

CDP Ireland climate change report 2017

Irish Companies respond to increasing Customer and Investor focus on Climate Change

Written on behalf of 803 investors with US\$100 trillion in assets



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CEO foreword



The transition to a low-carbon economy will create winners and losers within and across sectors. As new businesses and technologies emerge and scale up, billions of dollars of value are waiting to be unlocked, even as many more are at risk.

A changing climate is becoming more evident. This year has brought intense Atlantic hurricanes, severe wild fires in California, an exceptional monsoon across South Asia, a stifling heatwave across Europe, and record-low wintertime sea ice in the Arctic. These changes threaten ecosystems, communities and our economic well-being, with significant assets at risk from climate change.

This evidence is not going unnoticed. Public concern is growing; and policy makers and regulators are responding. The Chinese government, for example, is set to launch a national carbon emissions trading scheme by the end of this year. Companies around the world, from all sectors, have begun transitioning their business models away from a dependence on fossil fuels and towards the low-carbon economy of the future.

In this year's CDP analysis, which is based on the climate data disclosed to us by over 1,000 of the world's largest, highest-emitting companies, we reveal that a growing number are setting longer-term emissions reduction targets, planning for low-carbon into their business models out to 2030 and beyond. The number of companies in our sample that have committed to set emissions reduction targets in line with or well below a 2 degrees Celsius pathway, via the Science Based Targets initiative, has increased from 94 to 151 in the space of a year. Continuing this momentum, an additional 317 companies plan to commit to a science-based target within two years. EDP and Unilever are two of those companies sharing their story of how and why they decided to set a science-based target in our analysis. Aligned to these targets, the significant increase in companies from our sample that are setting targets to consume renewable energy including through the RE100 initiative, or produce their own, shows how companies are embracing the cheaper, more secure supply of clean energy to meet their low-carbon goals.

Regulators have begun to respond to the risks, notably with the Task Force on Climate-related Financial Disclosures. Established by the Financial Stability Board, the Task Force has moved the climate disclosure agenda forward by emphasizing the link between climate risk and financial stability. The Task Force has recommended that both companies and investors disclose climate change information, including conducting scenario analysis in line with a 2 degrees Celsius pathway and setting out the impacts on their strategy of those scenarios. This amplifies the longstanding call from CDP's investor signatories for companies to disclose comprehensive, comparable environmental data in their mainstream reports, driving climate risk management further into the boardroom.

This year, more than 6,300 companies, accounting for around 55% of the total value of global listed equity markets, have disclosed information on

climate change, water and deforestation through our reporting platform. This request from CDP was made on behalf of more than 800 investors with assets of US\$100 trillion.

To meet the growing needs of these investors, we are evolving our disclosure platform to introduce sector-based reporting and align our information request with the recommendations of the Task Force for 2018. This will help to further illuminate to company boards and their shareholders the risks and opportunities presented by the low-carbon transition, so they can act swiftly to shift their business models accordingly.

The environmental disclosures that leading companies are making through CDP are providing data across capital markets to inform better decisions and drive action. Companies are reporting how science-based carbon emission reduction targets can drive business and sustainability improvements. They are showing how renewable energy purchases are helping companies to cut emissions and how setting an internal carbon price can drive efficiency and shift investment decisions. They are revealing how their products and services directly enable third parties to avoid greenhouse gas emissions. They are collaborating with cities, states, regions and other companies to drive positive impact in their own operations and through value chains.

This report tracks the progress of corporate action on climate change. Last year, in the wake of the Paris Agreement, we established a baseline for corporate climate action. This year, we measure progress to date. As we show, there are some encouraging trends emerging, with more companies setting further reaching carbon emissions reduction targets, and greater accountability for climate change issues within the boardroom. But, there is no doubt that more companies need to act quickly and the pace of change needs to accelerate if we are to meet the goals of the Paris Agreement and ensure long term financial and climate stability.

Disclosure of quality data is crucial to support this progress. It leads to smarter decisions and informs companies and governments of the actions they need to take. It's encouraging to see more companies setting longer-term targets; data will be key to seeing how they are performing against these over time.

Make no mistake: we are at a tipping point in the low-carbon transition. There are enormous opportunities to be had for the companies that are positioning themselves at the leading edge of this tipping point; and enormous risks for those that haven't yet taken action.

Paul Simpson
CEO, CDP

Emma Jane Joyce

Chairperson of CDP Ireland Network



Irish companies will need to be ready to respond to these changing requirements and the CDP Ireland Network will continue to assist companies to prepare for these changes.

2017 has been another mixed year in terms of global and local performance on climate change but the trend is clear – and corporates and investors alike are seeking to better position their businesses and portfolios for our low carbon future.

As Paul Simpson, CEO of CDP, points out in this report, the low-carbon transition is happening - we are at a tipping point and companies around the world realise that climate action represents a huge opportunity not to be missed.

The 2017 proxy voting season saw unprecedented support for a number of climate related shareholder resolutions at several of the big US energy companies. These proposals typically asked the companies to disclose a detailed assessment of climate related risks and policies. These Investor-led initiatives demonstrate both the ability to positively influence an investee company as a shareholder through active ownership and engagement, and also the requirement that investors have for full disclosure of the risks within their portfolio. Investors need climate data.

In June, President Donald Trump declared that the U.S. was pulling out of the Paris climate accord. Conversely the Paris Agreement now two years old, and formally ratified by over 100 countries, is in fact picking up pace, as investors and corporates respond to the clear direction of travel.

Four weeks after President Trump's announcement, the Task Force for Climate-related Financial Disclosure (TCFD) released its final recommendations report. Launched by Mark Carney, Governor of the Bank of England and Chairman of the G20's Financial Stability Board (FSB) and led by Michael Bloomberg, the TCFD was asked to develop voluntary, consistent climate-related financial disclosures that would be useful to investors, lenders, and insurance underwriters in understanding material risks. The task force recommendations are applicable to organisations across different sectors and jurisdictions, and concluded that the market needs climate-related information in four key areas: (1) governance, (2) strategy, (3) risk management, and (4) metrics and targets. The voluntary guidelines encourage consistent, comparable and clear financial risk disclosures covering all industry sectors, including financial services, and calls for both corporates and investors to report.

Over the past few years the numbers reporting to CDP globally have remained relatively flat. However, in Ireland we have seen two years of increased numbers responding. Analysis shows corporates raising the bar on climate action, and taking the top spot on CDP's environmental A List. There are two

Irish companies, Kingspan and AIB, who have made the list of only 114 companies globally.

I am also happy to report that in 2017 there have been three new first time responders, An Post, Glanbia and Origin Enterprises, putting the number of Irish companies reporting to the Climate Change program this year at 30, while the total number of local and multinational companies reporting emissions in Ireland now stands at 220 companies.

The number of Irish entities responding to the CDP Supply Chain Program is 32 for 2017 as the issue of climate risk in their supply chains remains increasingly important to large companies, in turn making it an important issue for Irish companies.

Measurement and transparency are where meaningful climate action starts and that said, CDP is committed to continuous improvement of its reporting systems. 2018 will see a new online reporting system launched, sectoral specific questionnaires across energy, transport, materials and agriculture and incorporation of the TCFD recommendations.

Irish companies will need to be ready to respond to these changing requirements and the CDP Ireland Network will continue to assist companies to prepare for these changes.

I am delighted to have served as Chairperson of the CDP Ireland Network over the past year. I would like to acknowledge and express my appreciation to the EPA and SEAI for their continued support of the CDP program in Ireland. I would also like to recognise the work done by Clearstream Solutions who act as secretariat to the CDP project in Ireland and also the strong cooperation with Sustainable Nation and other organisations to keep Environmental, Social and Governance (ESG) issues front and centre.

Finally, I would like to thank my fellow CDP Ireland Network steering committee members for their time and effort over the year.

Emma Jane Joyce
Chairperson of CDP Ireland Network



Best Practice Actions

- ✓ **Climate Change Score: A**
- ✓ **RE100 Member**
- ✓ **Net Zero Energy Initiative**

Tips for success

- ▼ Define Goal: Net Zero Energy by 2020 with an interim target of 50% by 2016.
- ▼ Define Scope: Net Zero Energy (NZE), as defined for our purposes, is that our sites, over a year, are energy neutral on an aggregated basis across the Kingspan estate.
- ▼ Team & Process: Our global NZE team is responsible for delivering our ambitious 2020 goal, working together across Kingspan sites in 60 countries to develop processes to capture monthly data at every site and implement new initiatives.
- ▼ Develop Strategy: From the data we were able to identify areas for improvements which led to the development of our three-step strategy 'Save More – Generate More – Buy More'.
- ▼ Flexibility: The five-year journey has been a great learning experience for us. Continuous business growth and acquisitions mean that our strategy must be flexible. The renewable energy landscape is evolving rapidly and we look forward to the development of innovative options that will help us to achieve our goal.

Without more action from the corporate sector, greenhouse gas emissions will continue to rise and the impact of global warming will become a bigger threat for future generations.

