

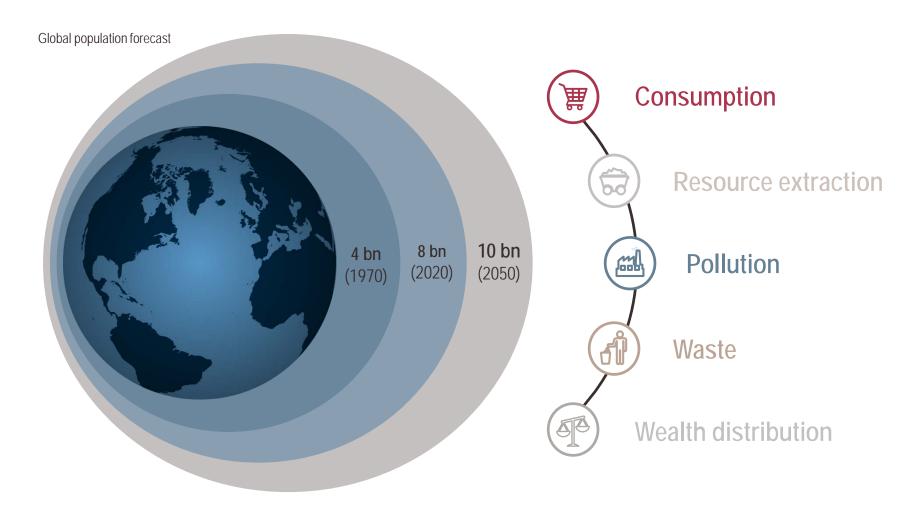
LOMBARD ODIER

Sustainability at the heart of investing

November 2019



Our current growth model is unsustainable



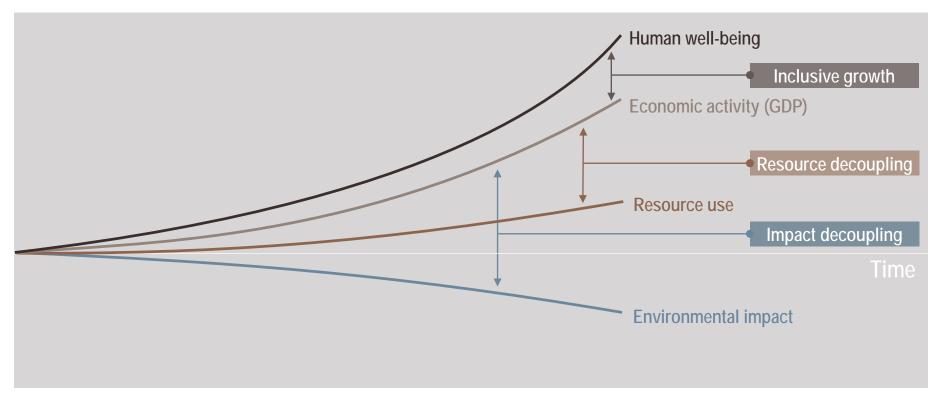
Sources: United Nations, Department of Economic and Social Affairs, Population Division (2019). World Population Prospects 2019. For illustrative purposes only.



Need for decoupling, a key theme

Favoring well-being and growth while limiting footprint

The concept of decoupling represented in an idealised manner (UNEP)¹



¹ Resource use increasing at a slower pace than GDP (relative resource decoupling), with environmental impacts actually declining (absolute environmental decoupling). For illustrative purposes only. Source: UNEP (2011), Figure 1, p. xiii.



Economic transition, from a "WILD" to a "CLIC" model







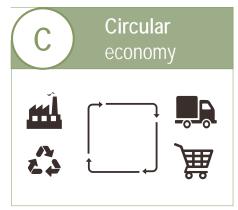


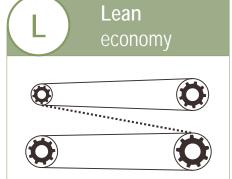


Lopsided

economy









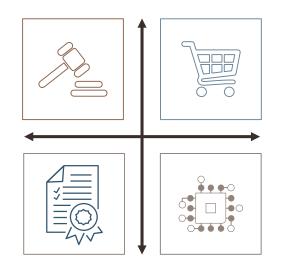


Source: LOIM. For illustrative purposes only.

