

Global Sustainable Investing

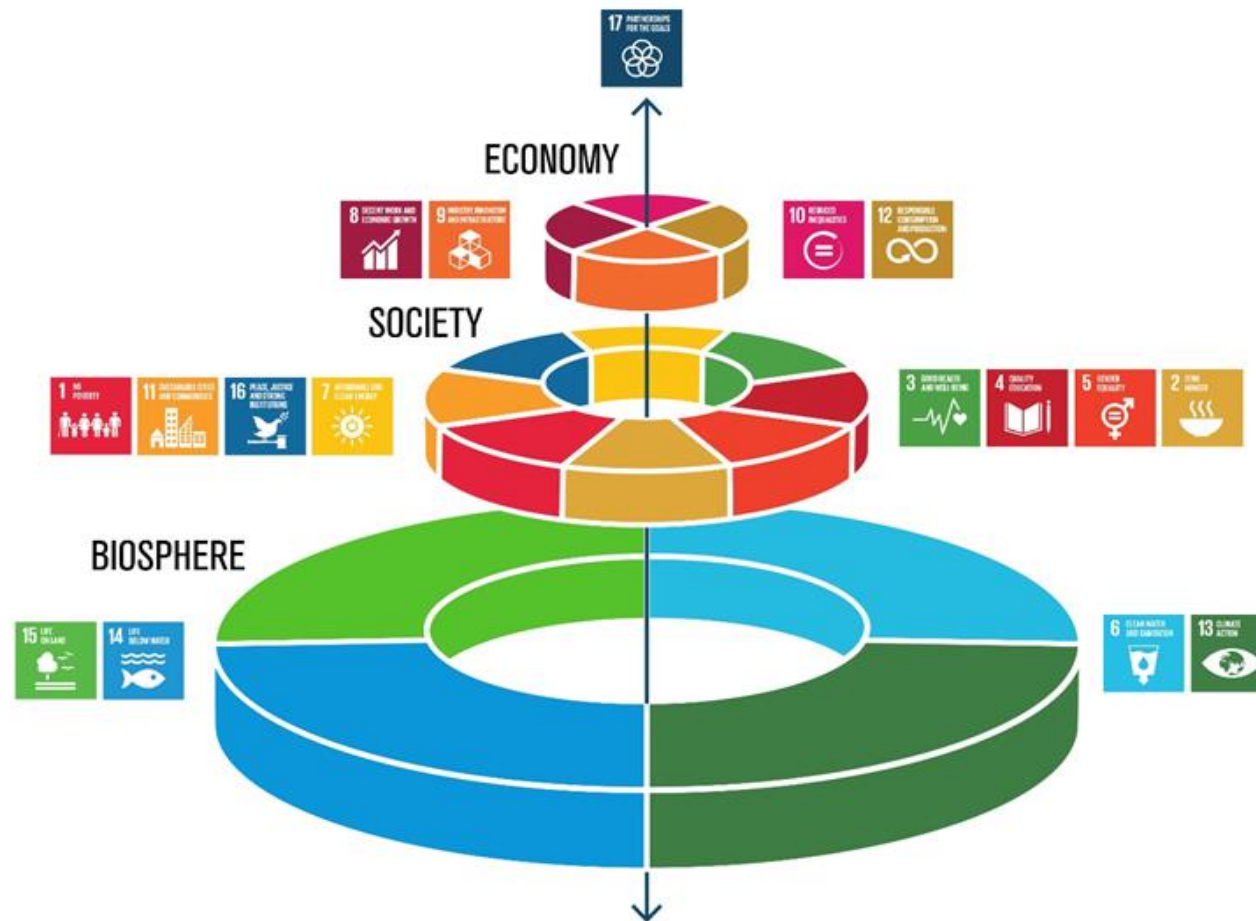
For professional investors only

26 February 2019



Sustainable Outcomes Investing

Isn't just good for the Earth, it's good for Business

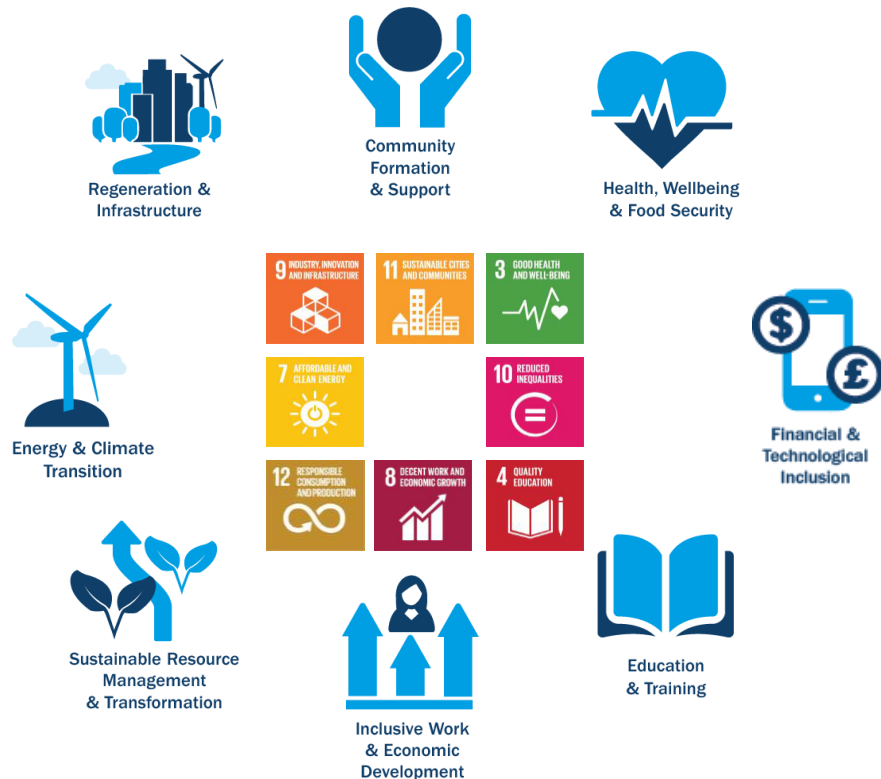


Source: ECOHZ, 2019.

UN logos. Use does not imply UN endorsement of this fund. Use for promotion of the SDGs. Our thematic framework draws on all SDGs, but the primary SDGs per theme are shown here.

