

Written by the Economist Intelligence Unit.

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INTELLIGENCE UNIT

The concept of sustainability can be interpreted in a number of ways, with the most common being that of the 1987 Brundtland report: sustainable development, or sustainability, is defined as an economic activity that meets the needs of the present generation without compromising the ability of future generations to meet their own needs.

How sustainability is understood by businesses and investors has changed dramatically since it was first considered within corporate social responsibility (CSR) in the 1960s. It has grown from being an annual report to shareholders of the actions taken in relation to a company's broader social and ethical obligations to become an integral part of many companies' business strategies. However, following the global adoption of the UN's sustainable development goals (SDGs) and the Paris Agreement, the concept of sustainability is now more often associated with the integration of environmental, social and governance (ESG) factors. These ESG factors cover a wide spectrum of issues that traditionally may not be part of a company's strategy or included within its financial analysis and reporting. This might

include quantitative measures of how corporations respond to climate change, as well as the more qualitative social and governance factors such as workforce training, shareholder protection and board diversity, and how companies manage their supply chains.

There is no global agreement on corporate social or sustainability reporting requirements. Yet over 93%¹ of the world's largest 250 corporations do follow voluntary reporting standards such as those set out in the Global Reporting Initiative and report on their sustainability performance. At the regional level, the European Union (EU) does have unified sustainability reporting, enforced through Directive 2014/95/EU. However, much of the push behind the incorporation of sustainability into business operations is coming from the globalisation of supply chains, and mounting pressures from investors, asset owners, nongovernment organisations and the general public for companies to report on ESG risks. As a result, there are significant differences in how the US, the EU and Asia are developing frameworks, programmes and legislation to achieve the global shift to sustainability.

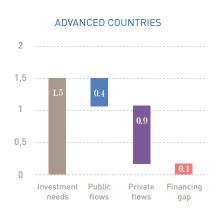
### THE FUNDING GAP

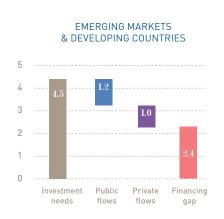
One area that has come to globally symbolise sustainability is the SDGs, developed by the UN and agreed by world leaders in 2015. They include environmental issues such as water, energy and climate change, along with social issues, such as education and health services.

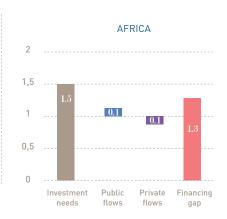
They also cover the private sector, with goals for employment and industry.

Achieving these goals by 2030 will be costly. Estimates range from \$6trn per year upwards<sup>2</sup> - equal to the entire annual economic output of Italy, India and Canada combined.

#### THE COSTS ARE HIGHEST FOR THE POOREST3







Source: UNEP Finance Initiative, Rethinking Impact to Finance the SDGs  $\,$ 

## EUROPE - MONEY TALKS

In January this year, the European Commission (EC) laid out plans to cement sustainability into the European financial system. It suggested introducing a classification system of what is "sustainable" and measures to impose conditions on corporate reporting requirements and the duties asset managers had to investors. The use of an ESG lens in particular means that, from a financial perspective, it is easier for companies and investors to integrate sustainability into their investment decisions, because it is quantifiable.

Many of the EC's suggestions are already being put in place. An accounting rules change will allow governments to keep certain energy transition projects off their national balance sheets. In doing so, the EC hopes to unlock plans that have been frozen for fear of increasing national deficits.

The mandates of Europe's banking, markets and pension regulators are also being expanded to include sustainability alongside financial stability.

Central bankers are already on board. The governor of the Bank of England, Mark Carney, has said many times<sup>5</sup> that climate change could be a source of financial risk and instability if left unchecked.

Likewise, De Nederlandsche Bank (the Dutch central bank) is looking at ways to factor environmental risk into lending, borrowing and insurance as sea levels rise.<sup>6</sup>

And France, through Article 173,<sup>7</sup> is already pressing ahead with measures to push companies and those who invest in them to assess and disclose the impact of their activities on the environment.