Drivers for change

Policy and regulations

Investors



Consumer behaviours

Technological innovations

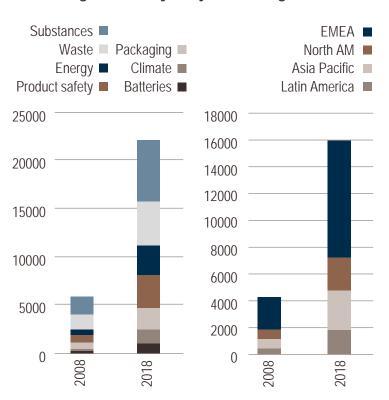
Source: LOIM. For illustrative purposes only.



Policy and regulations are increasing

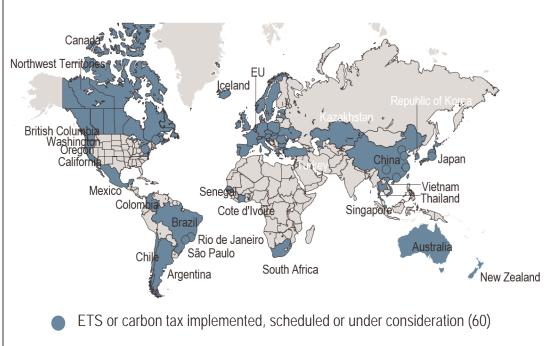


Global regulations by subject and region



Source: World Bank Group, State and Trends of Carbon Pricing, June 2019

New Regulations on polluters: Countries are Putting a Price on Carbon



Source: World Bank Group, State and Trends of Carbon Pricing, June 2019

For illustrative purposes only. *Note:* Carbon pricing initiatives are considered "scheduled for implementation" once they have been formally adopted through legislation and have an official, planned start date. Carbon pricing initiatives are considered "under consideration" if the government has announced its intention to work towards the implementation of a carbon pricing initiative and this has been formally confirmed by official government sources. The carbon pricing initiatives have been classified in ETSs and carbon taxes according to how they operate technically. ETS not only refers to cap-and-trade systems, but also baseline-and-credit systems as seen in British Columbia and baseline-and-offset systems as seen in Australia. The authors recognize that other classifications are possible.

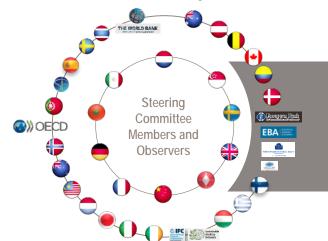
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Investors

Investors are forced to consider climate risk

Central banks and financial regulators take action



42¹ central banks and supervisors working to improve risk exposure to climate change and drive capital towards green and low-carbon investments

Europe deploying its sustainable finance action plan



For illustrative purposes only. Source: 1 Network for Greening the Financial System, A call for action: Climate Change as a source of financial risk, April 2019.

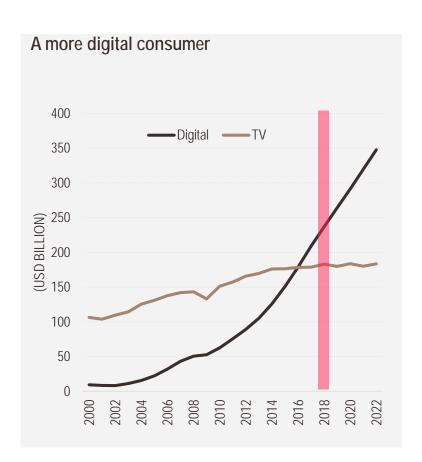


² Source: EC Sustainable Finance Action Plan.

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The rise of the connected and mindful consumer





A more mindful consumer

2/3 of consumers are willing to pay more for sustainable goods¹

	UN goal	
#1	Ensure responsible consumption and production	12 RESPONSIBLE CONSUMPTION AND PRODUCTION
#2	Build resilient infrastructure, inclusive and sustainable industrialization	9 MOSTEL PROMINE
#3	Protect, restore and promote life on land (protecting plant and animal life)	15 in Lan
#4	Good health and wellbeing (including air quality)	4 COMMITY ESDICATION
#5	Make cities and communities inclusive, safe, resilient and sustainable	11 DISTANGALÉ CITES AND COMMUNITES

Source: Nielsen. Innovation Group, J. Walter Thompson Intelligence.

Source: Global Advertising Forecast, Magna, December 2017. Data for 2017 and beyond are estimates

For illustrative purposes only.