Our Eight sustainable themes

Investing for change

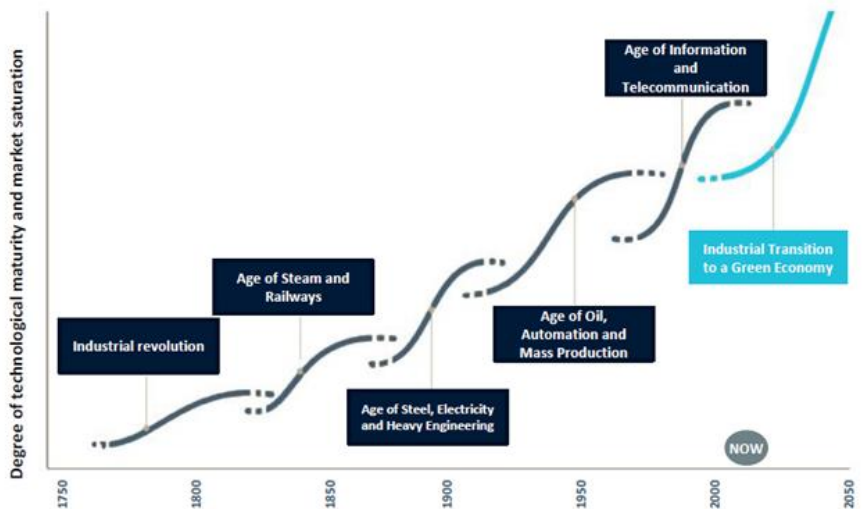


- The **17 UN Sustainable Development Goals (SDGs)** represent a catalyst for change, creating new investment opportunities
- Our **eight sustainable themes** draw on these SDGs and encompass a range of social and environmental outcomes
- We believe investment based on these themes can deliver not just **impact** for investors but **solid financial returns**

