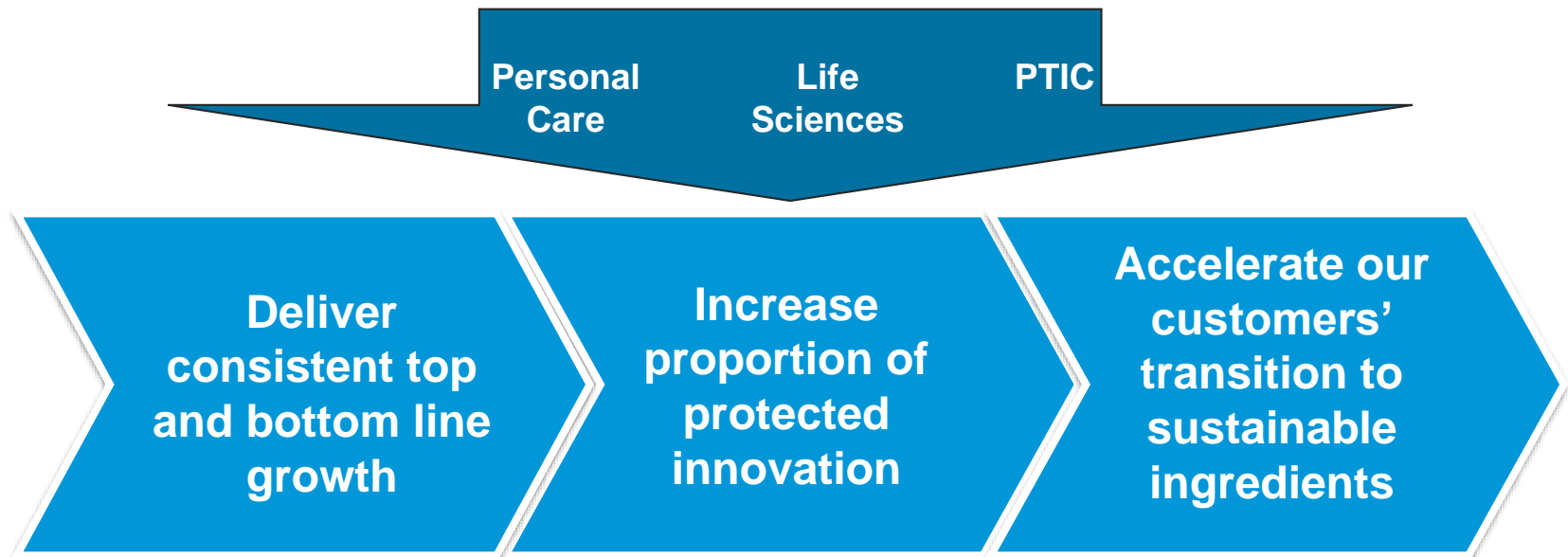
Well positioned for future growth

2017 numbers

2018–20: Connecting to faster growth markets

Vision and strategic aims unchanged

- To be the **leading** speciality ingredient company delivering **sustainable innovation**, superior **performance** & **value** to our customers & consumers
- **To be different**



2018-20: Connecting to faster growth markets

Growing the core and stretching the growth



Grow the Core

Stretch the Growth

Strong foundation to accelerate growth in our Core markets

2018-20: Connecting to faster growth markets

Growing the core and stretching the growth



Grow the Core

- Robust top line growth > market
- Industry leading margin + improvement
- Capital light

Delivering profit growth ahead of sales
growth ahead of volume growth

Superior ROIC



Stretch the Growth

- Accelerate in core markets
- More technology, NPP & IP
- Disciplined capital allocation

Investment in high capital return
opportunities

Capital return optionality



Superior shareholder value creation

Summary

A robust investment case

High quality business

- World class margins
- Low product churn
- Capital light

Earnings growth

- Relentless innovation
- Customer intimacy
- Targeted acquisitions

Strong cash returns

- High ROIC
- Cash generation
- Progressive dividends

Connecting to Faster Growth Markets

Crop Protection



Dr Dave Cherry, Managing Director - Crop Care

Connecting to Faster Growth Markets

Crop Protection

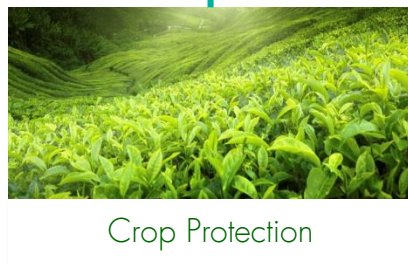
Crop Protection

- Market opportunities
- Emerging trends
- Recent performance

Growing the Core

- Premium niches
- Investing in R&D
- Technology acquisitions

Our Life Sciences business



Crop Protection

A market with Faster Growth opportunities

Global market size and growth

Crop Protection



\$50bn



50%
increase
since
2006

Our addressable market

Formulation aids



\$5bn

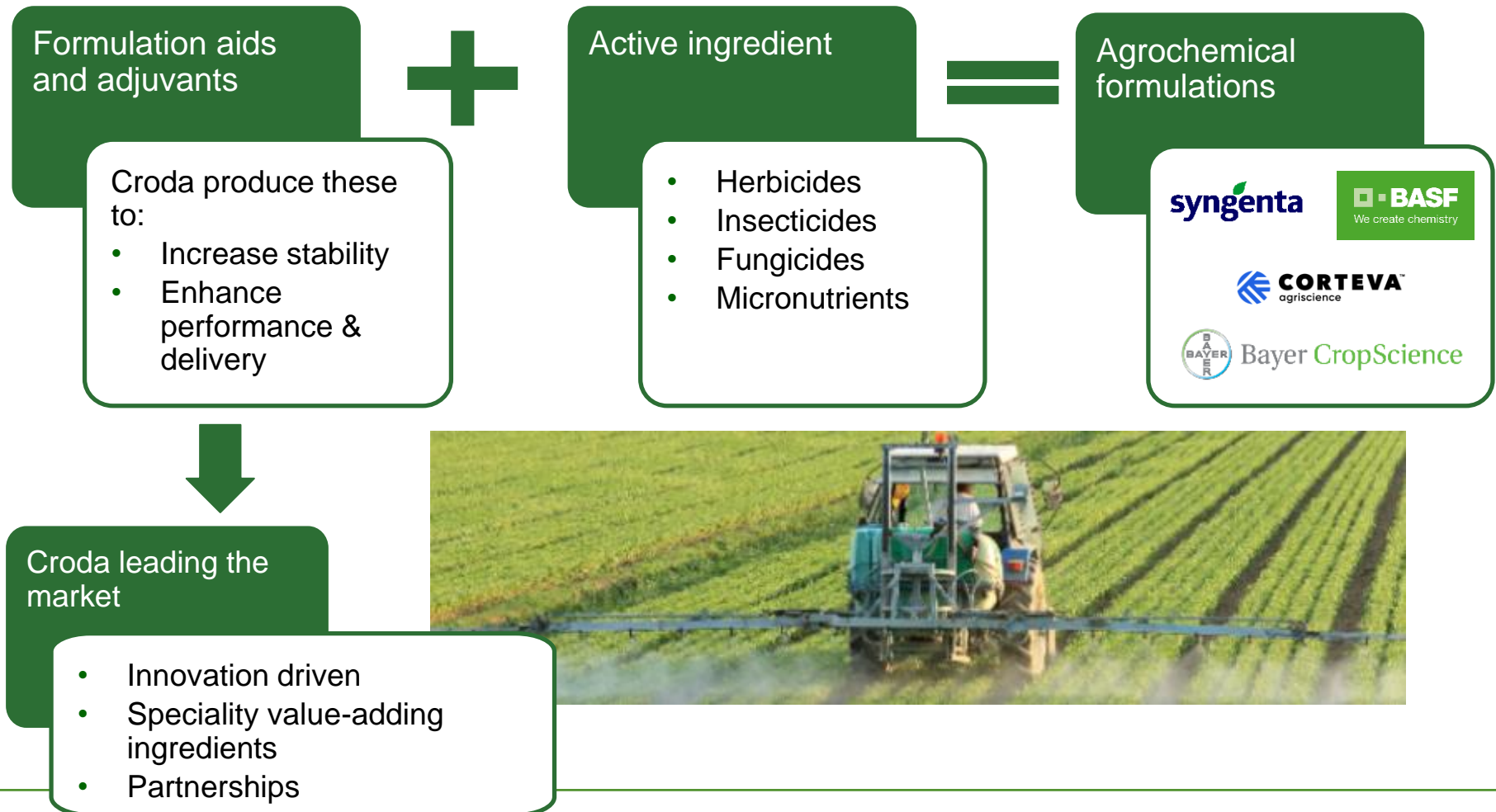


4%
CAGR
2020

- Global mega trends are driving **new opportunities**
- **High performance solutions** are the key to unlocking the greatest market challenges
- Croda's established reputation places us at the **forefront** of market innovation
- **Continuous alignment** with customers makes us the **ideal partner** to meet the increasing demands of the market