¹ Study of 30,000 consumers across 60 countries.



l7 ∽

Re-thinking established norms



Source: LOIM. For illustrative purposes only.

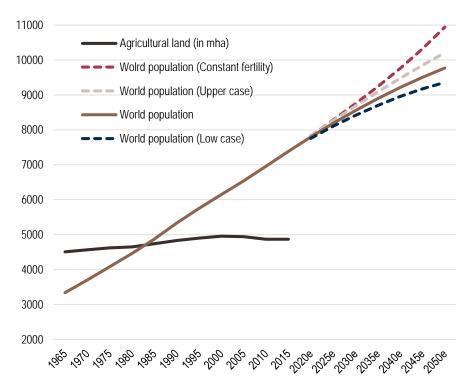


Transforming sustainable challenges in opportunities (1)

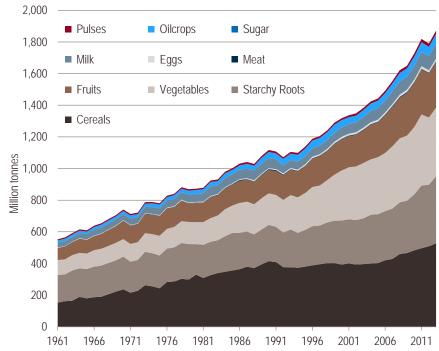


USD 250bn opportunity from Precision Farming: fertiliser, compaction reduction, irrigation, seeds
USD 700bn opportunity in supply chain optimisation: expiration date, water usage, frozen/local food, food distribution
Nearly 2/3 of consumers globally are willing to pay more for sustainable goods — and that is on the rise

Population growth & agricultural land



Global food waste



Source: FAO, United Nations Source: FAO, 2017



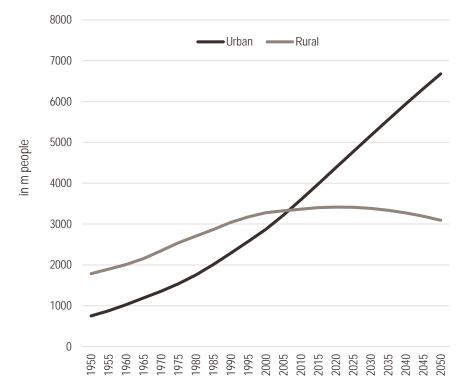
Transforming sustainable challenges in opportunities (2)

Sustainable Urban Systems



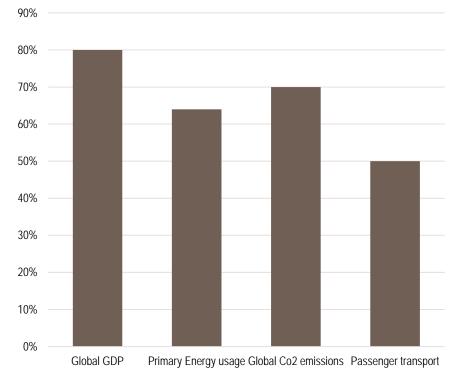
USD 8.4tn opportunity in new generating capacity in wind and solar over 2018-2050 USD 480-750bn opportunity in public mass transportation by 2050 USD 130bn pa market in energy efficiency for buildings, growing approx. 10% pa

Global urban and rural population



Source: United Nations, World Urbanisation Prospects 2018

Importance of cities



Source: IEA ETP 2016

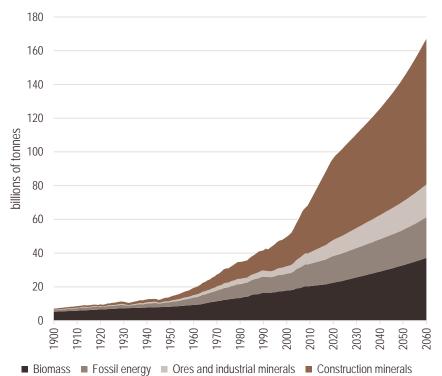


Transforming sustainable challenges in opportunities (3)