Sustainable Resource Management

Transitioning from a linear to a circular economy

The World has undergone five major industrial cycles



Redesign, reuse, recycle

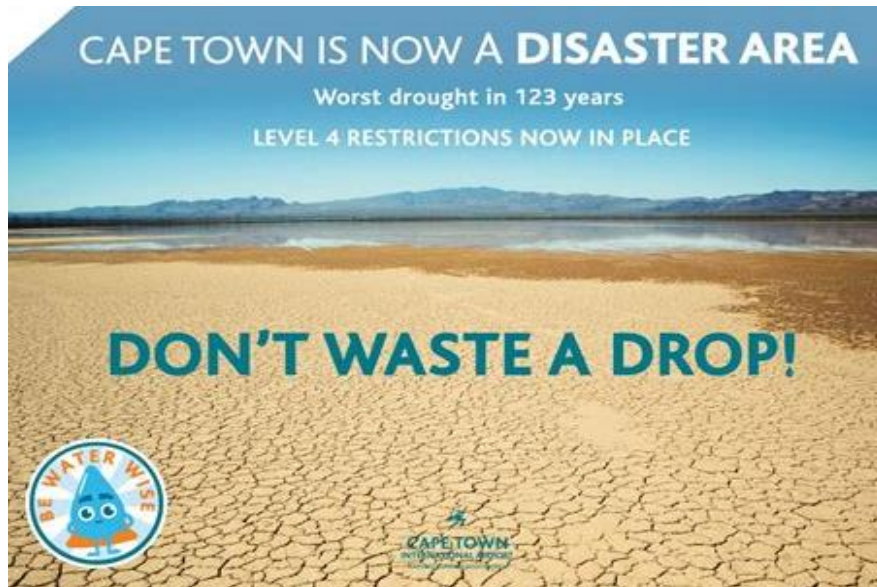
- Companies to date have enjoyed:
 - Unrestricted access to resources
 - Unlimited exploit of the environment
 - Little to no consideration for recovery/recycling at a product's end of life
- However the world population is set to expand to 9.4-10.2 billion by 2050¹
- Growing societal and regulatory pressure to do more and better with less
 - This will accelerate the transition
 - Companies cannot be financially sustainable in the long-term if they fail to adapt

Source: TOMRA Systems SA, as at 21 September 2018.

1. Citi GPS Research

Sustainable Resource Management

Water scarcity



- Water scarcity is largely the result of three key trends:
 - Population growth
 - Urbanisation
 - Climate Change
- About two-thirds of the world's population will face water-stressed conditions in the next decade¹
- Investment and Innovation in supply- and demand-side solutions needed to meet future water needs and improve waste water management.

Xylem – water technology company

- Innovative technology solutions for better water management
- Xylem's smart water networks identify infrastructure problems early, helping to reduce water loss

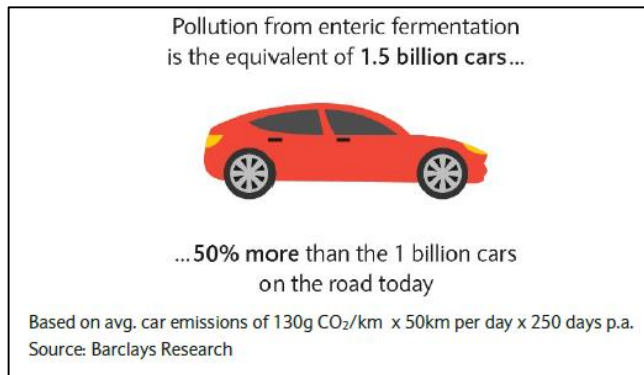
Source: www.airports.co.za

1. UN, International Decade for Action 'Water for Life' 2005-2015. All intellectual property rights in the brands and logos set out in this slide are reserved by respective owners. The mention of any specific shares or bonds should not be taken as a recommendation to deal.