Further EU legislation should be agreed by 2019<sup>8</sup> to compel the financial industry to deliver the €180bn needed each year<sup>9</sup> to hit Europe's climate change targets.

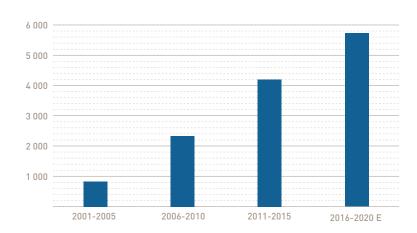
## CHINA - SUSTAINABILITY AN ECONOMIC VALUE-ADD

Rapid economic growth has left China facing some of the most severe environmental issues on the planet. They range from Beijing's life-threatening smog to untreated sewage in the 80% of cities without formal treatment facilities. This rapid growth has also left it with significant social disruption as populations moved from rural to urban areas and new mega cities (those with populations over 10mn) have sprung up.

Whilst recognising the investment cost required, China views sustainability as an opportunity for its companies to develop innovative technologies that will allow the country to move up the value-added export chain. What is clear is that it wants a return on its environmental investments.

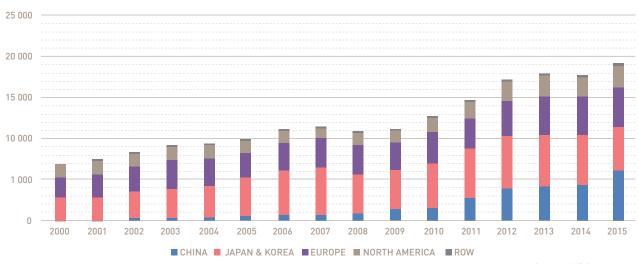
By focusing on research and development, China hopes to lead the world in environmental technology. The strategy is already paying dividends;<sup>11</sup> China now accounts for a greater share of environmental patent applications than Europe or North America.

#### THE RAPID RISE IN CHINA'S ENVIRONMENTAL SPENDING (RMB BN)



ource: CEIC, Environmental Financing Strategy, Credit Suisse. Pictet Asset Management

# A PATENTLY GOOD IDEA: GLOBAL ENVIRONMENTAL TECHNOLOGY PATENTS



Source: WIPO statistics database. Last updated: May 2018



Both industry and China's current-account balance are benefiting. From batteries to car manufacturing and solar power, China has already overtaken the US as the world's leading environmental technology exporter.<sup>12</sup> However, as noted by the Conference Board,<sup>13</sup> China still has to contend

with the social and economic pressures that have built up as China has developed. Failing to address these sustainability issues could have serious future cost, reputation and growth consequences for businesses in China.

### US: THE STATES AND MARKET REBEL

President Donald Trump has made it very clear he is no fan of climate change initiatives. During his election campaign, he promised to bring US coalmines back to life. In office, he has promised to pull the US out of the Paris Agreement.<sup>14</sup> In January 2018 he slapped 30% tariffs on imported solar panels.<sup>15</sup> This has led US renewable energy companies to cancel or freeze investments of more than \$2.5bn in large installation projects. This is more than double the about \$1bn in new spending plans announced by firms building or expanding US solar panel factories to take advantage of the tax on imports.<sup>16</sup>

But not everyone agrees with him. In June 2018 the US Senate rejected<sup>17</sup> his plans for deep cuts to renewable energy research budgets<sup>18</sup> and individual states are developing their own projects (see box) without the need for federal regulation.

"It is not possible for coal to compete. It would take tens of billions of dollars every year to make coal cheap and clean enough to ward off renewables and low-cost gas."

"Attempts by the Federal government to go against the trends are doomed to fail."

#### says David Schlissel

director of resource planning analysis at the Institute for Energy Economics and Financial Analysis.