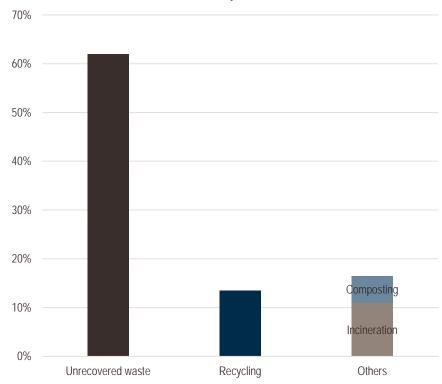


USD 380-630bn annual net material cost savings opportunity for manufacturing sectors in Europe USD 90bn value unlocked by AI for sustainability of consumer electronics pa by 2030 (automation, robotics) USD 335bn potential revenue for key sharing sectors by 2025 (travel, car sharing, finance, staffing, music, video)

Global materials extraction



Global waste treatment and disposal



Source: European Environment Agency, OECD, Ellen MacArthur Foundation, PWC, Global Waste 2.0



96

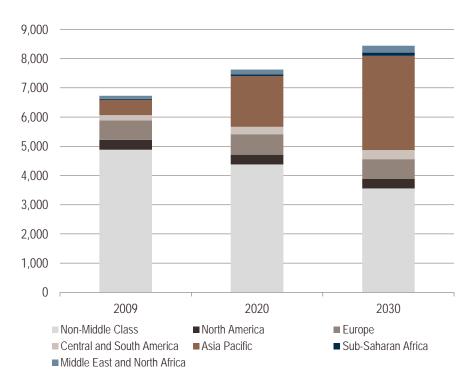
Transforming sustainable challenges in opportunities (4)



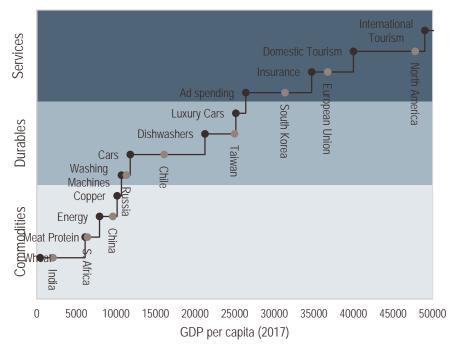


Personal car fleet to double by 2020 with electric/hybrid vehicles to rise from 5% to 15%-30% of sales by 2030 GBP 240m yearly opportunity in recycling/reusing textiles destined for landfill in the UK Number of non-cash transactions to double by 2025

Middle class population expansion (in millions)



Spending ladder



Source: Goldman Sachs, IMF, Ellen MacArthur Foundation, World Payments Report

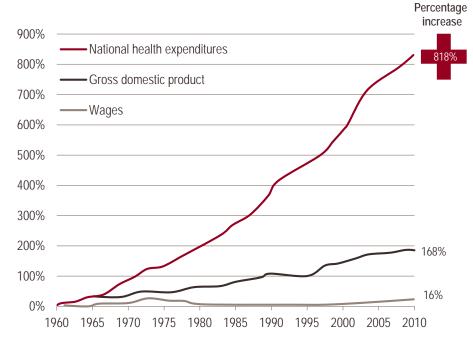


Transforming sustainable challenges in opportunities (5)



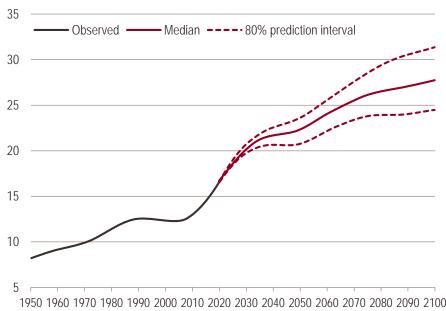
US healthcare spending is projected to grow at an annual rate of 5.5%, reaching \$6tn by 2027 Al Healthcare applications can generate savings of \$150bn annually by 2026 Robo-assisted surgery is estimated to grow to a \$40bn industry by 2026 Health and wellness food markets are forecasted to growth to \$812bn by 2021

US healthcare spending has grown faster than GDP in recent decades



McKinsey "Accounting for the Cost of U.S. Health Care" (2011), Center for American Progress. ¹ 2019 United Nations, DESA, Population Division. Licensed under Creative Commons license CC By 3.0 IGO. United Nations, DESA, Population Division. *World Population Prospects 2019*. http://population.un.org/wpp/

A quarter of the US population will be over 65 in the next 50 years



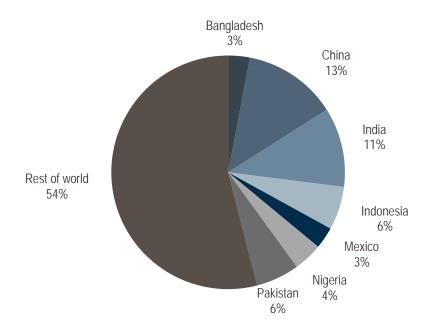


Transforming sustainable challenges in opportunities (6)