Sustainable Resource Management

Sustainable agriculture

Cows contribute more to global GHG emissions than cars



- Due to population growth we will need more food in the next 40 years than all the harvests in history combined
 - But growth in farming has environmental impact:
 - Industrial farming is harming the world's biodiversity
 - Growing global protein consumption is contributing to higher carbon emissions
 - Agriculture/land use account for 24% of Global GHG emissions with cattle and dairy farming 40% of this
 - We need sustainable farming solutions to feed growing populations e.g. Agriculture technology
- └──────────────────┘
- Trimble – Precision Agriculture field solutions:
 - Help improve farm yields by up to 30% and reduce water use by up to 20%



Sustainable resource Management

Waste management

Significant untapped potential to reuse good materials



- By 2025 solid waste generation will increase by **70% compared to 2010 levels** with a substantial percentage ending up in nature
- Good waste management is good for business
 - **Lowers costs:** Reuse good materials – only 14% of plastic packaging recycled today
 - **Strengthens Brand:** Plastic waste is quickly becoming a top consumer concern
- Proposed EU legislation targets 77% collection / 25% recycled plastic as an input by 2025

Source: Ellen MacArthur Foundation and Barclays research, 2017.

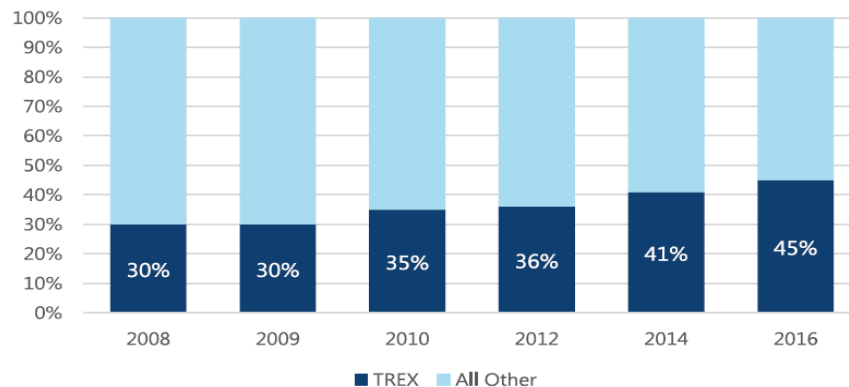
1. Tomra estimates and Ellen Macarthur Foundation, 2017.

Sustainable Resource Management

Recycle, Re-use = Competitive advantage



Trex has consistently gained market share



Source: Trex, 2018.

1. Company Data. All intellectual property rights in the brands and logos set out in this slide are reserved by respective owners. The mention of any specific shares or bonds should not be taken as a recommendation to deal.

- Trex is one of the largest plastic recyclers in the US
 - Their composite decking is made from 95% recycled content
 - The average 500 sq ft composite Trex deck contains approximately 140,000 recycled plastic bags¹
- Eco-friendly manufacturing
- Using recycled plastic film makes good business sense:
 - Key cost advantage versus peers who use virgin plastic
 - Better performance versus traditional wood decking
 - Environmental brand
 - Supported consistent share gains and margin expansion

Sustainable consumption

Shifting consumer preference for “brands with purpose”



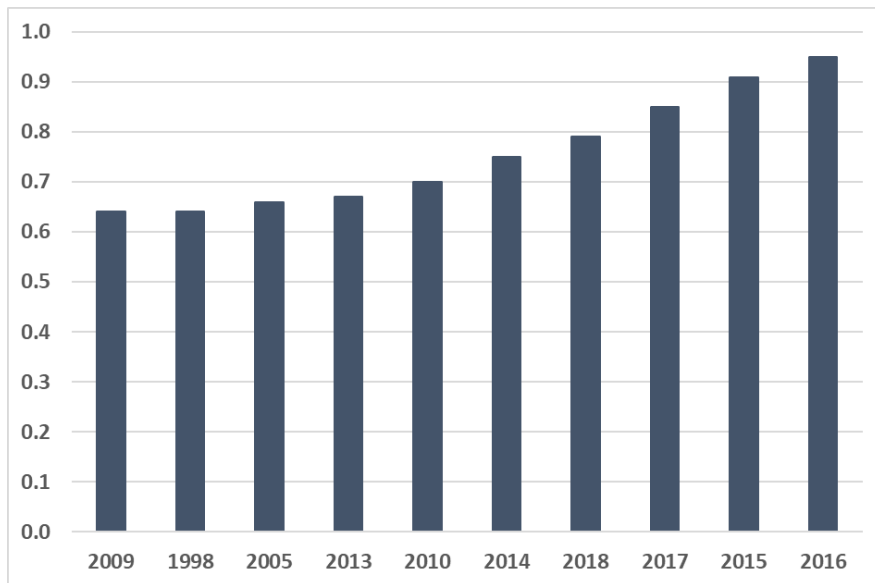
- Investment in sustainable living brands
 - 26 brands (approximately 40% of portfolio) growing 46% faster than other brands, delivering 70% of sales growth
 - Target 100% sustainably sourced agricultural raw materials by 2020
 - Target 100% fully recyclable packaging by 2025
 - “Sustainability makes business sense”