#### US ENERGY - FED, STATE OR MARKET?

The president's rhetoric cannot beat basic economics

In the last eight years, the US wind and solar energy capacity has increased fivefold. The cost of new wind power installations had dipped by a third.

The price of wind power generated fell to \$20 per megawatt hour (MWh) in 2016 and as low as \$11/MWh in Nebraska. Similar patterns can be seen in the solar power market, even as Federal

Individual states are piling yet more pressure on coal. California has set ambitious clean energy targets. Other states are pushing out polluters, promoting electric vehicles and pollution caps. Even where states are lagging, market forces are doing the heavy lifting. Consumers are demanding change and business is being forced to respond. Apple, Facebook, Google, Mars, Nestlé and Walmart have committed to 100% renewable energy use. Faced with the high cost of unproven carbon capture and sequestration technology, utilities are busy shutting coal plants or converting to cheaper, abundant gas.



# THE FINANCIAL CARROT AND STICK

Stakeholders recognise that the 'carrot' of incentives, such as subsidies or tax relief, is expensive for governments to maintain. They also know that the 'stick' of fines or regulatory action can be a blunt instrument to get financing to where it is needed most. However, due to increasing reports<sup>19</sup> on the social and governance impact of sustainability issues as represented by an ESG approach, there has been a significant shift by businesses on creating a strategy to design solutions. One key strategy is making financing more attractive at a low cost or with added benefits.

The green bond market is a small but growing part of the sustainability solution. More than \$150bn of such bonds were issued in 2017, with \$77bn issued in the first half of 2018. That would have to rise to \$1trn each year by 2020 just to meet global climate and emissions targets, according to the Climate Bond Initiative, 20 which tracks bonds data.

The biggest growth market for these bonds is currently in Asia. China and the Association of Southeast Asian Nations are laying the groundwork for standardised bond contracts, measurement and oversight so investors know what they are getting and regulators know where the risks are. Increasingly, the risks that asset owners are considering include the societal impact of these infrastructure projects, and this is reflected by the growing interest in social impact investing.<sup>21</sup>

India is also experimenting with energy efficiency as a lever. More efficient power stations may be more expensive to build, but should be cheaper to run, making it easier to cover coupon payments to financiers.

# ACT LOCAL TO ACHIEVE NATIONAL IMPACT

The US is something of a paradox when it comes to green bonds. It ranks alongside China as a big issuer, but growth and regulation are stalled. Corporate issuers see little reason to go to the trouble of certifying their bonds as green when national policy is adrift.

So it has fallen to individual states, counties and towns to take action. Californian and New York utilities, along with New York's public transport body, count amongst recent issuers.

In August 2018 California's state treasurer signed a pledge to make new projects climate-resistant and reduce greenhouse gas emissions where possible.<sup>22</sup> Fit-for-purpose criteria and tighter local building codes will help, but it may take many years before the impact is felt.



### OPPORTUNITY COST

But Sean Kidney, chief executive of the Green Bond Initiative, believes much more needs to be done. Companies across all sectors and those who fund them must show the impact of their action or inaction on balance sheets and in capital expenditure.

"Financing and developing banks do not have enough money; the commercial banking sector needs to take the lead. Once there is a repo market, it is easier for others to take project risk,"

Sean Kidney

chief executive of the Green Bond Initiative

Careen Abb, leader of the UN Environment Programme (UNEP) Finance Initiative, agrees. But too often, green or sustainable projects are simply seen as a cost that cash-strapped governments and local agencies find hard to swallow. Silo mentalities do not help when separate government departments, bankers and project contractors have different objectives.

By making 'impact investing' central in the taxonomy, from concept through funding and implementation, a UNEP consultation paper suggests how impact-investing frameworks might work<sup>23</sup> to mobilise private players, and reduce risk and cost.

"Our approach tackles the funding gap, particularly in public planning in the 'doing' part of government, not the policy part."