Industry trends

Aligned with our position



Industry trends

Understanding Formulation Aids & Adjuvants

Formulation Aids improve the long term stability of agrochemical products



Formulation Breakdown

Formulation breakdown can lead to:



Separation



Reduced storage life



Compromised efficacy

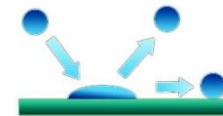
Adjuvants improve the delivery and bio-efficacy of active ingredients



Water naturally 'beads' on a waxy leaf surface but inclusion of an **adjuvant** spreads the droplets, making them much more effective



Spray Formation



Spray Retention



Wetting



Deposit Formation



Uptake

Macro trends - More from Less

9 billion

By 2050, the global population will grow to over nine billion people, an increase of two billion



- Increased demand for crop production
- Limited availability of agricultural land

60%

Agricultural productivity must increase by 60% in the next 30 years to ensure food security for the growing population



- Yield enhancement
- Increased productivity
- Soil health & water management

Reducing environmental impact



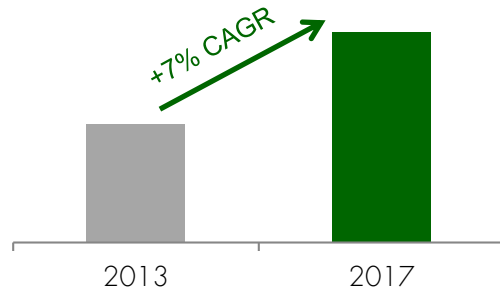
- Greater awareness of environmental impact
- Targeted & effective use of chemical inputs

Increasing food production without adverse impact on the environment

Croda has been winning in Crop ...By getting closer to customers

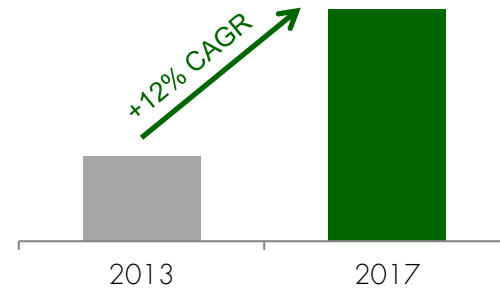
Consistently beating the market

Revenue growth



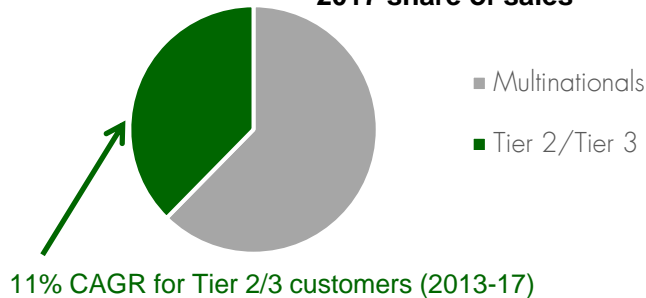
Faster growth in NPP

NPP product sales



Broadening our customer base

2017 share of sales



Strong future pipeline of innovation

49%

Pipeline value as % of current revenue



Stretching the growth



Premium Niches



R&D



Digitalisation



Sustainability



Technology acquisitions



Smart Partnering



Targeting stronger growth

Our value adding technologies help our customers achieve more complex, efficient & safer formulations that minimise the impact on the environment



Off target spray drift



Wettability/adhesion



Controlled delivery



Uptake enhancement



'Green' surfactants



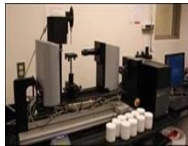
Rainfastness

Supported by stronger investment

Expanded global R&D capabilities



Brazil



USA



UK



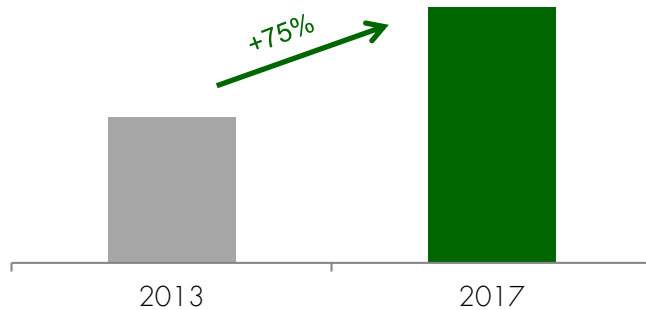
India

Increased new product development

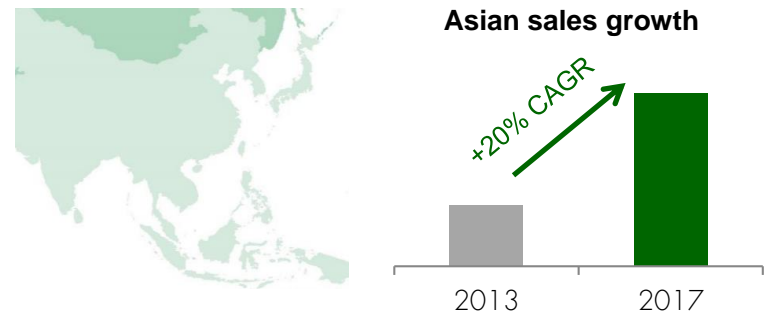
30+New products launched in
last 5 years

High value applications

Investment in collaborative projects



Regional support driving growth in Asia





Outstanding approach and service

Knowledge Sharing & Education



- Hands-on training programmes
- Crop Care website tools
- Webinars & seminars

Bespoke/Tailored Solutions



- Face to face support
- Collaborative agreements & projects
- Custom designed products

Innovation & Inspiration



- Open innovation
- Formulation design
- Application testing & design



With Faster Investments in Technology



What?

Researches & develops crop enhancement chemistry to improve crop yield & quality

How?

Discovers & creates chemical compounds to develop foliar sprays & seed treatments that work with natural plant responses

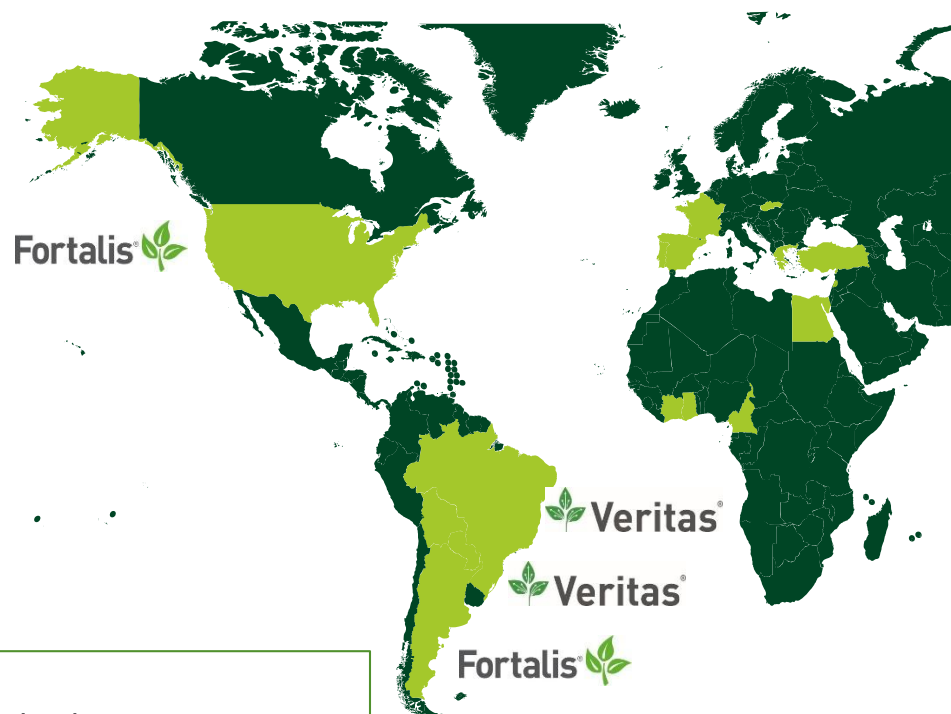
Where?