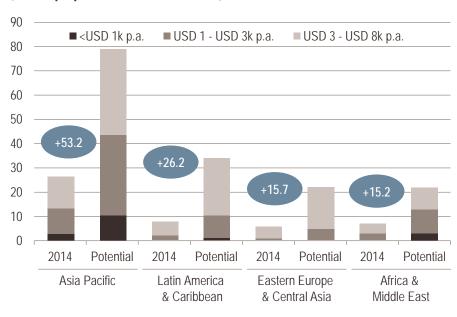
Financial inclusion is a US\$ 380bn global opportunity for banks Number of non-cash transactions to double by 2025 Middle-class spending to increase to \$56tn by 2030, and \$84tn in 2050

Globally, 1.7 billion adults lack a bank account



Source: The Global Findex Database, 2017. Measuring financial inclusion.

Financial services consumption set to increase (adult population USD billion)



Source: Accenture based on World Bank Global Consumption, Global Findex, IFC Enterprise Finance. Gap databases. Source: The World Bank data catalogue, 2017.



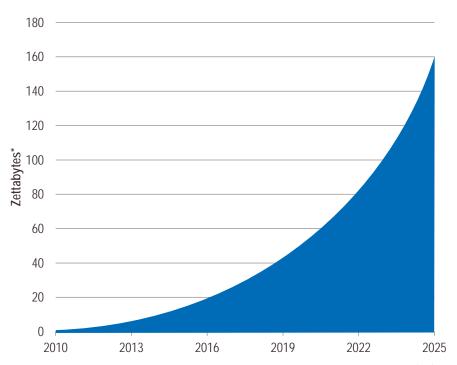
Transforming sustainable challenges in opportunities (7)



Big data revenues could reach \$103bn in 2027

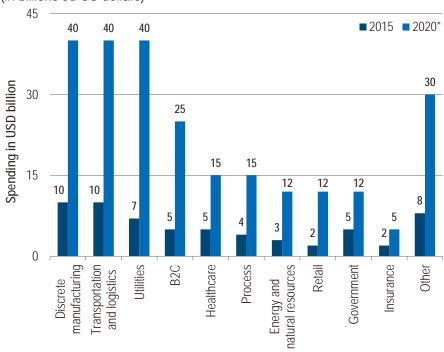
Between 2019-2024, the global semi-conductor market is forecasted to grow at a CAGR of 17.9% 64 billion Internet of Things devices by 2025, up from 10 billion in 2018 Global Cyber Security is projected to reach \$345 billion by 2026

Rise in global data



Internet of things

Spending on internet of things worldwide by vertical in 2015 and 2020 (in billions od US dollars)

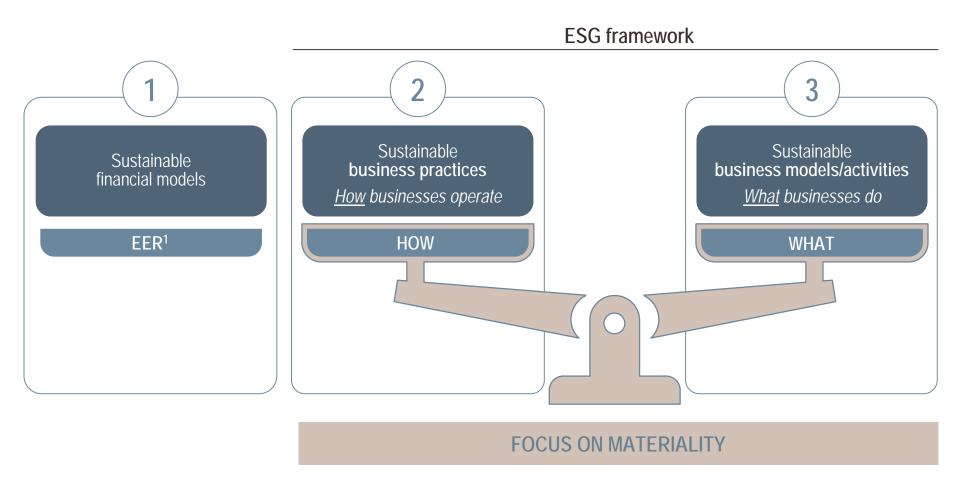


Source: IDC's Data Age 2025 study, sponsored by Seagate, April 2017. *A zettabyte (ZB) is a unit of digital information storage used to denote the size of data. It is equivalent to 1,024 exabytes or 1,000,000,000,000,000,000,000,000 bytes.