Stories of Change: Kingspan

At Kingspan, our vision is to be a global leader in sustainable business, and establish a leading position in providing sustainable, renewable and affordable solutions for the construction sector. For well over a decade we have been aware of the implications of climate change and the importance of reducing emissions. We recognized the substantial business opportunity it presented but also the significant challenges posed by the regulatory requirement for all new buildings to be nearly net zero energy by 2020. When this goal was outlined by the EU in 2010 it was clear signal that we needed to take action to fully understand the energy footprint across our estate and address the carbon emissions from our facilities.

In 2011 we made an ambitious commitment to make Kingspan a net zero energy company by 2020 with a challenging interim target of achieving 50% renewable energy by 2016. The five-year journey to date has been a great learning experience for us. Since setting our targets we have increased our renewable energy usage more than eight-fold, reduced our overall lighting and heat costs by over 30%, increased on-site generation to supply 7.6% of our total energy usage, and achieved almost a four-fold decrease in our carbon intensity.

We are delighted we have exceeded our 2016 target, entering 2017 with a 57% renewable energy level. Our progress in moving towards our 2020 goal has helped to protect us from the anticipated rise in energy costs over the next decade and support the achievement of the Sustainable Development Goals. It has enabled us to demonstrate the business case for investment in energy efficiency and renewable electricity generation to stakeholders across the building sector. It also helps to demonstrate the value proposition for our own products & solutions and highlights the benefits of upgrading existing facilities. Without more action from the corporate sector, greenhouse gas emissions will continue to rise and the impact of global warming will become a bigger threat for future generations.

Gene Murtagh
CEO Kingspan



Commentary from SEAI

Jim Gannon



Now we have a slew of major multinational organisations vocally addressing climate change and, critically, changing their own practices as well as those of their supply chain. They also have a direct and meaningful impact on the behaviour of their customers.

In line with precedent over recent years, 2017 witnessed many exceptional weather events including the truly devastating effects of Hurricanes Harvey and Irma in the Americas. Ireland too felt the impact of the exceptional Hurricane Ophelia.

It's now November and policy makers and stakeholders are assembling in Bonn for the COP23, aiming for further, faster ambition together. At home, the Citizens Assembly voted overwhelmingly in favour of 13 significant recommendations for climate action. This has given clear expression to their desire to put climate change at the centre of policy making in Ireland as a matter of urgency.

For businesses across the globe, sustainability is a major strategic driver. It is no longer a nice to have but a must have. Sure, motives may vary. Some can differentiate their product or service in the marketplace attracting customers willing to pay a premium for a more sustainable product. Others may be trying to attract ethical investors who can often remain more loyal to an organisation, bringing interest and value that is more personal to their investment. Finally, there are those who just see a smart business decision in front of them, where an investment in more sustainable practices goes directly to the bottom line, providing a better ROI than other initiatives.

Year on year, we see the business and finance world redoubling their efforts to address our climate challenges. Increasingly, this is happening not as a result of regulatory and policy frameworks, but entirely independent of them. This level of leadership is now reaching a tipping point. Previously this was the preserve of a number of niche 'green' companies. Now we have a slew of major multinational organisations vocally addressing climate change and, critically, changing their own practices as well as those of their supply chain. They also have a direct and meaningful impact on the behaviour of their customers. After all, if a company can convince you that their new mobile phone is worth over €1,000, then it is highly likely that they can convince you that you can address climate change each and every day through your choices and actions.

In an era of rapid political and economic change, victory will go to those who are agile, adapt to disruptive threats and capture new opportunities. Our innovative spirit in Ireland is our strength, and increasingly it is identifying the opportunities that both strengthen business and decarbonise our economy. But we are losing ground, and must redouble our efforts so that we are in the leading cohort of nations addressing climate change, as opposed to being in the following pack. We commend the work of the participating organisations, and reaffirm our mission to continue collaborating with you to reach your business and carbon goals.

After all, it is nothing more than our citizens, customers and society as a whole expect from us.

Jim Gannon
Chief Executive
Sustainable Energy Authority of Ireland

Commentary from EPA

Laura Burke



Climate change is now with us, and the sooner we act, the less damage will be done to our society, economy and environment. It is the defining environmental issue of our times.

To protect our environment, safeguard our wellbeing, secure our economy, and achieve our international commitments, we need to adopt a much greater sense of urgency about reducing our dependence on fossil fuels for energy, heating and transport, radically improving energy efficiency and preparing for the inevitable consequences of climate change. In addition, the most significant air pollutants in Ireland arise from traffic emissions and the burning of smoky fuels for home heating. So, a move away from fossil fuels brings clear benefits from both climate and public health perspectives.

Ireland has a national policy position that commits us to reducing our carbon emissions by at least 80 per cent compared to 1990 levels by 2050 across the electricity generation, built environment and transport sectors while achieving carbon neutrality in the agriculture and land use sectors. Environmental Protection Agency figures show that Ireland's greenhouse gas emissions have increased as Ireland has come out of economic recession, with the link between economic growth and increased emissions yet to be broken. Our figures indicate that Ireland is unlikely to meet its 2020 EU greenhouse gas emission reduction targets and cast doubts over efforts to transition to a low carbon economy in the long term. In addition, Greenhouse Gas emissions from the 100 major industrial and institutional sites in Ireland that participate in the Emissions Trading Scheme have been increasing each year since 2013. In 2016 these reached the highest level in eight years - a disappointing indicator that the price of carbon

remains too low for the trading system to have the desired impact on emissions in Ireland. It is clear that Ireland's economic systems need to undergo a major transformation in the coming decades as part of actions to address and limit climate change.

Companies, institutions and citizens all need to take a responsibility in the transitions required. State Bodies involved in environmental protection have a key role to play in supporting the adoption of low-carbon sustainable practices through fiscal measures, regulatory interventions and education. However, to make substantial progress on the sustainability challenges ahead we need widespread, and willing, engagement and participation at business, individual and community levels.

The CDP provides a transparent, robust process for gathering data and reporting on the performance of members' companies, and also for building an increased awareness along supply chains and across sectors of the importance of sustainable business practices. The EPA is pleased to continue its support for the work of the CDP Ireland Network and I look forward to its continued success.

Laura Burke
Director General,
Environmental Protection Agency

To make substantial progress on the sustainability challenges ahead we need widespread, and willing, engagement and participation at business, individual and community levels.

Best Practice Actions

- ✓ **Reporting transparency rated as level A in all CDP disclosures**
- ✓ **Included in FTSE4Good, Euronext Vigeo 120, STOXX® Global ESG Leaders and Ethibel investor registers**
- ✓ **First in the paper-based packaging industry to have 90% of products sold as Chain of Custody Certified globally in 2016**
- ✓ **Invested over €60m in water treatment**
- ✓ **Reached essentially fossil CO2 neutrality at our largest paper mill (Piteå Sweden) in 2014**

Tips for success

- ▾ **Be open & transparent:** Smurfit Kappa's full annual Sustainable Development Report has been assured by KPMG since 2010.
- ▾ **Focus on material issues:** We have identified five strategic sustainability areas – forest, climate change, water, waste and people.
- ▾ **Set challenging but realistic and measurable targets:** We report yearly and transparently on progress.
- ▾ **Align your strategy with the UN 2030 Sustainable Development Goals:** The SDGs provide strategic direction for business globally, opening up plenty of opportunities for almost any business.
- ▾ **Prepare for a circular society:** Shifting from linear to circular flows will be key to tackling sustainability challenges. Circularity has been core to Smurfit Kappa's business since our foundation over 80 years ago, and by focusing on our targets we will reach a fully circular business model.

Smurfit Kappa's vision is to embed sustainability in every fibre of our products and our company.

Stories of Change: Smurfit Kappa

Smurfit Kappa's vision is to embed sustainability in every fibre of our products and our company. As one of the leading providers of paper-based packaging solutions in the world, we believe being more sustainable creates value for our customers and shareholders as well as making us more efficient and innovative.

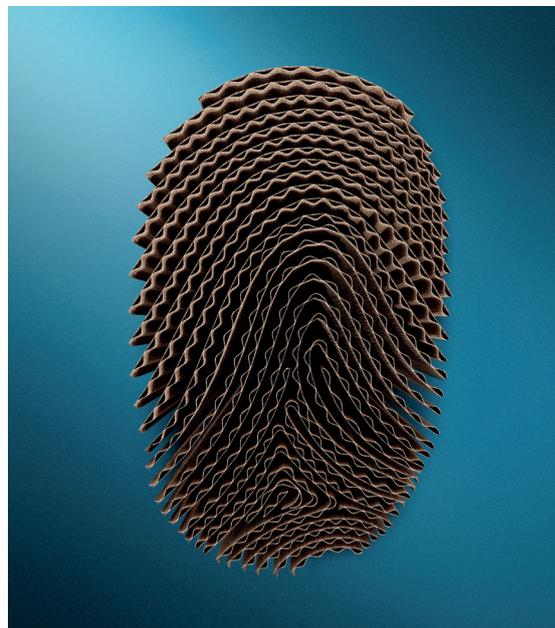
With our broad reach across 34 countries, 370 production sites and 45,000 employees in Europe and the Americas, we have an impact throughout the packaged goods value chain. We aim to drive positive change: from sustainable sourcing of our key raw materials to minimising our operational impact, mitigating risk and lowering the environmental footprint of our customers and consumers.