Careen Abb

leader of the UN Environment Programme (UNEP) Finance Initiative, agrees

# COLLABORATIVE THINKING

Ms Abb uses a hypothetical investment by a town in LED street lights to show how silos block creative solutions. The project has a big upfront cost, but with lower operational costs likely in the future.

Town lighting and energy are often down to one department, security another and traffic management yet another domain. But what if those lamp posts were more than just poles with lights on, so that costs and risks could be shared?

They could host everything from publicity hoardings to security cameras, Wi-Fi relays or even electric vehicle re-charging stations. Each of those has a direct impact on other local council activities, such as crime and traffic management.

Moreover, they could provide income streams (for recharging from solar panels) that lower the overall risk for external financiers.

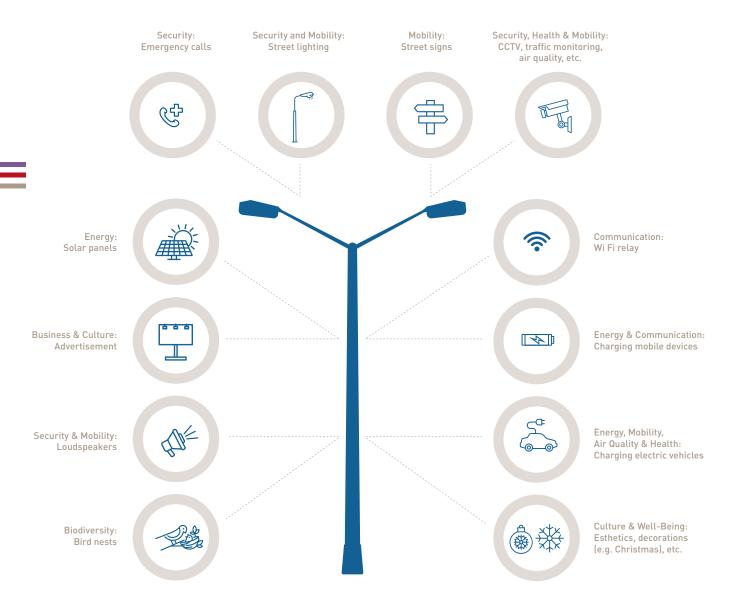
"We need an experimental space for corporates, banks and public agencies. Regulation is not the place to start, this is a business model issue," says Ms Abb.

Those lamp posts could also collect data on movement, air quality and other conditions. If those data have sufficient value, perhaps lamp post manufacturers (and their bankers) might follow the Google model: they could offer their lamp posts for free in exchange for the data they provide.



#### LAMP POSTS COULD MAKE MONEY

Innovation could create new income streams



## **GETTING TRACTION**

When implementing regulatory measures, companies have started to realise the benefits of a sustainable approach: their operations, enriched risk management, strengthened stakeholder relationships, costs savings, value creation and improved market positioning.

What is becoming clear is that by improving existing voluntary standards and practices, business, society and government can get closer to achieving a more sustainable future. Regulation does have a role to play, but it can be used to encourage and not just punish.



While every effort has been undertaken to verify the accuracy of this information, The Economist Intelligence Unit Ltd. Cannot accept any responsibility or liability for reliance by any person on this report or any of the information, opinions or conclusions set out in this report.

- <sup>1</sup> KPMG Survey of Corporate Responsibility Reporting 2017
- <sup>2</sup> Global Policy Watch, 28 May 2017
- <sup>3</sup> UNEP Finance Initiative, Rethinking Impact to Finance the SDGs, 2018 https://www.globalpolicywatch.org/blog/2017/05/29/funding-needs-for-uns-2030-development-agenda/
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<sup>12</sup> The Guardian

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<sup>20</sup> Climate Bonds Initiative, June 2018

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<sup>21</sup> Global Impact Investing Network

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<sup>22</sup> California State Treasurer, 7 August 2018

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<sup>23</sup> UNEP Finance Initiative

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