Main research facility in UK

Commercial operations in Brazil, USA, Argentina & West Africa, with sales in >20 countries

Compelling rationale

- 60 people - adds experienced commercial teams & scientists
- Complementary client base & product portfolio
- Extends Croda's capability & IP in highly attractive Crop Care market
- Increases opportunity globally



Crop Protection Summary

- Croda's formulation aids & adjuvants are critical to the Crop Protection market
- Our technologies allow customers to create complex, efficient and safer formulations
- Croda outperforms the market, growing with the majors & tier 2/3 customers
- We will drive faster growth through innovation, customer partnerships & technology acquisitions

Connecting to Faster Growth Markets

Personal Care



Sandra Breene, President Personal Care

Connecting to Faster Growth Markets

Personal Care

Personal Care

- Driving recent performance
- Emerging trends
- Aligned to growth

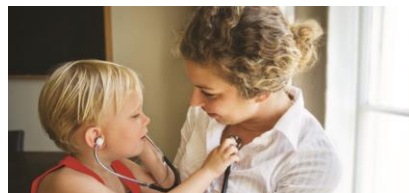
Growing the Core

- Stronger, Faster & Smarter investments
- Right structure
- 3 businesses driving future growth

Our Personal Care Business



Personal Care



Life Sciences



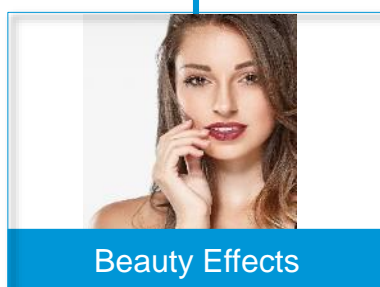
Performance Technologies



Industrial Chemicals



Arnaud Fournial



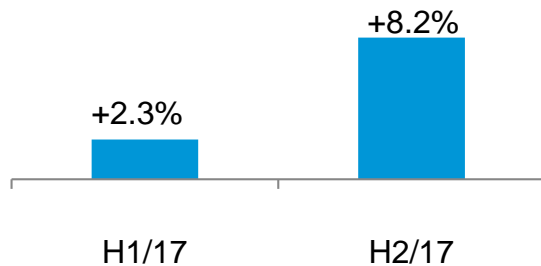
Jenn Hart



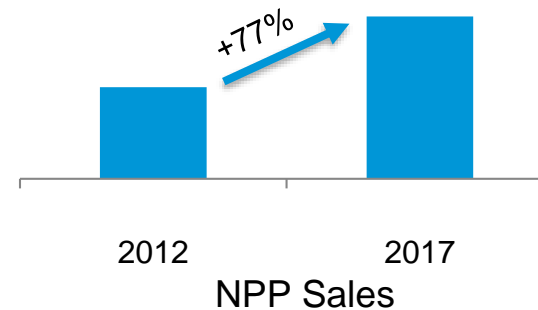
Richard Butler

Faster growth in Personal Care...

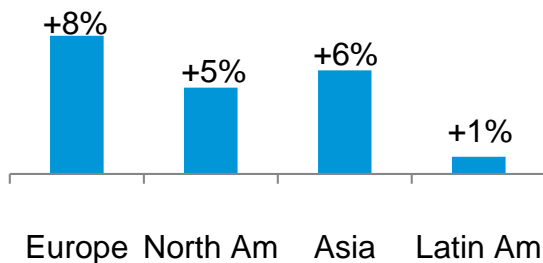
Strong sales growth



Relentless innovation



Robust regional sales growth



Targeted investments



- R&D
- Emerging markets
- People
- Digital

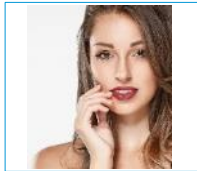
Sales growth is shown for 2017 in constant currency

...driven by sharper management focus

Restructured for growth



Beauty
Actives



Beauty
Effects



Beauty
Formulation

- Different drivers & needs
- Increased innovation & differentiation
- Targeted focus driving growth

Regional presence strengthened

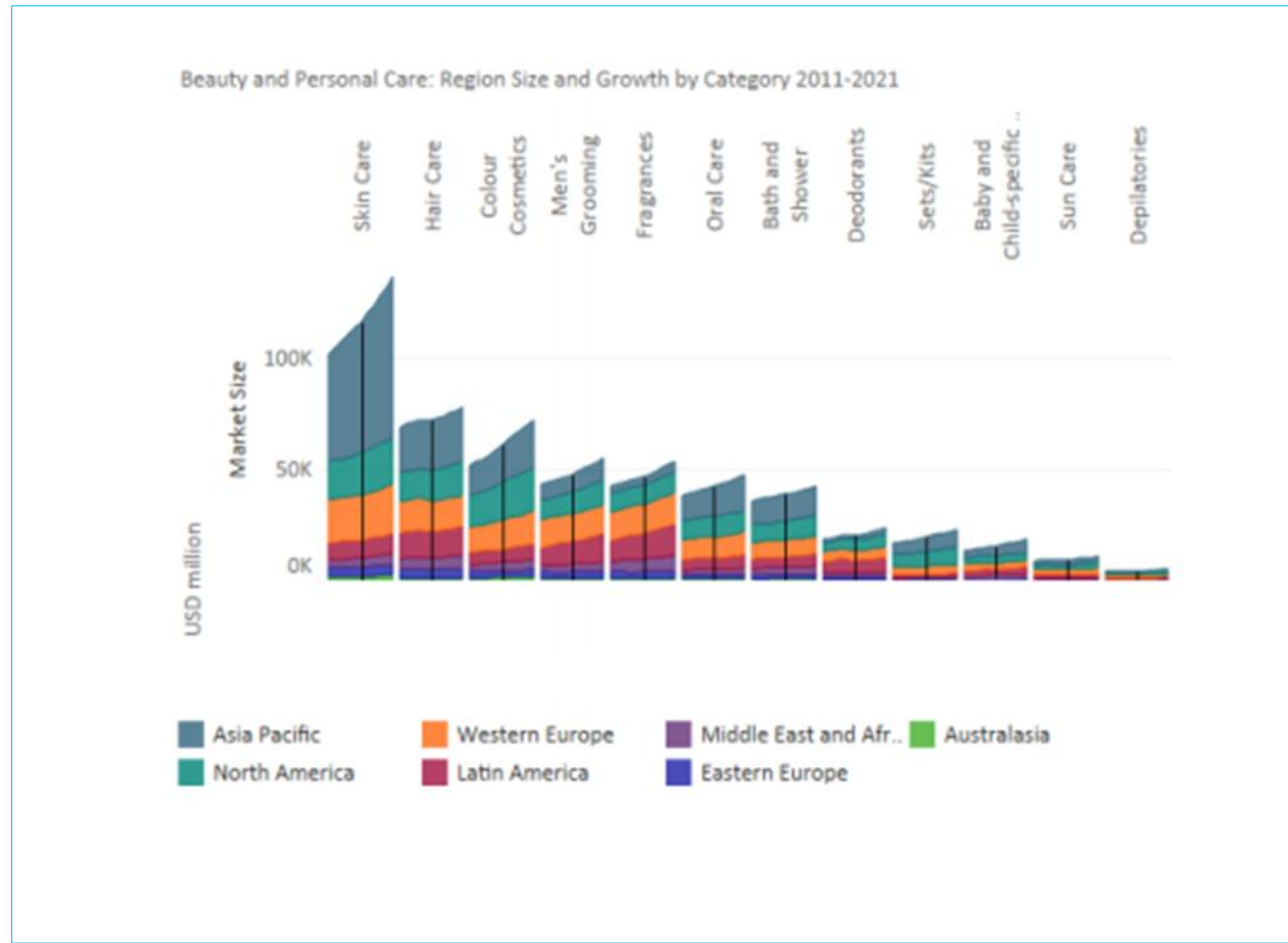
- North America initiatives delivering
- Latin America restructured
- Continued expansion in Asia & Africa

All customer classes growing

- More effective segmentation
- Penetration of 'Indie' customers

Industry trends

Aligned with Faster Growth categories



Source: Euromonitor International

Market is global beauty & personal care market, finished products at retail value

Industry trends

Aligned with our positioning

Fragmentation

- Lower barriers to entry
- Brand proliferation
- Loss of share at majors

Flight to Premium

- Growing ahead of mass at 7%
- China, USA, Eastern Europe
- More sophisticated claims