Integrating sustainability into investment



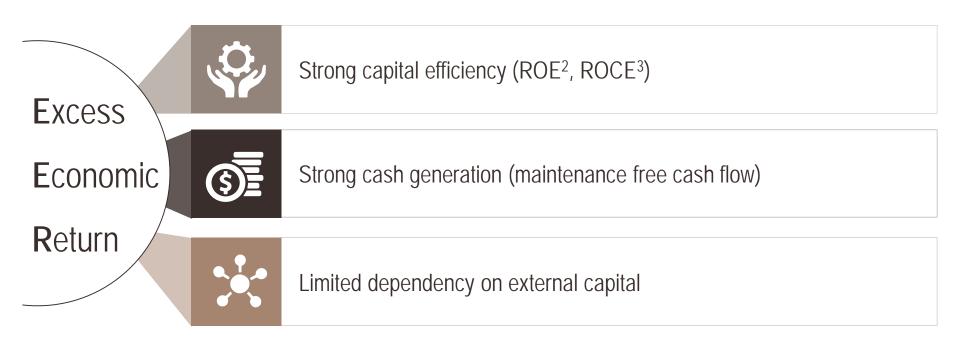
Source: LOIM. For illustrative purposes only. 1 EER = Excess Economic Returns



Pillar I - Sustainable financial models

We measure value creation through our EER¹ approach

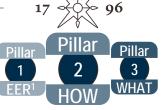


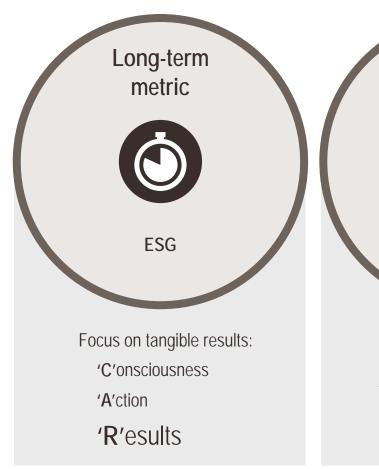


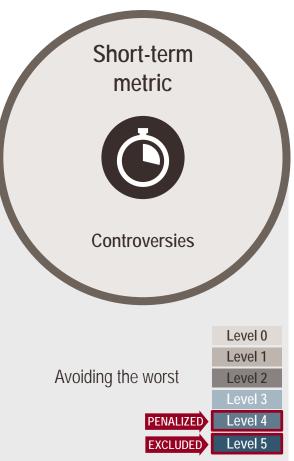
¹ EER = Excess Economic Returns ² ROE = Return on Equity. ³ROCE = Return on Capital Employed.

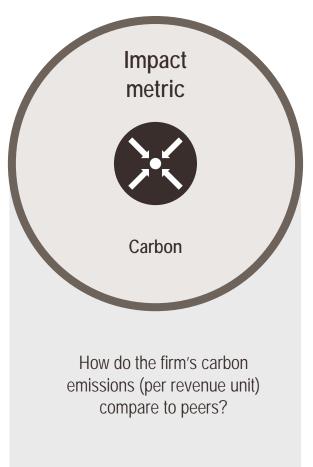
Pillar II - Sustainable business practices

How businesses operate









For illustrative purposes only.



Pillar III - Sustainable business models

What businesses do



Structural trends



Our aim

To select business models with a strong and long-lasting position.



Means

Fundamental, forward-looking research of pre-screened companies to ensure:

- Repeatability and sustainability of Excess economic return
- Ability to adapt to market/country/sector cycles and dynamics
- Positioning relative to structural trends (see left)