- Collaboration with Parley Ocean Plastic
 - Using sustainable ocean plastic to make shoes, and using recycled polyester
 - Target of only using recycled plastics by 2024

Energy & Climate Transition

Clean air revolution

Ten Warmest Years (1880-2018) – Anomaly oC



- Extreme weather is one of the biggest global risks today:
 - Nine of the 10 warmest years have occurred since 2005 with the last five (2014-2018) the hottest
 - Globally, the frequency and severity of floods, droughts, hurricanes and wildfires are increasing causing physical, economic and social devastation
- The power sector is the largest source of CO2 emissions with electricity and heat production representing approximately 25% of global GHG emissions¹:
 - We have to transition away from coal generated electricity if we are to achieve our carbon emissions reduction targets

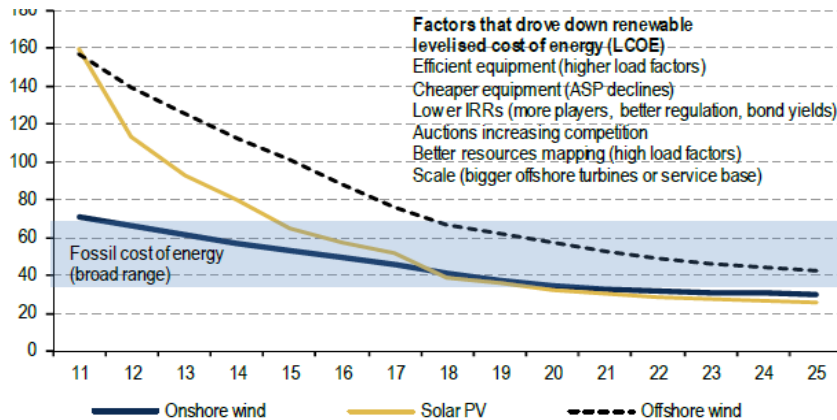
Source: National Oceanic and Atmospheric Administration (NOAA).

1. Barclays Research, EPA via IPCC, 2019.

Energy & Climate Transition

Clean energy

Renewable costs have fallen rapidly & heading < fossil by 2020



- Transitioning to renewables makes environmental and economic sense:
 - The cost of renewables is falling rapidly and in many countries is now already more economical than coal and nuclear
 - Battery efficiency improvements and cost declines further support renewables

- Nextera – Largest developer and operator of renewables in the US:
 - Generate more wind and solar energy than any company in the world
 - Key beneficiary of shift away from coal and nuclear towards renewables
 - Scale, expertise and brand strength positions Nextera for further share gains within renewables