Asia and Africa

- Population growth
- Middle class growth
- Creative culture

Sustainability

- Purity
- Safety
- Renewability

Stretching the growth

Targeting Stronger, Faster & Smarter Investments



Premium Niches



R&D



Smart Partnering



Technology acquisitions



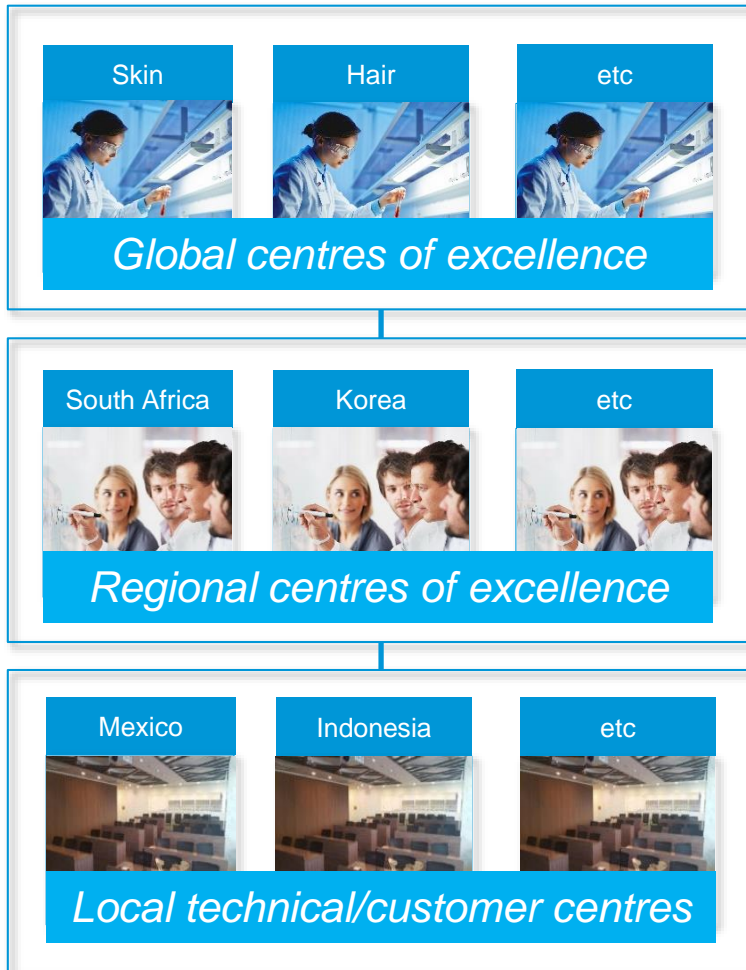
Sustainability



Digitalisation

PERSONAL CARE FOCUS ACROSS ALL GROWTH AREAS

With Stronger R&D Investment...

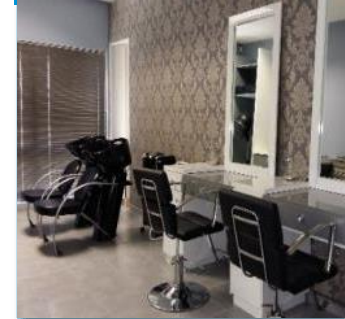


Recent investments in South Africa & Korea

Niche Hair Care



South Africa Salon



K Beauty



Korea Lab





Faster Investment in partnering...

Colour Cosmetics



- New exclusive partnership
- Fast paced niche sector
- Innovative special effect pigments

Premium Skin Care



Acquired Nautilus:

- Open innovation relationship
- Many new products
- Access to unique marine microbial library

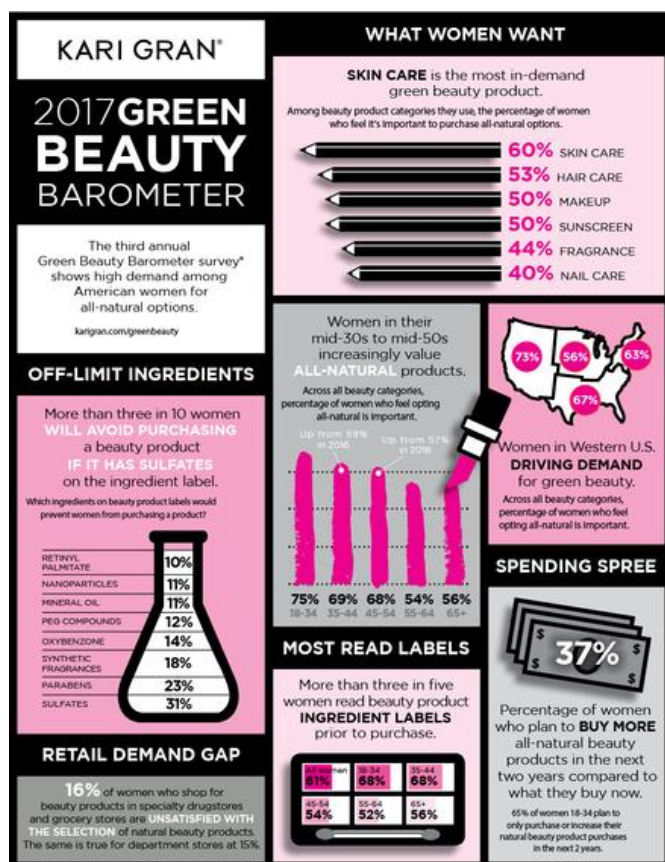
Open Innovation



- Increased number of projects
- Biotechnology led
- Cost effective

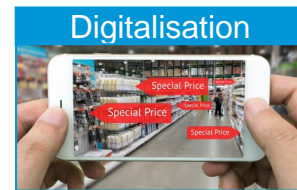


Investment in Green & Clean Beauty...



Green Beauty Barometer survey of American women found:

- More than **6 in 10 women** now read beauty product labels prior to purchase
- Women aged 35-54 are increasingly going green - **69%** say **purchasing natural products** is important to them, +10 percentage points over last year
- **37% of women** plan to purchase more green beauty products over the next 2 years, compared to what they currently do