Business-as-usual is not an option for us. We contribute to transformation in our sector through new ways of thinking and innovative business models for paper-based packaging. For us, the circular economy is a natural way to go—and already 75% of our raw material fibre is recovered. But we can, and will, go further.

The natural world is our primary resource so looking after it makes good business sense. That's why we have FSC certification or Chain of Custody certification for almost every box we supply. Earlier this year we were proud to achieve full chain of custody certification for our entire raw material supply chain.

We care for our water resources – and just recently announced that we have reached our target of reducing the chemical oxygen demand in our waste water three years early. We actively look to minimise harm to our environment and are working to further reduce waste.

We help our customers with their sustainability plans. We can track the carbon footprint of every box and redesign them to avoid product waste, minimise packaging and increase recycling so that our customers can reduce their own emissions. We have a range of Smart solutions – SupplySmart, eSmart and ShelfSmart – for businesses. This is exactly the kind of sustainable value creation that drives our vision.



Top 10 Irish Companies by score

Kingspan Group Plc*

Allied Irish Bank Plc*

Accenture

Ingersoll-Rand Co Ltd

Shire

Seagate Technology LLC

Experian Group

Kerry Group Plc

C&C Group Plc

XL Group

* Listed on the CDP 2017 A list

The analysis presented in this report is a brief summary of a subset of the data available through CDP. We encourage all readers of this report to view the full corporate responses individually from our website. Enhanced and unlimited access to the data is available through the CDP analytics tool which makes benchmarking and trend analysis simple via a series of interactive dashboards and export functions. Different versions of the tool are available for investors and companies. Visit www.cdp.net to find out more.

The 30 Irish companies reporting to CDP climate change 2017 represents an increase of 20% on 2016. There are a total of 220 companies and organisations reporting to CDP in 2017 that are either headquartered or operating in Ireland, this represents a 8% increase on 2016. This positive trend is reinforced by companies disclosing more information about their operations and increasing their emissions reduction activities. Performance scores in 2017 were reflective of CDP's increase in the scoring threshold. Ireland maintained two Climate A List companies , Kingspan Group Plc and Allied Irish Bank Plc. Accenture, Ingersoll-Rand Co Ltd, Shire and Seagate Technology LLC achieved and A-. The last 7 years of CDP

reporting in Ireland has shown a trend of Irish companies improving the performance of their disclosure scores and this is supported in the 2017 results. 99% of the scored companies achieved a Disclosure score or above. 35% of the companies achieving a Awareness score or higher and 19% achieving a Management level or above. Ireland is continuing to build its reputation as a country with strong CDP performing companies across the reporting programmes. Smurfit Kappa was the only Irish reporting company to participate in the CDP Climate Change, Water and Forest programmes.



Over 16 Million tonnes of scope 1 + Scope 2 emissions reported in Ireland



The top 10 Scope 1 + Scope 2 emitters, account for 90% of reported emissions



The top 20 Scope 1 emitters, 40% are from the Healthcare Sector.



The top 20 Scope 2 Emitters, 45% are from the Healthcare Sector.

Chart 1:

Total Scope 1 and Scope 2 emissions by sector 2017

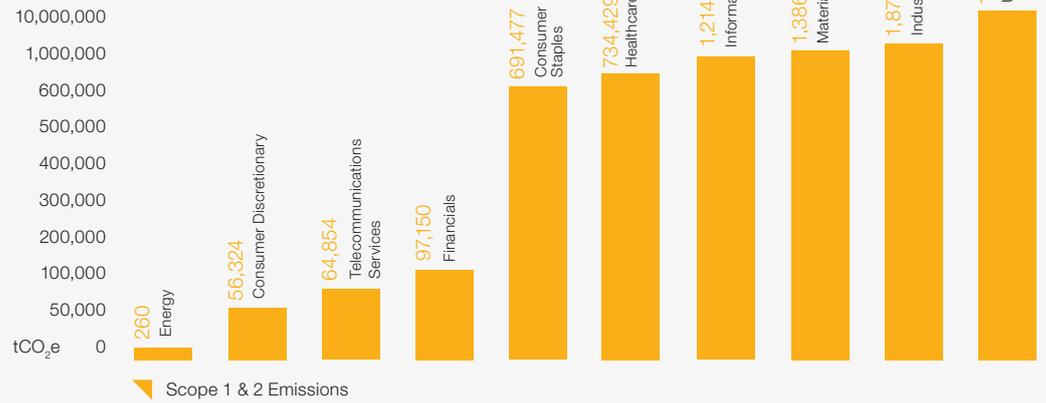


Chart 2:

Number of organisations reporting their emissions in Ireland by Scope

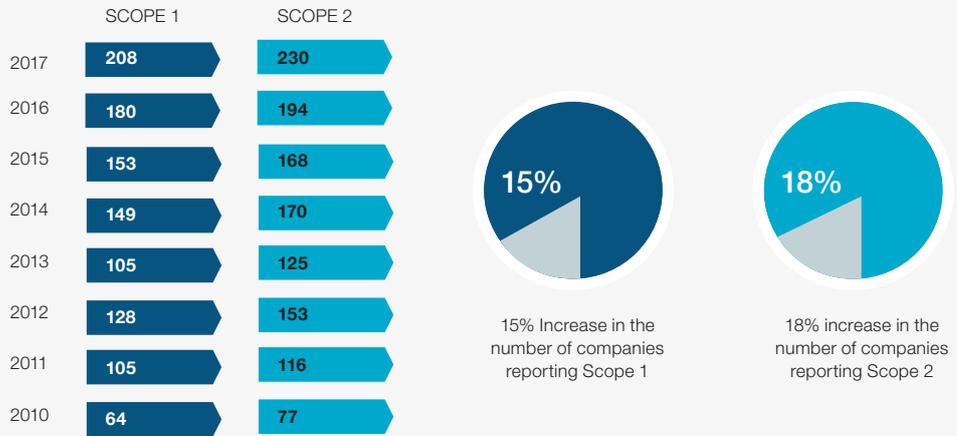
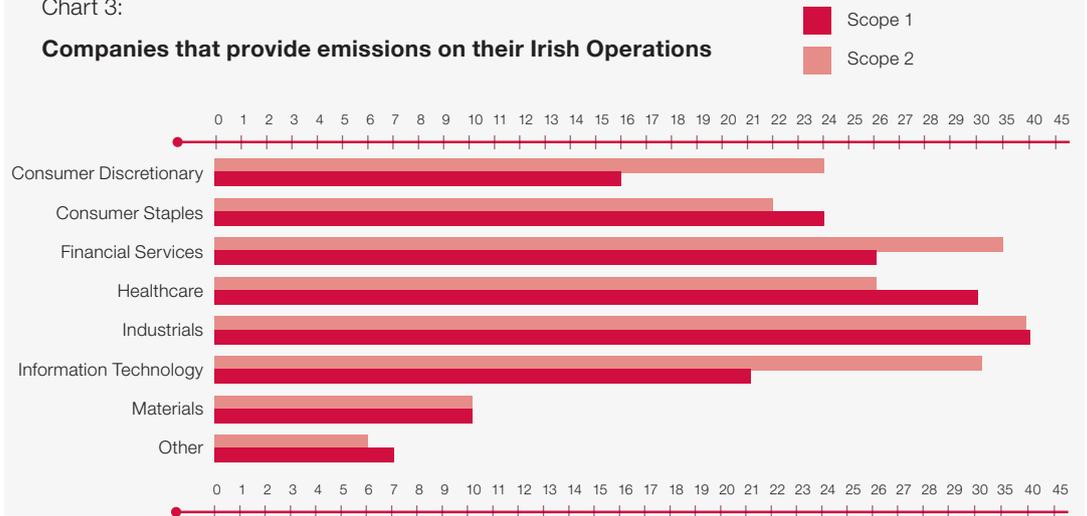


Chart 3:

Companies that provide emissions on their Irish Operations



CDP Ireland Network initiative

Irish business continues to demonstrate leadership



Brian O' Kennedy, CDP Ireland Network Supply Chain Event, RDS, 2017.

It has been a very interesting 12-month period for the CDP Ireland Network since our 2016 report launch last November. We continue to advance our mission to develop an economic system in Ireland that operates within sustainable environmental boundaries and promotes the development of Ireland as a leader in the low carbon economy.

This year we have seen strong growth of 20% in the numbers of Irish companies reporting their Climate Change performance to CDP. Ten companies are now also reporting to at least one other CDP programme; the CDP Water and Forests Programmes. There are also more Irish companies reporting to their customers under the Supply Chain program than those disclosing to investors under the Climate Change program. 32 Irish entities responded to the supply chain program up from 29 in 2015, of which 17 responded publicly. We will continue to offer support to this group as they report their emissions to CDP and to their clients. We see this as a competitive issue for Irish companies as we compete internationally.