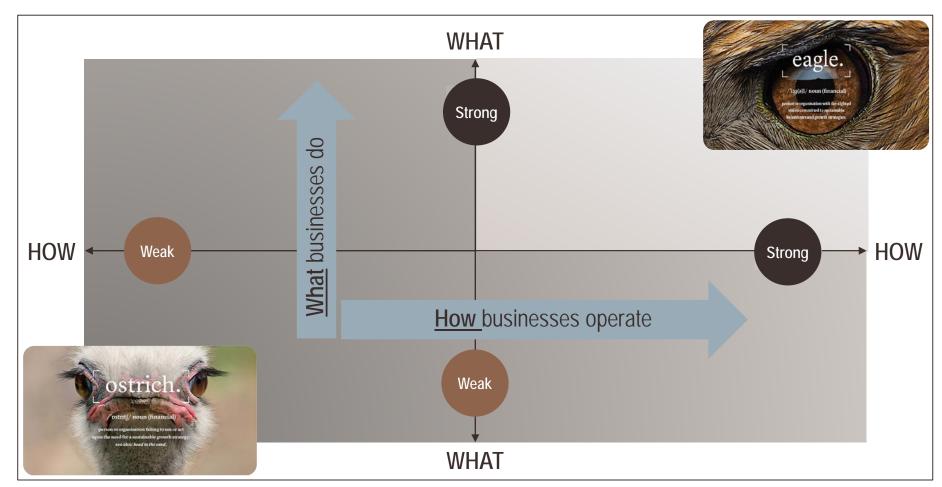
We ask

- Is the sector at risk of major disruption?
- How high is the exposure to regulation?
- Is the company well-positioned to be a long-term solution-provider?
- How capable is the company of transitioning?





Our approach to a robust ESG framework



Source: LOIM. For illustrative purposes only.



Growth opportunities across all sectors

Positive



_	(¥)						
	Sustainable Food	Sustainable Urban Systems	Sustainable Supply Chains	Sustainable Lifestyle	Sustainable Health	Sustainable Finance	Digitalisation
Communication Services							
Consumer Discretionary							
Consumer Staples							
Energy							
Financials							
Health Care							
Industrials							
Information Technology							
Materials							
Utilities							

Source: LOIM, Bloomberg (July 2019). For information purposes only. Investments and/or allocations may change. The opinions and opinions expressed herein are for information purposes only and do not constitute a recommendation by LOIM to buy, sell or hold a security.



Construction of our Eagles portfolio





Urban Systems



Supply Chains









From the equity universe to the 'Solution' universe 1

(2'500 stocks) (1,300 stocks)

Disciplined analysis focused on <u>financials</u> (Excess Economic Returns) and <u>business practices</u> (ESG)

'Sustainable' universe

(450 stocks)

Selection based on fundamental, forward looking analysis

Stewardship

High Conviction portfolio

(c. 50 stocks)

focused on EAGLES

Solution-driven incumbents

Companies partially exposed to solutions which are transitioning their business model or facilitating efficient implementation of solutions

Solution pure-players

Companies enabling implementation of focused solutions or with an innovative solution potentially disrupting existing activities/products.

¹ Minimum USD 3 billion market cap, minimum USD 5mn average daily liquidity. Source: LOIM For illustrative purposes only. Allocations are subject to change. It illustrates the investment process undertaken by the manager in respect of a certain type of investment, but may not be representative of the Fund's past or future portfolio of investments.



eagle.

/'iɪg(ə)l/ noun (financial)

person or organisation with far-sighted vision committed to sustainable behaviours and growth strategies.

rethink everything.

17 % 96

LOMBARD ODIER

ostrich.

/'pstritf/ noun (financial)

person or organisation failing to see or act upon the need for a sustainable growth strategy; see also: head in the sand.

rethink everything.

17 96

LOMBARD ODIER

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SINGAPORE

Lombard Odier (Singapore) Ltd.

9 Raffles Place · Republic Plaza #46-02 · Singapore 048619 · singapore@lombardodier.com
A merchant bank regulated and supervised by the Monetary Authority of Singapore.

TOKYO

Lombard Odier Trust (Japan) Limited

Izumi Garden Tower 41F·1-6-1 Roppongi, Minato-ku Tokyo 106-6041 · Japan · tokyo@lombardodier.com Regulated and supervised by the Financial Services Agency (FSA) in Japan. It holds a trust business license (FSA No.208) and is registered with Kanto Local Finance Bureau for Financial Instruments Business Operator(No.470).

Ref. 06.2018

Private bank and securities dealer authorised and regulated by the Swiss Financial Market Supervisory Authority (FINMA).

² Branch of Lombard Odier (Europe) S.A., a credit institution based in Luxembourg, authorised and regulated by the Commission de Surveillance du Secteur Financier (CSSF) in Luxembourg.