...And Smarter Digital Investment

New digital ecosystems



Cutitronics

- 25% investment
- High-tech digital technology
- Optimum delivery of skin care

Rapid formulation screening



Materials Innovation Factory

- State of the art facility
- Robotics
- Fast screening
- Agile R&D

Digitally enabled for new customers



Indies

- Virtual
- Agile
- Technology & data hungry

Creating a digital presence

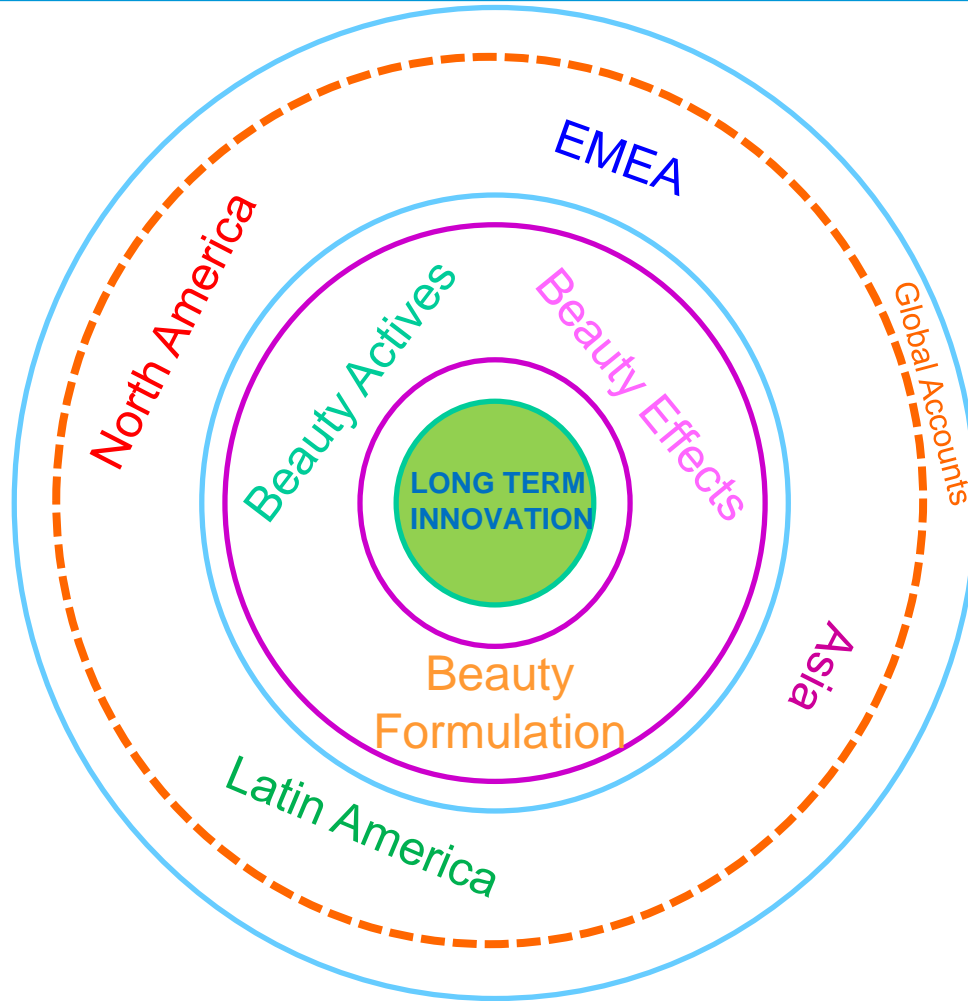


- New customer experience
- Chief Digital Officer
- Agile software engineering

DIGITAL – DISRUPTIVE TECHNOLOGY CREATING NEW OPPORTUNITIES

Digital – a disruptive technology creating many opportunities

With a Smarter Structure & Sharper Focus



Three powerful businesses:

- Beauty Actives
- Beauty Effects
- Beauty Formulation

Supported by:

- Strengthened long term innovation capability
- Different and focussed attention

Beauty Actives

Beauty Actives supply IDEAS and CONCEPTS to the majority of cosmetic manufacturers globally

sederma

Essential in Actives

- Actives with high added value for the Premium and Masstige markets
- Based on science and innovation



CRODAROM

Excellence in Emotive
Ingredients

- Plant extracts with identified phytomolecules
- Entry level for botanical actives
- Quality conventional plant extracts
- Offers differentiation to customers



- Plant cell culture production
- Products commercialised under IRB by Sederma



Flight to Premium



Phytodensia – Phyto
(Alès Group)
Hair care range
Contains PROCAPIL®



DayWear Eye
Estée Lauder
Cooling Anti-Oxidant
Moisture GelCreme
Contains
VENUCEANE®



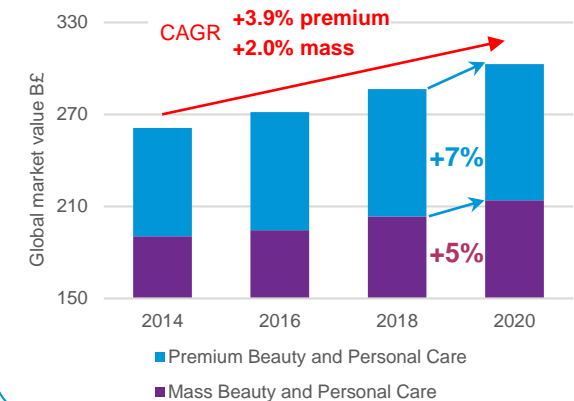
Sublimage La Brume
Chanel
Skin care mist
Contains
PRODIZIA®



City Skin®
Overnight Detox
Moisturizer
Murad
Contains
CITYSTEM®

Premium Beauty Market

- Premium is about emotional connection
- Increasingly wealthy consumers spend on items that resonate emotionally
- Consumers spend more on products that make them feel smarter, more sophisticated, more responsible



Brands sourced from company websites

Global market growth sourced from Euromonitor

Investment in R&D will support growth



- €10m investment to expand Sederma by >50% in R&D and Production
- Reinforces global #1 position in peptide skin actives
- Expands resourcing for plant, plant cell culture and microbial transformation
- Creates opportunities to leverage new disruptive technologies – eg blue biotech

Driving continued growth outperformance

Beauty Effects

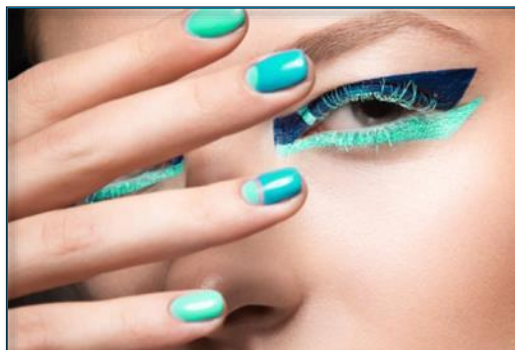
- Creating an “Actives type” business in Beauty Effects
 - Above market growth
 - Innovation rich
- Trusted to deliver the latest & next effects
- Expanding existing portfolio of value-adding products that deliver immediate or short-term consumer performance benefits
 - Hair actives
 - Solar protection
 - Non-biological skin actives and effects
- Increasing demand for sophisticated effects



Flight to Premium



UV and pollution protection



Strength encapsulated



Embrace style diversity



Elegant UVB protection



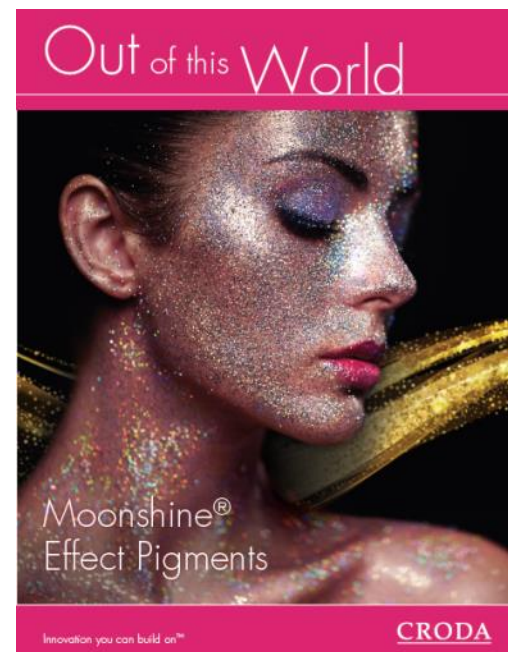
Instant skin smoothing



Intelligent hydration

Faster Investment in Smart Partnering

- Sustained fast growth in colour cosmetics, especially in premium niches
- Smart partnership with Glassflake
- Innovative special effect pigments originally developed for speciality coatings applications
- Completed successful market test late 2017
- Global launch March – May 2018



Beauty Formulation

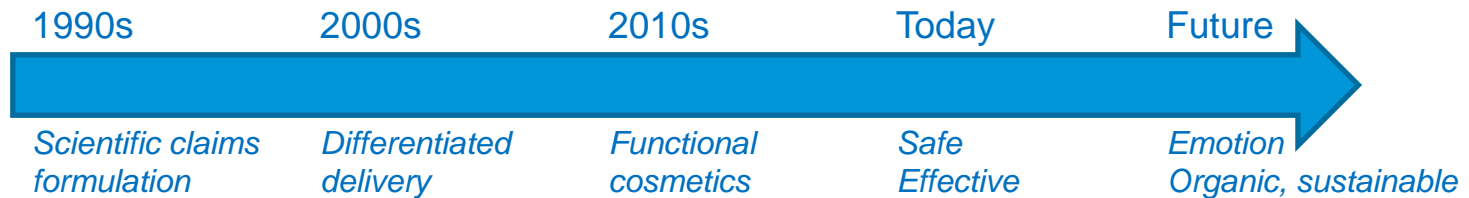
- Sensory and Texture
 - the touch, the feel, the experience
- Beauty Formulation Texture
 - 1,500 heritage ingredients across 25 technology groups from 16 sites worldwide
 - Providing customer with **technology breadth, problem solving options & creative inspiration**
 - Combined with Croda's reputation for **safety, dependability & regulatory expertise**
- Beauty Formulation Science
 - The science behind a great sensory experience
 - The science behind formulation effectiveness & sustainability

Getting closer to customers

Croda in Korea



Customer needs from cosmetic ingredients are changing fast:

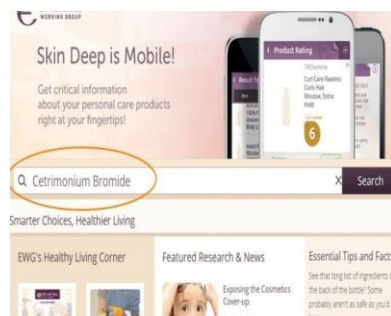


Local customers are driving change:

- >12,000 cosmetic producers/sellers
- New product trends changing fast – mask sheets, gels & sticks are hot today