Over the coming year we plan to accelerate our work with the Irish investment community to encourage their support in addressing climate change. And we will continue to try to persuade Irish non-responders, who this year achieved an 'F' score, to engage with the programme.



Gavin Whitaker and Ji Yeon Kim, CDP Ireland Network Training Event, DCU, 2017.

Some highlights from 2017

- More companies are now reporting. **30 Irish companies are now reporting under CDP Ireland's Climate Change program**, up from 25 last year.
- Two Irish companies, **AIB and Kingspan Group PLC** achieved the highest level of recognition under the programme, an **'A' score**. Only 114 companies worldwide achieved this score.
- One of our key strategies is to cooperate with other like-minded organisations. To this end, we have continued our close cooperation with **Sustainable Nation** and supported their Sustainable Leadership Breakfast briefings and the Gathering event in November.
- Supply Chain Event.** We hosted our first CDP Supply Chain network event. The meeting was addressed by Dexter Galvin, CDP London, with very insightful presentations from Raoul Empey, Sustineo, Leigh Holloway, Eco3 and Gavin Whitaker from Clearstream Solutions.
- In terms of **Training**, we hosted our annual CDP Reporter training in May 2017. Ji Yeon Kim from CDP London and Gavin Whitaker delivered a very informative session for both experienced, as well as new responders.
- We have also been working with the **Sustainability Skillnet** to roll out Non-Financial Reporting and Supply Chain Sustainability training over the past year.
- We now have 83 members on our LinkedIn group **'CDP Ireland Network'** and a growing Twitter following **@CDPIrelandnet**
- We have updated our Website **CDPIrelandNetwork.net** where you will find this report.

Aims and Objectives

- Emissions Reductions:** To drive action by companies and cities to reduce greenhouse gas emissions, safeguard water resources and prevent the destruction of forests.
- Engage and inform the debate:** To promote, encourage and support Irish stakeholders to engage with the CDP and other organisations seeking to minimize climate change impacts.
- Business Efficiency through carbon management:** To increase Irish organisations transparency on environmental performance in order to build resilience and sustainability.
- Factoring climate change risk and opportunity into investment decisions:** To make environmental performance central to investment and business decisions.
- Knowledge Sharing:** To share best practice in carbon management and policy from both Irish and international organisations.
- Framework for Emissions Reporting:** To provide a common and consistent framework for Irish companies to measure and report their GHG emissions.
- Developing Ireland's Competitive Advantage:** Assist in promoting the image of Ireland as a sustainable place to do business and to help our companies to achieve a long term competitive advantage from their initiatives.

20%

This year we have seen strong growth of 20% in the numbers of Irish companies reporting their Climate Change performance to CDP

The launch of our 2016 report was a huge success and attracted significant media attention.

16% jump in carbon emissions reporting among companies based in Ireland

The number of companies in Ireland reporting on their carbon emissions jumped by 16% to more than 200 last year, according to latest data.

The report from international not-for-profit CDP Ireland (formerly the Carbon Disclosure Project) shows that Kingspan, Accenture and Kerry Group were the top three performing Irish companies – in a top ten list that include some of Ireland’s best known businesses.

CDP CEO Paul Simpson said the “baseline-setting report uses data related to companies’ activities pre-Paris Agreement; it shows that while many are already on the right path, there is still a large gap to close.

RTE, November 2016

Kingspan retains position on climate 'A List'

Cavan-based Kingspan has been named on the climate 'A List' by CDP, an international non-profit organisation that measures the environmental impact of thousands of companies around the world. This is the third year in a row that the building materials company has featured on the list. Only one other Irish company – AIB – made the list of 112 companies, which includes Unilever, Microsoft, and Toyota.

Thousands of companies are independently assessed against CDP's scoring methodology in a report compiled at the request of over 800 investors who represent \$100 trillion of assets under management. Only 5pc of the companies who submit information are awarded position on the Climate A List, in recognition of their actions to reduce emissions and mitigate climate change in the past reporting year.

**ELLIE DONNELLY
Irish Independent
November 2017**

16% rise in carbon data

THE number of Irish companies reporting on their carbon emissions rose 16% to 202 last year, a CDP Ireland report revealed.

Kingspan, Accenture and Kerry Group were the top three performing firms in a top 10 including some of our best known businesses.

CDP Ireland measures the environmental impact of thousands of companies worldwide.

Its chief Paul Simpson said the report “shows that while many are already on the right path, there is still a large gap to close”.

**Irish Daily Mirror,
November 2016**

Kerry Group and AIB lead Irish challenge

Kerry Group and AIB have emerged near the top of a list of Irish companies who are seeking to mitigate climate change.

CDP Ireland, part of an influential international investor-backed lobby group, said in a report, yesterday that the two companies and Irish-headquartered industrial group Ingersoll Rand each achieve an A-rating for the first time for efforts to tackle carbon emissions.

Ireland’s top-rated companies, Kingspan and Accenture, had previously been highlighted in a report last month by CDP, formerly Carbon Disclosure Project, which collects data for global investors with more than \$100 trillion of assets under management.

**JOE BRENNAN
Irish Times,
November 2016**

Ryanair denies snubbing influential climate change survey

Ryanair has been named on a list of the world’s largest companies that ignored a major survey, carried out on behalf of more than 800 international investors, relating to how companies are managing risks posed by climate change.

However, a spokesman for the carrier said it has no record of being contacted regarding the report, published this week by the influential investor-backed lobby group CDP, formerly known as Carbon Disclosure Project.

The report by CDP, which collects data for global investors with more than \$100 trillion (€92 trillion) of assets under management, including BlackRock, Goldman Sachs Asset Management and Aviva Investors, named Kingspan on its so-called Climate A List of companies “who lead climate change mitigation”. Others on this list include Microsoft, Citigroup and Unilever.

**JOE BRENNAN,
Irish Times,
November 2016**

Steering Committee 2017

We would like to express our appreciation to SEAI and EPA for their continued financial support and participation in the Network. And also to Kingspan Group Plc and Smurfit Kappa Plc for their support in publishing and launching this report. Last year we welcomed three new CDP Ireland Steering Committee members from Smurfit Kappa Plc, CRH plc and ILIM. Our Chairperson for 2017 is Emma Jane Joyce, NTMA and our Vice Chairperson is Caroline Pope, KPMG. Thanks again to all our committee for their dedication and input.



Emma Jane Joyce
NTMA



Caroline Pope
KPMG



Shane Colgan
EPA



Joseph Curtin
IIEA



Lorcan Dowd
Kingspan Group Plc



Eoin Fahy
KBIGI



Gillian Carson-Callan
Smurfit Kappa Plc



Paul Harris
Bank of Ireland



Majella Kelleher
SEAI



Conor Linehan
William Fry



Stephen Nolan
Sustainable Nation



Mark Prendergast
CRH PLC



Sandra Rockett
Irish Life Investment Managers



John Barcroft
DCC Plc

Executive Support



Brian O'Kennedy
Clearstream Solutions



Gavin Whitaker
Clearstream Solutions

30 Irish companies reporting to CDP in 2017 is an increase of

200%

30 IRISH COMPANIES WHO RESPONDED IN 2017

ALLIED IRISH BANKS PLC M50 CONCESSION LTD
JAMES HARDIE INDUSTRIES
ARYZTA AG FBD HOLDINGS PLC GLANBIA PLC AN DCC PLC CRH PLC G&G GROUP PLC
ORIGIN ENTERPRISES PLC ECOCEM
BANK OF IRELAND SMURFIT KAPPA PLC ESB GROUP
ACCENTURE ALLEGION PLC SHIRE UDG HEALTHCARE PLC
TULLOW OIL MAINSTREAM RENEWABLE POWER XL CATLIN PLC
INGERSOLL - RAND CO.LTD KERRY GROUP PLC
ENVIRONMENTAL PROTECTION AGENCY EXPERIAN GROUP
KINGSPAN GROUP PLC MEDTRONIC PLC SEAGATE TECHNOLOGY LLC

220

Companies reporting to CDP with operations in Ireland

and 2017

Ireland results by CDP scoring levels



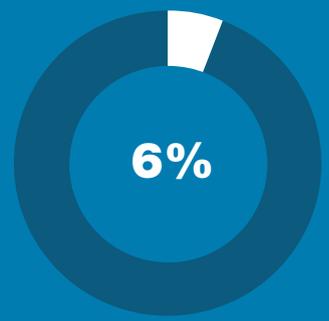
Disclosure



Awareness



Management



Leadership

A

IRELAND'S
A LIST
COMPANIES

KINGSPAN
AIB

27 IRISH COMPANIES WHO RECEIVED AN F FOR NON DISCLOSURE

INDEPENDENT NEWS AND MEDIA PLC
PADDY POWER BETFAIR
TOTAL PRODUCE PLC
DALATA HOTEL GROUP
PETRONEFT RESOURCES
GRAFTON GROUP PLC
ALKERMES PLC
PERMANENT TSB
GROUP HOLDINGS PLC
DATALEX PLC
RYANAIR HOLDING PLC
IFG GROUP PLC
ACTAVIS PLC
HOSTELWORLD GROUP PLC
KENMARE RESOURCES PLC
DRAGON OIL PLC
ENDO INTERNATIONAL PLC
JAZZ PHARMACEUTICALS PLC
MALIN CORP PLC
MINCON GROUP PLC
IRISH CONTINENTAL GROUP PLC
ABBNEY PLC
APPLEGREEN PLC
COVIDIEN LTD
FIRST DERIVATIVES PLC

Investor perspective

Sandra Rockett, Irish Life Investment Managers



The CDP is rapidly becoming the industry standard for disclosure and measurement of a company's progress and performance on key Climate related issues.