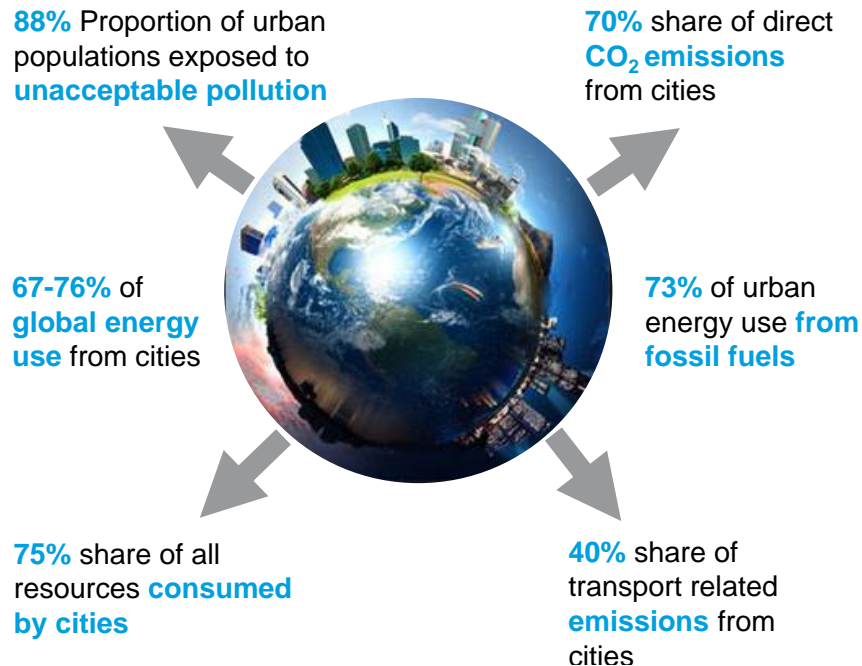


Source: BofAML Global Research, LCOE is levelized cost of energy; Barclays Research, and IPCC

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Regeneration & Infrastructure

Smart cities



- 54% of global populations currently live in cities
- We need more sustainable infrastructure to support growing populations and their impact on the environment
- Technology has a key role in developing “Smart” cities:
 - IoT for more intelligent buildings
 - Mobility as a shared service (autonomous, connected, electric vehicles)
 - “Green”, more energy efficient buildings
- Ingersoll Rand – “heat, cool and automate buildings”
 - Superior, more energy efficient HVAC equipment enables customers to lower energy costs and reduce carbon emissions
 - Strong share gains led by China post introduction of more rigorous building regulations for energy efficiency

Source: Citi GPS: Sustainable Cities

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A more inclusive world

Education, Work and Equality



2U STUDENT DEMOGRAPHICS*



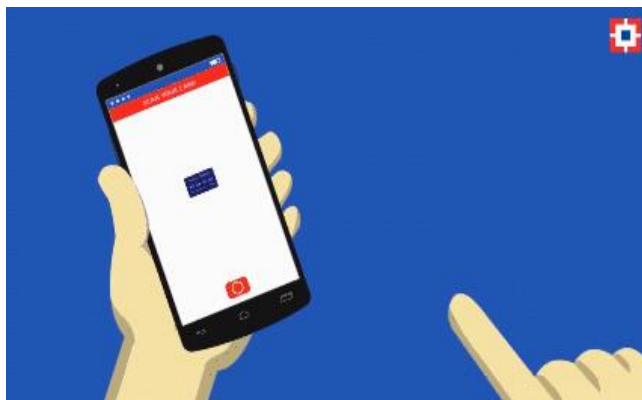
- More inclusive education & work reduces inequality and supports economic growth:
 - One extra year of education associated with 1.4 percentage point drop in the Gini coefficient
 - Women working to full potential to unlock up to US\$28 trillion in annual global GDP by 2025
- However issues remain for developed markets:
 - Rising cost of higher education
 - 14% jobs in OECD countries 'highly automatable'; need life long-learning and new skills
 - Cost of childcare and early education increasing, women disproportionately impacted
- We look for companies offering solutions for a more inclusive education system and workplace:
 - 2U – enabling colleges to offer online degrees
 - Bright Horizons Family Solutions – early education and employer funded childcare services support working parents

Sources: UNICEF; OECD; McKinsey; Bright Horizons, as at November 2018.

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A more inclusive world

Digital India: increased financial inclusion



- Indian government supporting a **more inclusive financial system** for the 100s of millions previously unbanked population
- Increasing smartphone penetration in India is facilitating a digital transformation and the **increasing banking penetration**
- HDFC – premier private sector bank in India
 - HDFC are leaders in digital banking innovation supporting consistent share gains – market share in loans doubled from 4.6% in 2013 to ~7% in 2018
 - Greater exposure to digital versus physical banking means lower costs and higher returns versus developed market peers

Source: HDFC, 2018.