- Self safety key to consumers



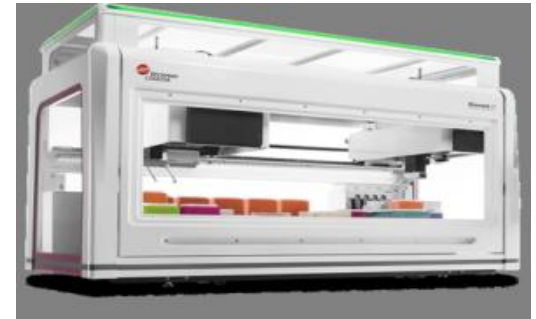
Croda is close to customers:

- New lab & customer centre
- Close to regional dynamos
- Seminars tailored to local customer segments
- Increasing export customers – China, Asia, Global



Smarter Digital Investment

- Croda has created its **Centre of Innovation for Formulation Science** in the Materials Innovation Factory (M.I.F.) at the University of Liverpool
- State-of-the-art facility will house the highest concentration of laboratory robotics for materials science in Europe
- 2018 planned investment in robotic active screening at Nautilus



Personal Care Summary

- Positioned to capitalise on emerging trends
- Investing in fast growth disruptive technologies, R&D and premium niches
- As well as in Smart Partnerships and Technology Acquisitions
- Digital and Sustainability becoming powerful differentiators
- Strategy continuing to deliver

Beauty in Business...Questions?



Stretching the Growth Technology Opportunities



Anthony Fitzpatrick, Damian Kelly, Maarten Heybroek & Chris Sayner

Stretching the Growth Technology Opportunities

Innovation in Croda

- Clever R&D
- Leveraging Open Innovation
- Technology acquisitions

In-flight disruptive opportunities

- Biotechnology
- Biostimulation
- Smart materials
- Biosurfactants

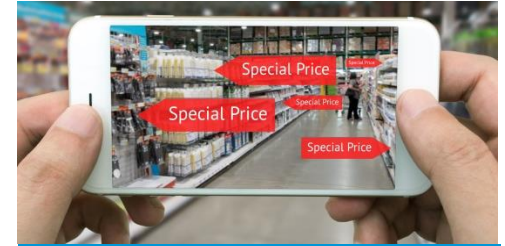
Stretching the Growth



Premium Niches



R&D



Digital



Sustainability



Technology Acquisitions



Smart Partnering

Innovation and technology deliver superior growth

Our Innovation Framework

Tech acquisitions



R&D

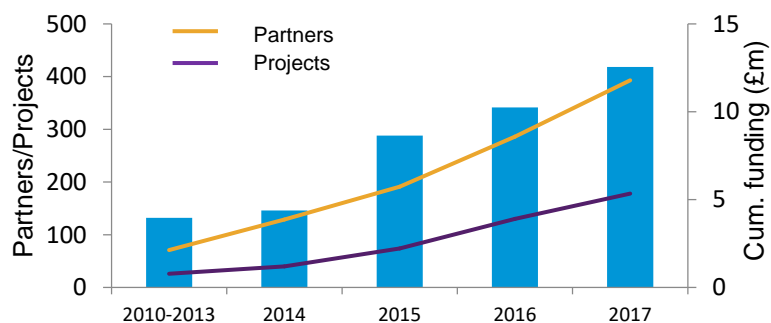


Return on Investment: 11x for every £1 invested in R&D

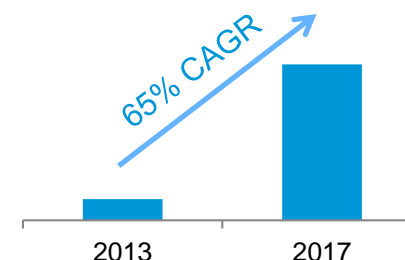


Proven Innovation Framework

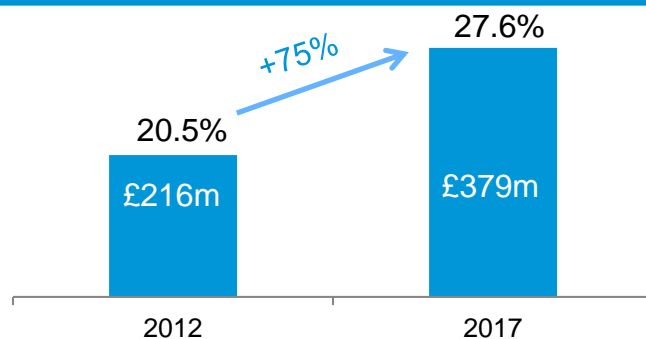
Accelerating open innovation



Strong sales growth in new technologies



Five successive years of NPP growth



Delivery of Technology M&A accelerating

- IRB
- JD Horizons
- Incotec
- Inventiva

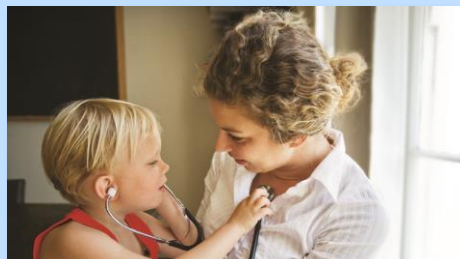




Growing our core sectors faster



Beauty & Ageing



Health & Wellbeing



Sustainability

Personal Care

Life Sciences

Performance Technologies

KEY CRITERIA FOR TECHNOLOGY ACQUISITION

Ability to globalise

IP-rich

Long term ROIC at or
above 20%

In-flight disruptive opportunities

Technology examples

Technology	Revenue		Investments	Sector		
	Potential	Time to full commercials		PC	LS	PT
Biotechnology	✓✓✓	0-5 years	Organic, IRB, Nautilus, Enza	✓	✓	
Biostimulants	✓✓	0-3 years	Plant Impact		✓	
Smart Polymers	✓✓	0-3 years	IonPhase			✓
Biosurfactants	✓✓✓	0-3 years	Organic (ECO), Enza	✓	✓	✓



Aim to deliver 3-5 new technologies annually

Revenue potential:

✓ = Small, ✓✓ = Medium, ✓✓✓ = Large

Timescale is estimated time to full commercialisation of technology

Open Innovation

Leveraging global potential

R&D



Innovation through collaboration

- 178 projects, 400 partners, >£12m in funding
- Global partners
 - UK, France, Netherlands, Singapore, Japan, USA
- Valuable outputs
 - New products, application data, test methods & processes
- Leads to Smart Partnering & TIG
 - Nautilus
 - Plant Impact