Irish Life Investment Managers (ILIM) is a global asset management business delivering investment solutions to clients globally – in Ireland, across the EU and more recently into the US and Canada. Consequently, we have a breadth of perspective as to how different investors and regulatory regimes are responding to the issue of Climate Change.

Can investors fight climate change?

In this article, we focus on a new dynamic emerging across the Asset Management industry which has the potential to not only accelerate change but also influence and potentially dictate changes in companies more than it has ever been felt before – a trend towards a more integrated approach to considering Environmental factors in their decision making alongside other Social and Governance factors (“ESG investing”).

Companies are ultimately beholden to their shareholders and these Shareholders are beginning to change their approach to investing. They are beginning to exert greater influence over the companies in which they invest and require changes which they believe are ultimately in their long term interests.

Climate change as a financial consideration for investors has become a key focus given the potential long term impact this could have on a company's performance and risk profile and is unlikely to lose its prominence any time soon.

The CDP is rapidly becoming the industry standard for disclosure and measurement of a company's progress and performance on key Climate related issues and will increasingly come into focus as a means of assessing and comparing companies for investment.

Climate Change as a key focus for Investors

Over the course of the last 18 months, the largest investors globally – asset managers and global pension funds - have all issued public statements setting out their position on Climate Change citing it as a key priority and investment theme within their portfolios. It is estimated that Climate change currently sits as possibly one of the top three such themes alongside Executive Remuneration and Gender Diversity.

How Investors are Responding (ILIMs Perspective)

Investors have a breadth of options available to incorporate and tackle Climate Change within their portfolios and our clients look to us as their Asset Manager to help them implement their views.

1. Active ownership: In direct response to our clients, we have moved to a Voting and Engagement policy which focusses on advocating for disclosure

on various key issues including Climate Change. We actively target companies which have a high exposure to Climate Change as a key business risk for the future and which lag their peer group in terms of progress on addressing the risks posed by Climate Change to their business and their disclosure of Climate Change metrics.

2. Divestment. Certain clients wish to divest from or exclude companies that lack industry norms or score high on carbon emission criteria. We enable them to implement their views by either tailoring a strategy to exclude certain companies which fail to meet certain criteria or by providing access to specific ex fossil fuel/low carbon investment strategies which are rapidly being developed in the market place.

3. Integration. Other clients prefer to include low-carbon/climate change into their investment strategies as factor to be considered alongside other financial characteristics. In this case, rather than exclude certain sectors or companies which perform poorly relative to climate change criteria, they seek to overweight their investment in companies which demonstrate strong performance to these same criteria.

How is the Industry Responding?

The Asset Management industry has responded to this growing trend in many ways;

- Increased research into the potential impact of climate change on future investment returns.
- New and innovative options for investors being launched by both index providers and active managers.

Transparency and Disclosure at the Forefront

Underpinning this strategic shift in investors focus is disclosure. One of the common challenges cited by investors is the lack of available information calculated on a consistent basis to enable decision making and relative comparisons and ultimately the development of new investment strategies which reflect investor preferences.

CDP addresses challenges faced by investors directly by providing a consistent, global reporting standard for climate related disclosures in much the same way as other financial metrics have established themselves.

Investor perspective

Steve Waygood, Aviva Investors



As investors, the TCFD has given us a very powerful mandate, it has shifted the burden of proof to companies to explain why climate risk isn't an issue. The new norm is that companies should be considering climate risk at the board level. It's created a new concept of climate risk governance.

For an insurance giant like Aviva, failing to successfully halt climate change is unthinkable. “Our sector has an existential issue with warming above 4 degrees,” says Steve Waygood, Aviva Investors’ chief sustainability officer. “It simply won’t be possible to price insurance products at a premium we can sustain, and which economies can afford.

“That’s a profound macroeconomic problem, given the role of insurance in pricing and redistributing risk.”

On the asset side of its balance sheet, meanwhile, Aviva faces challenges relating to the climate risks to which its investments are exposed. He cites a study carried out by Aviva with the Economist¹, which found that 6 degrees of warming would wipe US\$43 trillion off the value of global capital markets. “The entire value of the MSCI World equity index is only US\$38 trillion – that’s obviously a clear and present danger.”

For that reason, Aviva has been a prominent voice in the climate change debate: disclosing on climate risk since 2004, incorporating climate risk into strategy and governance, engaging with investee companies, and playing an important role on the Task Force for Climate-Related Financial Disclosures (TCFD), on which Waygood sits.

“As investors, the TCFD has given us a very powerful mandate,” he says. “It has shifted the burden of proof to companies to explain why climate risk isn’t an issue.” And, for those that recognize climate exposures, the “new norm is that companies should be considering climate risk at the board level. It’s created a new concept of climate risk governance.”

The TCFD recommends that companies disclose how they are likely to perform against various climate scenarios – which Waygood says will provide additional insight, but which are unlikely to tell the whole story. “A good scenario, that has been properly considered by the board, that looks at the downside risk is evidence of good quality management.”

But he notes there is, as yet, no standardized way for each sector to produce scenarios, nor sector reference scenarios against which a company’s scenario reporting might be compared – although he suggests there may be a role for the TCFD to produce these benchmarks.

Waygood also acknowledges that climate disclosure poses challenges for financial services groups such as his, noting that it is still not yet clear what the most appropriate metrics are for investors to disclose against. “We haven’t got it cracked – I’m not happy with the state of the art,” he says, noting that simply disclosing the carbon footprinting of a portfolio “doesn’t cut it”, as emissions can rise and fall for reasons not linked to climate risk management.

“We need a reference scenario for fund management,” he suggests, that sketches out what a transition pathway to 2 degrees looks like, allowing investors to disclose how close their portfolio is to matching it.

Aviva will continue to encourage the companies in which it invests to use the TCFD guidance, but Waygood adds that more system-wide pressure needs to be brought to bear.

“It’s as important that we use our influence in the political process to encourage those in Brussels, Westminster or Washington to use the TCFD in important international processes such as the International Accounting Standards Board, and the International Organization of Securities Commissions (IOSCO),” he says.

“We need to encourage the system to use this guidance and make it more than voluntary,” he says, adding that he would also like to see the proxy voting firms and credit rating agencies explicitly referencing TCFD data, as well as the regulations that govern the financial sector – Basel III for banks and Solvency II for insurers – take climate risk into account.

“We have a role as investors, in terms of influencing the companies we own, as well as in terms of advocating how the financial system evolves,” he concludes.

¹ https://www.eiuperspectives.economist.com/sites/default/files/The%20cost%20of%20inaction_0.pdf

Reimagining Disclosure

Tony Rooke, Director of Technical Reporting



Our 2017-2020 Tipping Point strategy¹ is to build on the momentum of the Paris Agreement and fulfil our mission to mainstream environmental stewardship and action into the economic system. We have been the catalyst for global disclosure over the past 15 years. We want to continue to drive the future of meaningful disclosure to help companies and investors better understand environmental risk and opportunities. This will accelerate the transition to a more sustainable economy and future.

We set up our Reimagining Disclosure initiative to work in consultation with you and our other key stakeholders to evolve our corporate questionnaires. Our goals of this initiative are to:

- ▼ Provide investors and stakeholders with increased relevant information now and into the future; and
- ▼ Optimise the reporting burden for companies.

To deliver this, we have focused development of our questionnaires on the high impact areas through the following three pillars.

1. Introduction of sector-specific questionnaires. We have listened to the feedback from both companies and investors that we need to focus on sector-specific disclosures.

2. Integration of the recommendations of the Task-Force on Climate-Related Financial Disclosures (TCFD). These recommendations align closely with existing CDP disclosures and will be incorporated principally into our climate change questionnaire, with water- and forest-specific TCFD recommendations also included in these respective questionnaires.

3. Continued evolution into more forward-looking metrics and reporting harmonisation. We are building upon forward-looking metrics in carbon pricing and science based targets to include reporting on scenario analyses, carbon price corridors, and transition pathway planning as key indicators of where companies are and the progress they are making.