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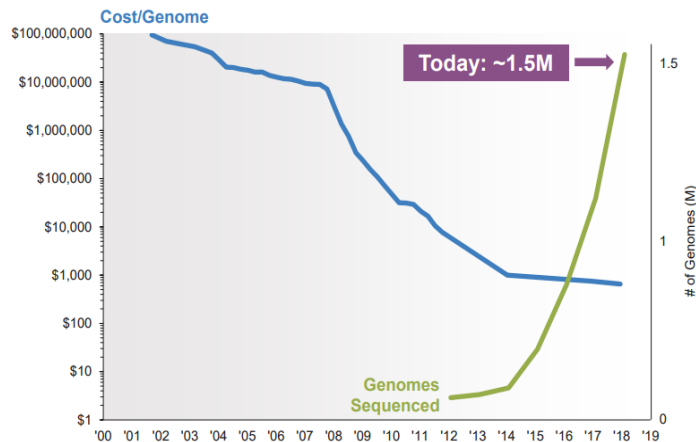
Health & Wellbeing

Innovative healthcare

Falling cost of genetic sequencing



Health, Wellbeing
& Food Security



“Improve human health by
unlocking the power of the
genome”



- Healthcare sector growth supported by secular trends:
 - Increasing innovation to offset US pricing pressure
 - Ageing populations
 - Increasing healthcare spend in EM
 - The rise of lifestyle related diseases
- According to the WHO worldwide obesity is up approximately 3x since 1975¹
 - Associated diseases include cardiovascular and diabetes
 - Rise in diabetes patients risk bankrupting publicly funded healthcare
 - **Novo-Nordisk's** new drug Ozempic better controls blood sugar levels in diabetic patients reducing weight and cardiovascular events by >20%
- Personalised, precision healthcare
 - Helps improve outcomes for patients and reduce the cost burden for governments
 - **Illumina's** genetic sequencing solutions result in more effective healthcare e.g. sequencing a tumour can improve efficacy of cancer therapy for patients.

Source: Illumina company data and presentation 2019.

1. Berenberg research and WHO: Obesity and Overweight, dated 16 February 2018.

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Quality in a sustainable world

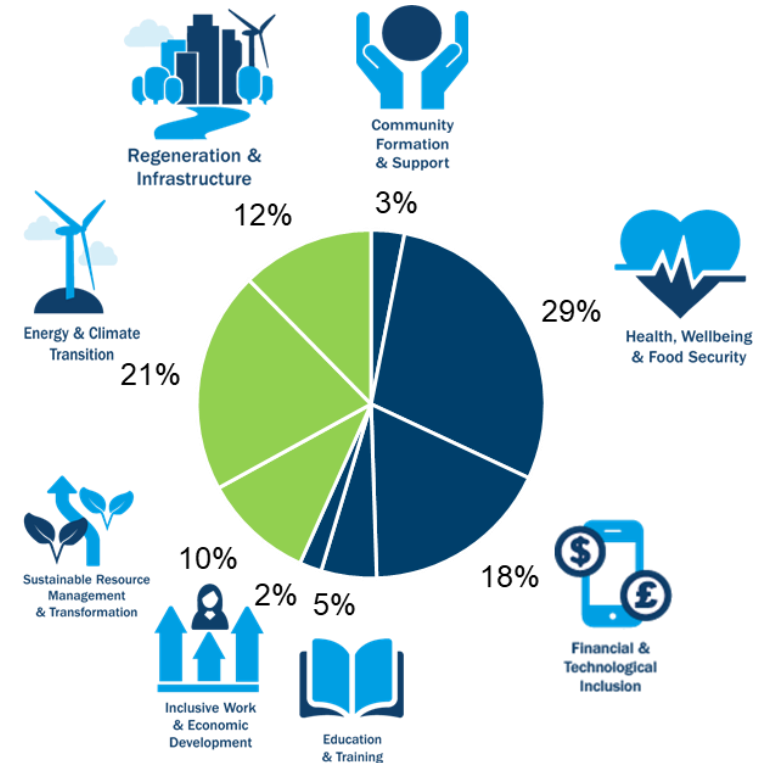


We believe that:

- The world is changing
- Companies offering solutions to meet these changing demands will enjoy superior growth and returns and wider competitive moats in the long term
- ESG is a key component of the quality of a company

Global Sustainable Outcomes Strategy

- Dedicated investment in Sustainable Outcomes
- Exclude companies misaligned with these outcomes
- Financial returns benchmarked to MSCI ACWI
- Investment in quality companies (versus MSCI ACWI):
 - EPS 5 year growth 15% versus 12%
 - Cons LT growth forecast 14% versus 11%



For illustrative purposes only.

Source: Columbia Threadneedle Investments, as at 31 December 2018.

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