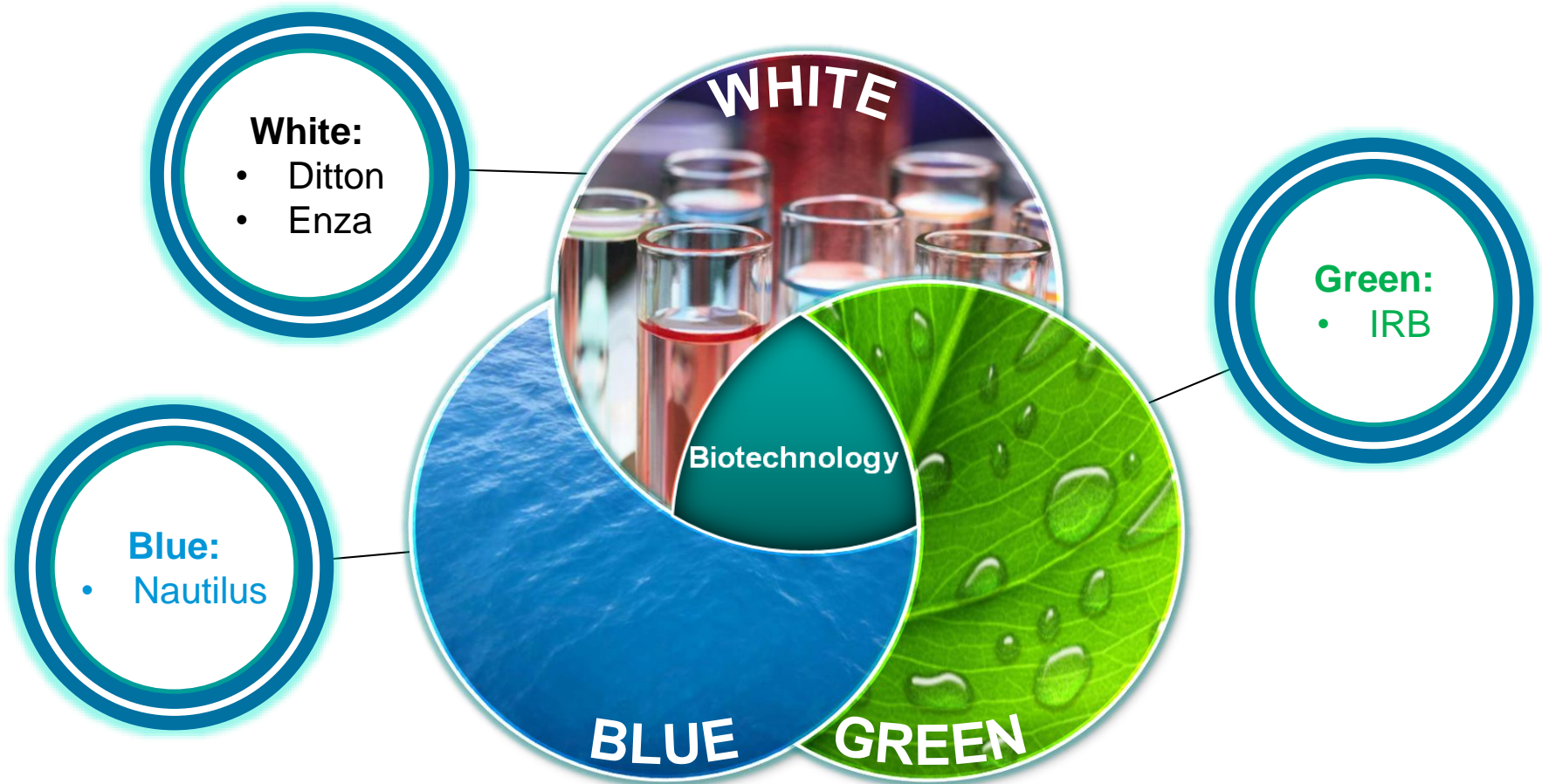
Our partners

THE UNIVERSITY *of* York



In-flight disruptive opportunities

Biotechnology – sustainable technology



In-flight disruptive opportunities

Why "Green" Biotechnology?



Sourcing

- No crops
- No seasonality
- No supplier
- Unlimited availability

Sustainable development

- Smart land usage
- Reduced solvents
- No biosphere destruction

Ethics

- Land can be used for food crops
- Protection of plant and biodiversity

Safety and quality

- High, standardised active quantity
- No undesired pollutants
- No GMO



IRB acquired 2012 & growing rapidly

In-flight disruptive opportunities

Why “White” Biotechnology?



Organic – Fermentation investment

- Long standing investment
- Access to unique chemistry, molecules and effects
- Rich new product pipeline
- Full manufacturing capability from microbe to multi-tonne
- Immediate capability to scale up Nautilus and Enza technologies

Sugar Based Chemistry

- Meets trend for sustainable surfactants
- Sugar based surfactants have unique bespoke performance properties
- Enzymes are nature's catalysts
- Enzymatic route to novel sugar (100% bio-based) non-ionic surfactants
- Opportunity to be world leader in sugar surfactant chemistries

In-flight disruptive opportunities

Enza Biotech



- Acquired July 2017
- World class scientists focused on novel drug delivery technology
- Unparalleled expertise and IP on enzymatic route to novel sugar based chemistry
- Proven access to unique molecules with meaningful commercial potential
- Proven differentiated performance in drug solubility and delivery
- Significant growth potential in Personal Care and Health Care



Hair Care



Topical formulations

In-flight disruptive opportunities

Why Marine "Blue" Biotechnology?



Oceans are vast & underexplored with unparalleled biodiversity

Diversity

Geographic



Habitat



Wood



Sediment



Algae



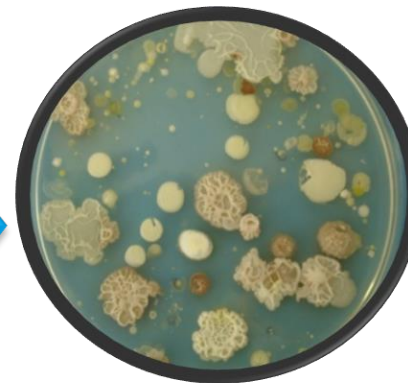
Mangroves



Invertebrates

- Corals
- Sponges
- Tunicates
- Arthropods

Biological



Applications



Adjuvancy



Solar Protection

In-flight disruptive opportunities

Nautilus Biosciences



- Acquired January 2018
 - Six year Open Innovation partnership
- World class scientists focused on marine microbial biodiversity
- Expertise in microbe isolation, fermentation, molecular biology, genetic engineering, genomics
- Expansive and unique marine library
- State of the art analytical facilities
 - High Throughput Screening investment
- High potential revenue opportunity
 - Personal Care and Crop Care



Skin Care



Crop Care Adjuvants

In-flight disruptive opportunities

Biostimulants

- Biostimulants market at advanced stage of commercial development
- Proven yield enhancement, differentiated science with experienced, world-class talent
- Commercially proven, technology rich, strong strategic fit
- Globalisation potential and complementary with existing Croda/Incotec activities
- Based alongside world recognised agricultural research centre
- Existing revenue stream
 - Potential for fast scale up through Croda



Biostimulants



Seed enhancement



Crop protection

Operate in 3 key markets in Crop Care

Inflight disruptive opportunities

Smart Materials

The Internet of Things

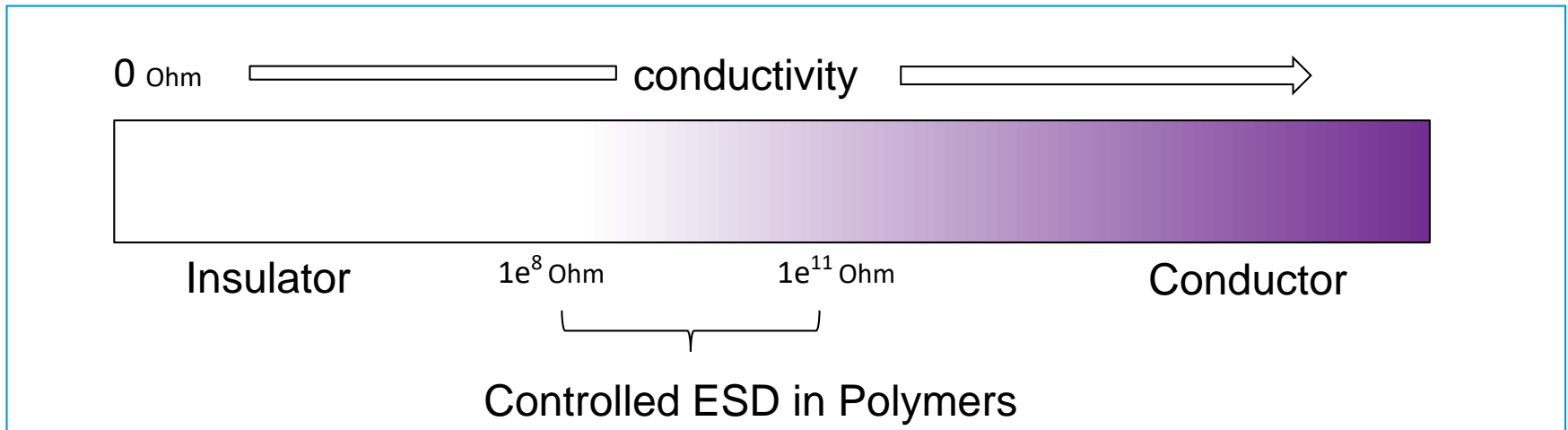
- Devices, cars, sports equipment, etc are increasingly connected to the Internet through embedded micro electronic components
- Rapid discharge of static electricity can damage micro electronics
- This drives the rapidly growing demand for improved ESD protection



Brand images from company websites

Inflight disruptive opportunities

Controlled Electro Static Discharge (ESD)



- IonPhasE additives give polymers the right conductivity for safe discharge of static electricity
- IonPhasE additives are compatible with a range of different polymers (Polyolefins, Polycarbonates, Styrenics, PMMA)

Inflight disruptive opportunities IonPhasE

- Acquired December 2017
- Technology leader in fast growing market (>2x GDP)
- Emerging position in target markets like Automotive and Electronics
- Robust protection from IP and know how
- Excellent strategic fit with Smart Materials business
- Sales €9m in 2017, 23 employees, 70 customers
- Faster sales conversion via the Croda global sales & marketing network