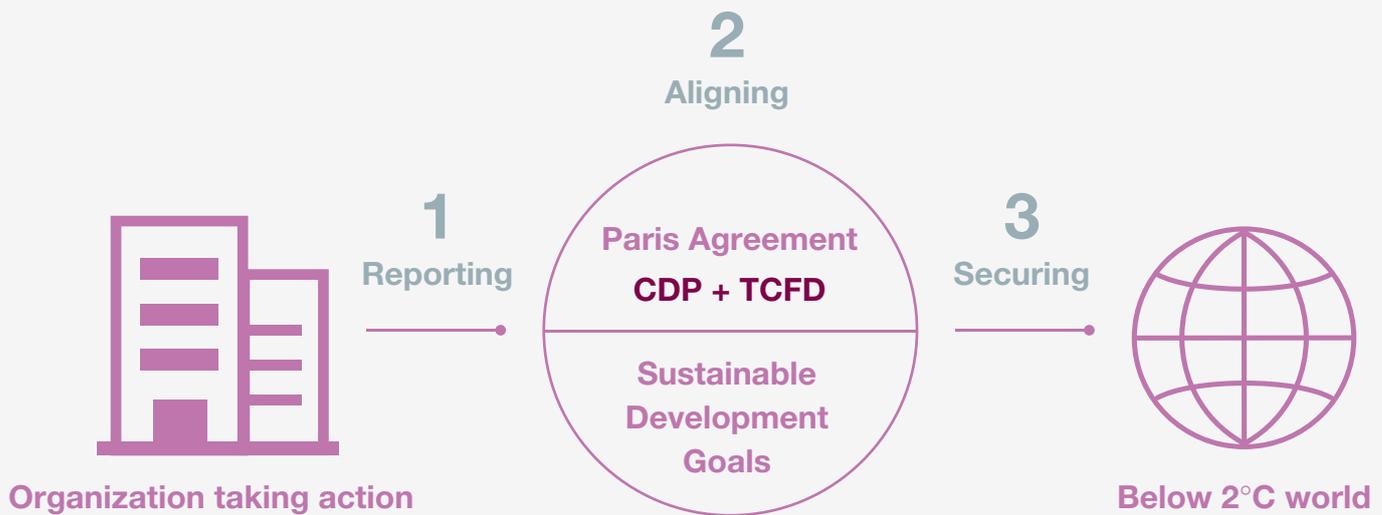
What's new for 2018?

We are launching 18 new sector-specific questionnaires across our three themes in 2018, with all other sectors answering the "general" questionnaire for the relevant theme(s):

Cluster	Climate change	Forests	Water
General	All other companies without sector specific questionnaires	All other companies without sector specific questionnaires	All other companies without sector specific questionnaires
Energy	Oil & gas Coal Electric utilities		Oil & gas Electric utilities
Transport	Vehicle manufacturers Service providers		
Materials	Cement Steel Metals & mining Chemicals		Metals & mining Chemicals
Agriculture	Food, beverage & tobacco Agricultural commodities Paper & forestry	Paper & forestry	Food, beverage & tobacco

¹ <https://b8f65cb373b1b7b15feb-c70d8ead6ced550b4d987d7c03fcd1d.ssl.cf3.rackcdn.com/cms/reports/documents/000/002/292/original/CDP-Strategic-Plan.pdf?1501603727>

How it all fits together:



For climate change, in addition to the inclusion of sector-specific metrics, the majority of changes introduced align both structure and flow with the recommendations of the TCFD. This means an increased focus on financial impacts, and the inclusion of scenario analysis and transition planning. This is designed to help companies in preparing to include TCFD recommended disclosures in their mainstream reporting and accounts, and to provide a place for companies to reference from their reports in providing more detail.

For water, the structure and flow has been retained to maintain alignment with the CEO water mandate. Some questions have had wording and options

changed following consultation (e.g. move from supply chain to value chain), and to align with TCFD recommendations.

For forests, the main changes have been to include disclosures from our 2016-17 supply chain pilot, consolidation of questions, and better alignment with climate change and water questionnaires. We have also introduced differentiation between sustainable forestry management for paper & forestry companies, land use change, and differentiation between afforestation, reforestation and restoration projects.

Outreach this year

We have reached over 2000 companies and other stakeholders on our reimagining plans this year through webinars, conferences, meetings, industry groups, and two consultations this year:

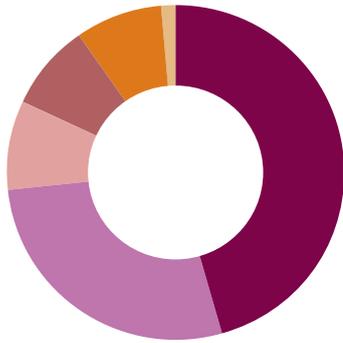
1. Over 170 organisations responded to our first consultation on sector-specific disclosures and evolution;
2. We published 6 months earlier than usual our draft sector-specific questionnaires for feedback from organisations in our second consultation.

The feedback was processed to look for common responses, agreement/disagreement between stakeholders, and then assessed to see if the feedback would help add to achieving our goals for reimagining disclosure. The final questionnaires will be published in December as a result of this feedback and our own development work.

The consultation is now closed but the results, supporting documents and draft sector-specific questionnaires can still be viewed at <https://www.cdp.net/en/companies/consultation>

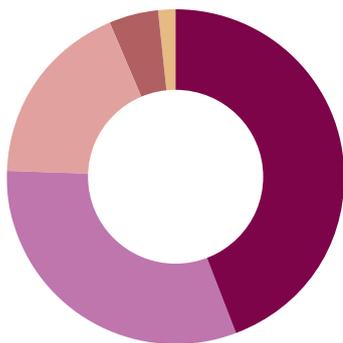
Investor signatories and members

1. Investor signatories by location



- ▼ **Europe**
 - 366 = 46%
- ▼ **North America**
 - 224 = 28%
- ▼ **Latin America & Caribbean**
 - 70 = 9%
- ▼ **Asia**
 - 67 = 8%
- ▼ **Australia and NZ**
 - 65 = 8%
- ▼ **Africa**
 - 11 = 1%

2. Investor signatories by type



- ▼ **Asset Managers**
 - 355 = 44%
- ▼ **Asset Owners**
 - 253 = 32%
- ▼ **Banks**
 - 144 = 18%
- ▼ **Insurance**
 - 38 = 5%
- ▼ **Others**
 - 13 = 2%

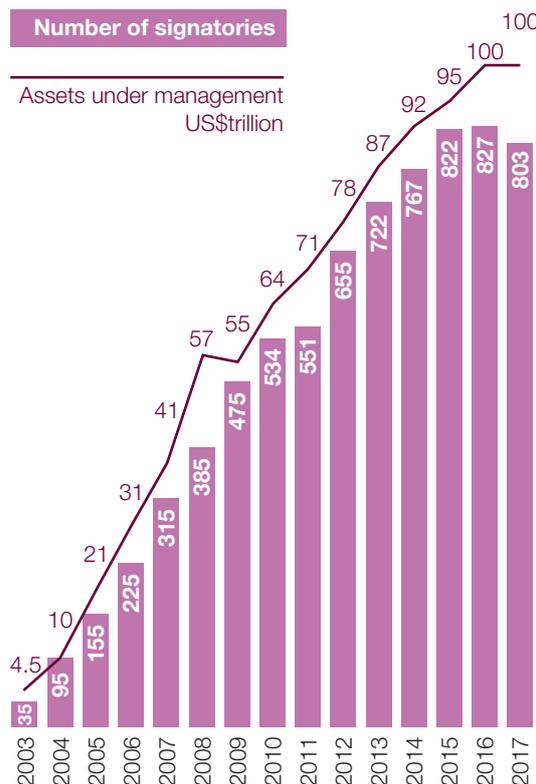
CDP's investor program - backed in 2017 by 803 institutional investor signatories representing in excess of US\$100 trillion in assets - works with investors to understand their data and analysis requirements and offers tools and solutions to help them.

Our global data from companies and cities in response to climate change, water insecurity and deforestation and our award-winning investor research series is driving investor decision-making. Our analysis helps investors understand the risks they run in their portfolios. Our insights shape engagement and add value not only in financial returns but by building a more sustainable future.

For more information about the CDP investor program, including the benefits of becoming a signatory or member please visit:
<http://bit.ly/2vvsrhp>

To view the full list of investor signatories please visit: <http://bit.ly/2uW3336>

3. Investor signatories over time



Investor members

ACTIAM
Aegon
Allianz Global Investors
ATP Group
Aviva Investors
Aviva plc
AXA Group
Bank of America
Bendigo and Adelaide Bank
BlackRock
Boston Common Asset Management LLC
BP Investment Management Limited
British Columbia Investment Management Corporation
California Public Employees' Retirement System
California State Teachers' Retirement System
Calvert Investment Management, Inc
Capricorn Investment Group
Catholic Super
CCLA Investment Management Ltd
ClearBridge Investments
Environment Agency Pension fund
Ethos Foundation
Etica SGR
Eurizon Capital SGR S.p.A.
Fundação Chesf de Assistência e Seguridade Social
Fundação de Assistência e Previdência Social do BNDES
FUNDAÇÃO ITAUBANCO
Generation Investment Management
Goldman Sachs Asset Management
Henderson Global Investors
Hermes Fund Managers
HSBC Global Asset Management
Instituto Infraero de Seguridade Social
KLP
Legal and General Investment Management
Legg Mason, Inc.
London Pensions Fund Authority
Morgan Stanley
National Australia Bank
Neuberger Berman
New York State Common Retirement Fund
Nordea Investment Management
Norges Bank Investment Management
ÖKOWORLD LUX S.A.
Overlook Investments Limited
PFA Pension
PREVI Caixa de Previdência dos Funcionários do Banco do Brasil
Rathbone Greenbank Investments
RBC Global Asset Management
Real Grandeza Fundação de Previdência e Assistência Social
Robeco
RobecoSAM AG
Rockefeller Asset Management
Sampension KP Livsforsikring A/S
Schroders
Skandinaviska Enskilda Banken AB
Sompo Holdings, Inc
Sustainable Insight Capital Management
TIAA
Terra Alpha Investments LLC
The Sustainability Group
The Wellcome Trust
UBS
University of California
University of Toronto Asset Management Corporation (UTAM)
Whitley Asset Management

Appendix I

Ireland responding companies

NR : No Response
 AQ : Answered Questionnaire
 DP : Decline to Participate
 QF : Questionnaire Forthcoming
 ▲ : Information not requested
 F : Failure to respond

Company	2017 Response Status	2016 Response Status	2015 Response Status	2014 Response Status	2013 Response Status	2012 Response Status	2011 Response Status
Ireland Top 30 - Answered Questionnaire							
Allied Irish Banks PLC	AQ*						
Aryzta AG	AQ*	AQ*	DP	NR	NR	NR	NR
Bank of Ireland	AQ*	AQ*	AQ*	AQ*	NR	NR	AQ*
C&C Group PLC	AQ*						
CRH PLC	AQ*						
FBD Holdings PLC	AQ*						
Glanbia PLC	AQ*	NR	NR	NR	NR	DP	NR
Kerry Group PLC	AQ*						
Kingspan Group PLC	AQ*	AQ*	AQ*	AQ*	AQ*	AQ*	NR
Origin Enterprises PLC	AQ*	NR	NR	NR	NR	NR	NR
Smurfit Kappa Group PLC	AQ*						
Tullow Oil	AQ*						
Other Responding Companies - Answered Questionnaire							
Accenture	AQ*						
Allegion PLC	AQ*	AQ*	DP	DP	▲	▲	▲
An Post	AQ*	▲	▲	▲	▲	▲	▲
DCC PLC	AQ*						
Ecocem	AQ*	AQ*	AQ*	▲	▲	AQ*	AQ*
Environmental Protection Agency	AQ*	▲	▲	▲	▲	▲	▲
ESB Group	AQ*						
Experian Group	AQ*						
Greencore Group PLC	AQ*						
Ingersoll-Rand Co.Ltd	AQ*						
James Hardie Industries	AQ*	QF*	▲	▲	▲	▲	▲
M50 Concession Ltd.	AQ*	AQ*	AQ*	AQ*	▲	▲	▲
Mainstream Renewable Power	AQ*	AQ*	▲	▲	▲	▲	▲
Medtronic PLC	AQ*						
Seagate Technology LLC	AQ*	AQ*	AQ*	AQ*	AQ*	▲	▲
Shire	AQ*						
UDG Healthcare PLC	AQ*						
XL Catlin PLC	AQ*	AQ*	AQ*	AQ*	AQ*	AQ*	▲
Ireland Top 30 - Unanswered Questionnaire							
Abbey PLC	F	NR	NR	NR	NR	DP	NR
Applegreen PLC	F	NR	▲	▲	▲	▲	▲
CPL Resources PLC	F	NR	NR	NR	NR	NR	NR
Dalata Hotel Group	F	NR	NR	▲	▲	▲	▲
Datalex PLC	F	NR	NR	▲	▲	▲	▲
Fyffes PLC	F	NR	NR	NR	NR	NR	NR
Hostelworld Group PLC	F	▲	▲	▲	▲	▲	▲
IFG Group PLC	F	NR	NR	NR	NR	NR	NR
Independent News & Media PLC	F	DP	NR	NR	AQ*	AQ*	AQ*

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Company	2017 Response Status	2016 Response Status	2015 Response Status	2014 Response Status	2013 Response Status	2012 Response Status	2011 Response Status
Ireland Top 30 - Unanswered Questionnaire							
Irish Continental Group PLC	F	NR	NR	NR	NR	NR	NR
Kenmare Resources PLC	F	NR	NR	NR	NR	NR	NR
Malin Corp PLC	F	NR	▲	▲	▲	▲	▲
Mincon Group PLC	F	NR	NR	NR	▲	▲	▲
Paddy Power Betfair	F	QF	AQ*	AQ*	NR	AQ*	AQ*
Permanent TSB Group Holdings PLC	F	NR	NR	NR	NR	DP	DP
Ryanair Holding PLC	F	NR	NR	NR	NR	NR	NR
Total Produce PLC	F	NR	NR	NR	NR	NR	DP
First Derivatives PLC	F	NR	NR	NR	NR	NR	NR
Other Responding Companies - Unanswered Questionnaire							
Actavis PLC	F	▲	▲	▲	▲	▲	▲
Alkermes PLC	F	QF	▲	▲	▲	▲	▲
Covidien Ltd	F	▲	▲	▲	▲	▲	▲
Dragon Oil PLC	F	NR	▲	▲	▲	▲	▲
Endo International PLC	F	NR	NR	▲	▲	▲	▲
Grafton Group PLC	F	NR	NR	DP	NR	DP	DP
Jazz Pharmaceuticals PLC	F	NR	NR	NR	▲	▲	▲
Perrigo Co.	F	NR	NR	DP	NR	DP	NR
Petronet Resources PLC	F	NR	▲	▲	▲	▲	▲

Appendix II

Global responding companies with operations in Ireland

Company	Country	Sector
Abbott Laboratories	USA	Health Care
AbbVie Inc	USA	Health Care
Abercrombie & Fitch Co.	USA	Consumer Discretionary
Allergan plc	USA	Health Care
Alliance Data Systems	USA	Information Technology
Allied Irish Banks plc	Ireland	Financials
Alps Electric Co., Ltd.	Japan	Information Technology
Amdocs Ltd	Guernsey	Information Technology
Amgen, Inc.	USA	Health Care
Amlin	United Kingdom	Financials
Analog Devices, Inc.	USA	Information Technology
AptarGroup	USA	Materials
ARM Holdings	United Kingdom	Information Technology
Aryzta AG	Switzerland	Consumer Staples
Asics Corporation	Japan	Consumer Discretionary

Appendix II

Global responding companies with operations in Ireland

Company	Country	Sector
Assa Abloy	Sweden	Industrials
Astellas Pharma Inc.	Japan	Health Care
Atos SE	France	Information Technology
Aviva plc	United Kingdom	Financials
AXA Group	France	Financials
Axel Springer SE	Germany	Consumer Discretionary
Balfour Beatty	United Kingdom	Industrials
Ball Corporation	USA	Materials
Bank of America	USA	Financials
Bank of Ireland	Ireland	Financials
Bank of Nova Scotia (Scotiabank)	Canada	Financials
Baxter International Inc.	USA	Health Care
BBA Aviation	United Kingdom	Industrials
Bemis Company	USA	Materials
Biogen Inc.	USA	Health Care
BlackBerry Limited	Canada	Information Technology
BlackRock	USA	Financials
Boliden Group	Sweden	Materials
BorgWarner	USA	Consumer Discretionary
Boston Scientific Corporation	USA	Health Care
Brammer Plc	United Kingdom	Industrials
Bristol-Myers Squibb	USA	Health Care
Britvic	United Kingdom	Consumer Staples
BT Group	United Kingdom	Telecommunication Services
Bunzl plc	United Kingdom	Industrials
C&C GROUP PLC	Ireland	Consumer Staples
CA Technologies	USA	Information Technology
CAE Inc.	Canada	Industrials
Cap Gemini	France	Information Technology
Cargill	USA	Consumer Staples
Cargotec Corporation	Finland	Industrials
Celestica Inc.	Canada	Information Technology
Centrica	United Kingdom	Utilities
Cloetta AB	Sweden	Consumer Staples
Close Brothers Group	United Kingdom	Financials
Cobham	United Kingdom	Industrials
Coca-Cola HBC AG	Switzerland	Consumer Staples
ComfortDelGro Corporation Limited	Singapore	Industrials
CommScope, Inc.	USA	Information Technology
Computer Sciences Corporation (CSC)	USA	Information Technology
Daikin Industries, Ltd.	Japan	Industrials
Danone	France	Consumer Staples
Danske Bank A/S	Denmark	Financials