Inflight disruptive opportunities

Croda's role in Sustainability

- Surfactants produced at Atlas Point since 1940s
- Iconic emulsifiers invented here
 - Arlacel™, Brij™, Myrj™, Tween™.
 - Synonymous with the chemistry
 - Globally the strongest brands
- 7,000 customer/product combinations delivered to 40 industries - Personal Care, Crop Care, Coatings, Home Care, Lubricants, Pharma, Veterinary
- 30-40% of skin & hair care products launched in last 20 years globally contain alkoxyates
- Breadth and depth firmly embedded into many high value supply chains

In-flight disruptive opportunities

Industry trends in Sustainability



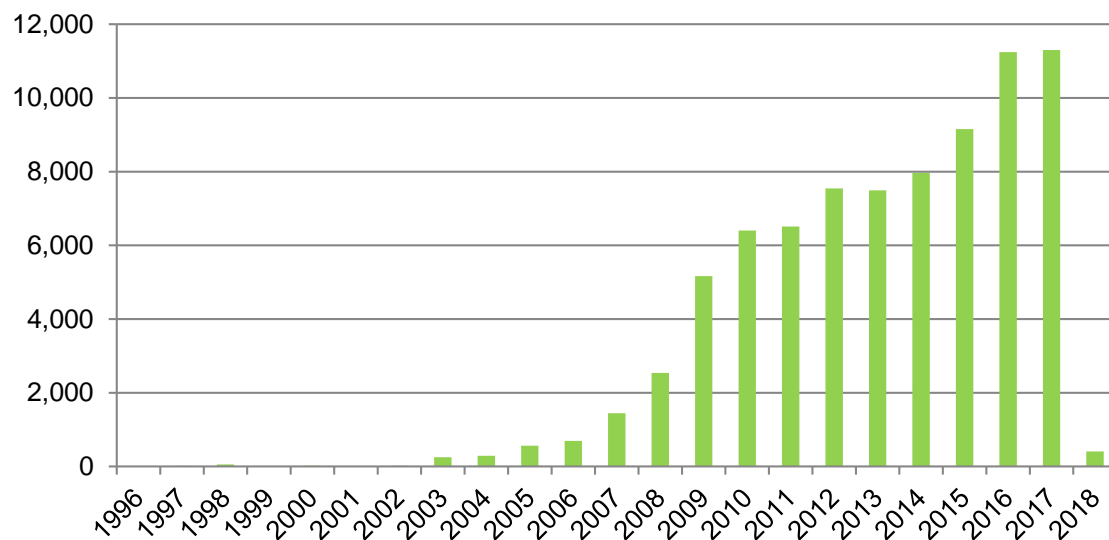
20th Century
Feedstock



21st Century
Feedstock



Growth in Product Sustainability Claims



Source: GNPD Mintel capturing Environmentally Friendly, Carbon Neutral 16-1-18

In-flight disruptive opportunities

New ECO surfactants



- 100% renewable
- 100% bio-based*
- Outperform other Non-EO Bio-based substitutes (eg APGs)
- Lower carbon footprint than petrochemically derived ingredients
- USDA BioPreferred Program 3rd party certification
- *RSPO Supply Chain Certified via Mass Balance***



- 100% biobased ethoxylates were the missing link
- ECO products solve the problem



Look for the Label!



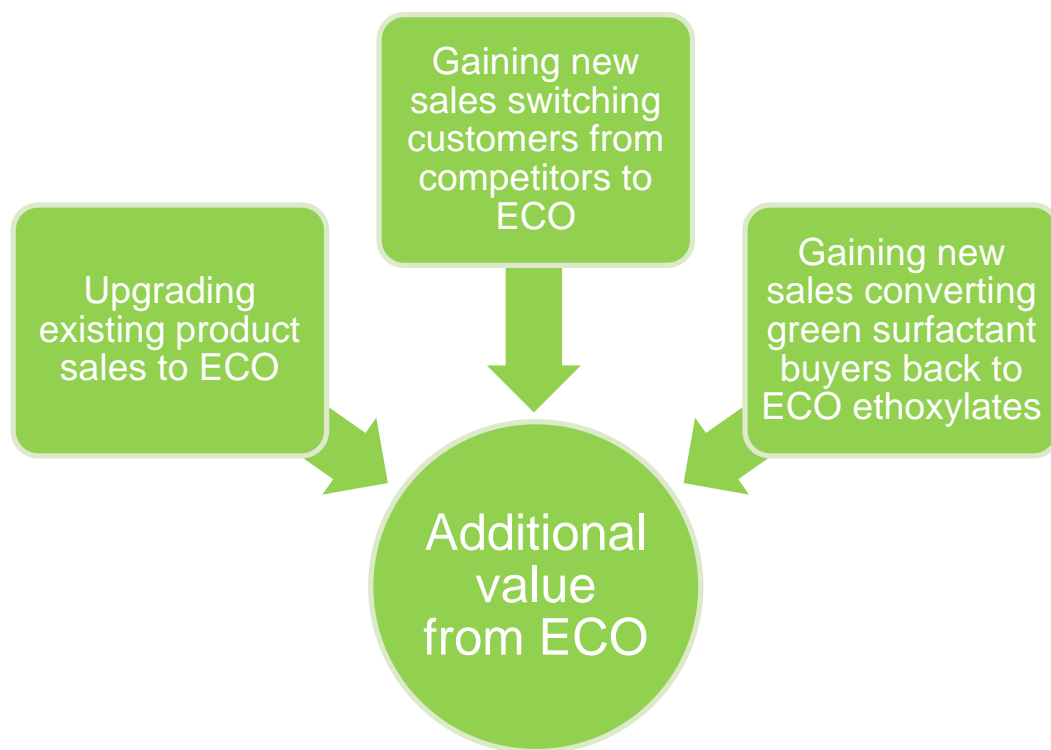
* Calculated using prEN16785-2 which is to be validated by carbon 14 testing (ASTM D6866)

** Products containing palm derivatives



In-flight disruptive opportunities

ECO - immediate opportunities

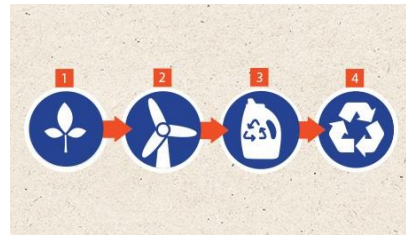


2 years of customer engagement is presenting rich opportunities:

- “Deep Green” accounts are ready to fill pipelines
- Strong cross-industry interest in increasing bio-based consumption
- Long list of opportunities displacing competition
- 11 new product launches due in 2018
- Other companies keen to buy intermediates

In-flight disruptive opportunities

Biopreferred is now mainstream



This Product is Made
at a Zero Manufacturing Waste
to Landfill Site



FREE OF DYES,
CHLORINE, PHOSPHATES
AND OPTICAL BRIGHTENERS



Tide Purclean™ is a registered trademark of The Procter & Gamble Company

Technology Opportunities Summary

- Relentless innovation through organic investments and thoughtful M&A
- High potential, disruptive technologies addressing identified market needs
- Rich pipeline of M&A opportunities in harmony with R&D and Open Innovation
- Exciting range of new products coming to market
- Significant opportunities to 'Stretch the Growth' for Croda

Technology	Investment	Thesis	Year
Biotech	IRB	'Green' adjacency for Sederma	2012
Seed enhancement	Incotec	Crop Care adjacency	2015
Encapsulation	Inventiva	Delivery technologies	2016
Biotech	Enza	Disruptive sugar surfactants	2017
Digital	Cutitronics	Disruptive technology	2017
Electrostatics	IonPhasE	Polymer additive extension	2017
Biotech	Nautilus	'Blue' biotech for Sederma/LS	2018
Biostimulants	Plant Impact	Crop Care adjacency	2018
Biosurfactants	ECO	Disruptive technology	2018

Extract of some recent technology investments & acquisitions.

"Year" is year of completed investment

Connecting to Faster Growth Markets Summary



Steve Foots, Group Chief Executive

A strong business getting stronger

- Continuing to deliver significant progress
- Performance driven by a powerful business model and focused strategy to:
 - Deliver consistent top and bottom line growth
 - Increase the proportion of protected innovation
 - Accelerate our customers' transition to sustainable ingredients
- A thriving creative culture
- Creating superior value for shareholders
- Connecting to Faster Growth markets
 - Growing the Core
 - Stretching the Growth

Three strong legs of growth

Connecting to faster growth markets



Personal Care



Life Sciences



Performance Technologies