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Company	Country	Sector
DCC PLC	Ireland	Industrials
Debenhams	United Kingdom	Consumer Discretionary
Deere & Company	USA	Industrials
Dentsu Aegis Network	United Kingdom	Consumer Discretionary
Deutsche Bank AG	Germany	Financials
Deutsche Börse AG	Germany	Financials
Diageo Plc	United Kingdom	Consumer Staples
Diasorin SpA	Italy	Health Care
Dixons Carphone	United Kingdom	Consumer Discretionary
Domino's Pizza Group plc	United Kingdom	Consumer Discretionary
eBay Inc.	USA	Information Technology
Ecocem	Ireland	Materials
Eli Lilly & Co.	USA	Health Care
Emerson Electric Co.	USA	Industrials
Enterprise Holdings	USA	Industrials
Ericsson	Sweden	Information Technology
ESB Group	Ireland	Utilities
Expeditors International of Washington	USA	Industrials
FERROVIAL	Spain	Industrials
Flextronics International	USA	Information Technology
Fresenius Medical Care AG & Co. KGaA	Germany	Health Care
G4S Plc	United Kingdom	Industrials
Gas Natural SDG SA	Spain	Utilities
General Electric Company	USA	Industrials
Glanbia PLC	Ireland	Consumer Staples
GlaxoSmithKline	United Kingdom	Health Care
Graphic Packaging	USA	Consumer Discretionary
Great-West Lifeco Inc.	Canada	Financials
Greencore Group PLC	Ireland	Consumer Staples
GRIFOLS	Spain	Health Care
Hammerson	United Kingdom	Financials
Hays	United Kingdom	Industrials
Heineken NV	Netherlands	Consumer Staples
Hertz Global Holdings	USA	Industrials
Hill & Smith Holdings	United Kingdom	Materials
Hiscox	United Kingdom	Financials
Humanscale Corporation	USA	Industrials
IHS Markit Ltd.	United Kingdom	Information Technology
IKEA	Sweden	Consumer Discretionary
Illinois Tool Works, Inc.	USA	Industrials
Imperial Brands	United Kingdom	Consumer Staples
Indorama Ventures PCL	Thailand	Materials
Intel Corporation	USA	Information Technology

Appendix II

Global responding companies with operations in Ireland

Company	Country	Sector
Inter Pipeline Ltd.	Canada	Energy
International Consolidated Airlines Group, S.A.	Spain	Industrials
Interserve Plc	United Kingdom	Industrials
Intesa Sanpaolo S.p.A	Italy	Financials
Invesco Ltd	USA	Financials
Ipsen	France	Health Care
ISS	Denmark	Industrials
J Sainsbury Plc	United Kingdom	Consumer Staples
Jabil Circuit, Inc.	USA	Information Technology
Jardine Lloyd Thompson Group Plc (JLT)	United Kingdom	Financials
JBS S/A	Brazil	Consumer Staples
JD Sports Fashion	United Kingdom	Consumer Discretionary
Johnson & Johnson	USA	Health Care
JPMorgan Chase & Co.	USA	Financials
Just Eat	United Kingdom	Information Technology
KBC Group	Belgium	Financials
Kellogg Company	USA	Consumer Staples
Kennedy Wilson Europe Real Estate	United Kingdom	Financials
Kering	France	Consumer Discretionary
Kerry Group PLC	Ireland	Consumer Staples
Kingspan Group PLC	Ireland	Industrials
Kubota Corporation	Japan	Industrials
Kuehne + Nagel International AG	Switzerland	Industrials
La Poste	France	Industrials
Lexmark International, Inc.	USA	Information Technology
Liberty Global plc	United Kingdom	Consumer Discretionary
Macquarie Group	Australia	Financials
Mainstream Renewable Power	Ireland	Utilities
Marine Harvest Group	Norway	Consumer Staples
Marks and Spencer Group plc	United Kingdom	Consumer Discretionary
Marsh & McLennan Companies, Inc.	USA	Financials
MasterCard Incorporated	USA	Information Technology
McKesson Corporation	USA	Health Care
Medtronic PLC	Ireland	Health Care
Merck & Co., Inc.	USA	Health Care
Merck KGaA	Germany	Health Care
Mexichem SAB de CV	Mexico	Materials
Micro Focus International	United Kingdom	Information Technology
Mitsubishi Corporation	Japan	Industrials
Mitsui O.S.K. Lines Ltd	Japan	Industrials
Molex Incorporated	USA	Information Technology
Molson Coors Brewing Company	USA	Consumer Staples
N Brown Group Plc	United Kingdom	Consumer Discretionary

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 ▲ : Information not requested
 F : Failure to respond

Company	Country	Sector
National Bank of Canada	Canada	Financials
Neopost	France	Information Technology
News Corp	USA	Consumer Discretionary
Nippon Express Co., Ltd.	Japan	Industrials
Novartis	Switzerland	Health Care
Old Mutual Group	United Kingdom	Financials
PAREXEL	USA	Health Care
PepsiCo, Inc.	USA	Consumer Staples
Pernod Ricard	France	Consumer Staples
Pfizer Inc.	USA	Health Care
Power Corporation of Canada	Canada	Financials
Power Financial Corporation	Canada	Financials
Procter & Gamble Company	USA	Consumer Staples
Provident Financial plc	United Kingdom	Financials
Prudential PLC	United Kingdom	Financials
QUALCOMM Inc.	USA	Information Technology
Quintiles Transnational Holdings Inc	USA	Health Care
Rabobank Group	Netherlands	Financials
Robert Walters	United Kingdom	Industrials
Roche Holding AG	Switzerland	Health Care
Royal BAM Group nv	Netherlands	Industrials
Royal Bank of Scotland Group	United Kingdom	Financials
RPS Group Plc	United Kingdom	Industrials
RSA Insurance Group	United Kingdom	Financials
Sage Group	United Kingdom	Information Technology
salesforce.com	USA	Information Technology
Schibsted ASA	Norway	Consumer Discretionary
SDL Plc	United Kingdom	Information Technology
Securitas AB	Sweden	Industrials
Sherwin-Williams Company	USA	Materials
Shire	Ireland	Health Care
Siemens AG	Germany	Industrials
SIG	United Kingdom	Industrials
Skandinaviska Enskilda Banken AB (SEB AB)	Sweden	Financials
Smurfit Kappa Group PLC	Ireland	Materials
SNC-Lavalin Group Inc.	Canada	Industrials
Societe Generale	France	Financials
Spirax-Sarco Engineering	United Kingdom	Industrials
SSE	United Kingdom	Utilities
Standard Life	United Kingdom	Financials
Sthree Plc	United Kingdom	Industrials
Stryker Corporation	USA	Health Care
Sumitomo Mitsui Financial Group	Japan	Financials

Appendix II

Global responding companies with operations in Ireland

Company	Country	Sector
Sun Life Financial Inc.	Canada	Financials
SuperGroup	United Kingdom	Consumer Discretionary
Symantec Corporation	USA	Information Technology
Takeda Pharmaceutical Company Limited	Japan	Health Care
Ted Baker Plc	United Kingdom	Consumer Discretionary
Tesco	United Kingdom	Consumer Staples
Teva Pharmaceutical Industries Ltd	Israel	Health Care
The Coca-Cola Company	USA	Consumer Staples
THK Co., Ltd.	Japan	Industrials
TJX Companies, Inc.	USA	Consumer Discretionary
Twenty-First Century Fox	USA	Consumer Discretionary
UCB SA	Belgium	Health Care
UDG Healthcare PLC	Ireland	Health Care
Unilever plc	United Kingdom	Consumer Staples
United Co RUSAL PLC	Russia	Materials
Vedanta Resources PLC	United Kingdom	Materials
Verisk Analytics Inc	USA	Industrials
Veritas Technologies LLC	USA	Information Technology
Verizon Communications Inc.	USA	Telecommunication Services
Vestas Wind Systems A/S	Denmark	Industrials
VF Corporation	USA	Consumer Discretionary
Village Roadshow	Australia	Consumer Discretionary
Visa	USA	Information Technology
VMware, Inc	USA	Information Technology
Vodafone Group	United Kingdom	Telecommunication Services
Whitbread	United Kingdom	Consumer Discretionary
Wincanton plc	United Kingdom	Industrials
Wood Group	United Kingdom	Energy
WPP Group	United Kingdom	Consumer Discretionary
Wyndham Worldwide Corporation	USA	Consumer Discretionary
Xilinx Inc	USA	Information Technology
Xylem Inc	USA	Industrials
Zimmer Biomet Holdings, Inc.	USA	Health Care
Zurich Insurance Group	Switzerland	Financials

CDP 2017 scoring partners

CDP works with a number of partners to deliver the scores for all our responding companies. These partners are listed below along with the geographical regions in which they provide the scoring. All scoring partners complete training to ensure the methodology and guidance are applied correctly, and the scoring results go through a comprehensive quality assurance process before being published. In some regions there is more than one scoring partner

and the responsibilities are shared between multiple partners.

In 2017, CDP worked with RepRisk, a business intelligence provider specializing in ESG risks (www.reprisk.com), who provided additional risk research and data into the proposed A-List companies to assess whether there were severe reputational issues that could put their leadership status into question.



Global climate change scoring partner



Global water and forest scoring partner



Japan



France



Japan, Latin America, Turkey



Japan, Korea



Brazil



Korea



Japan



Japan



Iberia (Spain & Portugal)



Japan



Japan



Japan



All regions

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