


# REIMAGINING BUSINESS FOR THE 21<sup>ST</sup> CENTURY

The 2015 A4S Annual Summit



ACCOUNTING FOR  
SUSTAINABILITY

#A4SSummit15



We would like to thank Aviva Investors, Sainsbury's, BrandMe and Siemens for their support for this year's Summit, as well as all of the members of the A4S CFO Leadership Network.

## EVENT SCHEDULE:

## TIME:

1. Arrival and registration	18.30
2. Welcome and keynote speaker	18.50
3. Interactive reception and refreshments	19.20
4. Finish	21.00

## FLOORPLAN OF THE CRYSTAL



## THINGS NOT TO MISS



- The Street: Find out more about the aims and objectives of A4S, as well as who we work with and our future plans
- Zones 1-3: **Forces of Change** – Introduction to global megatrends and the business case for sustainability
- Maturity Maps: Assess where your organisation sits on our maturity maps and gain insight into what you need to do next to become a leader

## CONTENTS

### THE STREET

<b>Sustainability megatrends and impacts</b>	1
<b>About The Prince of Wales's Accounting for Sustainability Project</b>	2
<b>A4S and the CFO community</b>	6
<b>A4S and the accounting community</b>	8
<b>A4S's work with business schools</b>	9
<b>A4S's work with investors</b>	10
<b>Aviva Investors</b>	11

### THE CRYSTAL EXHIBITION

(showcases A4S CFO Leadership Network case studies)

<b>Zones 1, 2 + 3: Forces of Change</b>	12
Anglian Water	
Royal DSM	
Yorkshire Water	
<b>Zone 4: Creating Cities</b>	16
Asda	
The Crown Estate	
Unilever	
<b>Zones 5 + 6: Smart Buildings</b>	20
British Land	
Marks and Spencer	
Sainsbury's	
<b>Zone 7: Safe and Sound</b>	24
2015 Maturity Maps	
<b>Zone 8: Keep Moving</b>	26
National Grid	
<b>Zone 9: Go Electric</b>	28
SSE	
<b>Zone 10: Water is Life</b>	30
South West Water	
<b>Zone 11: Healthy Life</b>	32
Bupa	
<b>Zone 12: Clean and Green</b>	34
National Grid	
<b>Zone 14: Future Life</b>	36
Video recording hub 'Imagine if...'	
<b>Event Map</b>	38

# SUSTAINABILITY MEGATRENDS AND IMPACTS

DID YOU KNOW?

By 2030, approximately US\$90 trillion in additional infrastructure capacity will be needed globally<sup>1</sup>

Imagine the changes needed to capital investment planning to ensure these assets are future proofed for a warmer, wetter, more extreme world

We are currently using 50% more of the Earth's natural resources than the Earth can provide<sup>2</sup>

Imagine the cost implications from resource scarcity for your organisation

By 2030 we'll need 50% more energy, 35% more food and 40% more water<sup>3</sup>

Imagine the cost implication this would have on your organisation and your supply chain

In 2013 extreme weather events were behind \$37bn of the world's \$45bn disaster related insured losses<sup>4</sup>

Imagine not being able to get cost effective insurance for some of your operations

To keep below a 2°C global temperature rise and avoid 'dangerous' climate change, only 20% of total current fossil fuel reserves can be burnt unabated<sup>5</sup>

Imagine running your business at zero net carbon

<sup>1</sup>Driving Sustainable Development through Better Infrastructure: Key Elements of a Transformation Program, Bhattacharya, A., Oppenheim, J., and Stern, N., 2015

<sup>2</sup>Living Planet Report, WWF, 2012

<sup>3</sup>OECD; Dan Hammer, Center for Global Development, March 2014

<sup>4</sup>Sigma: Natural catastrophes and manmade disasters in 2013, SwissRe, 2014

<sup>5</sup>Unburnable carbon, Carbon Tracker and Grantham Research Institute, 2013

## ABOUT THE PRINCE OF WALES'S ACCOUNTING FOR SUSTAINABILITY PROJECT

The Prince's Accounting for Sustainability Project (A4S) was established by HRH The Prince of Wales in 2004 to “help ensure that we are not battling to meet 21st century challenges with, at best, 20th century decision making and reporting systems”.

### Our mission

To catalyse action by the finance and accounting community to support a fundamental shift towards resilient business models and a sustainable economy.

### Our aims

- **Demonstrate the business case**, increase engagement and build capacity for action by the finance community
- Develop **practical tools**, guidance and approaches that enable environmental, social and economic risks and opportunities to be reflected in decision making
- Facilitate the creation of **an enabling environment for change** through a shift to sustainable capital markets, and supportive regulatory and reporting regimes

### We work with



Chief Financial Officers (CFOs) and finance teams



Global accounting community



Investors, capital markets and the wider finance community



Governments, regulators and policy makers



Business schools

## What we do

### DEMONSTRATING THE BUSINESS CASE AND BUILDING CAPACITY FOR ACTION

#### The commercial case for action

A4S's Accounting Bodies Network is collating case studies from around the world which show how organisations have derived benefits from a risk management, cost saving or opportunity perspective by acting on material environmental and social issues.

#### Engagement, education and training

At the A4S Summit 2014, education and training was identified as a key priority to scale up action. During 2015, we have started a programme of engagement with Accounting Institutes, Business Schools and other key partners to look at how sustainability can be integrated into the training that accounting and finance professionals receive, at each key stage in their professional career.

This builds on our existing collaboration with the University of Cambridge Institute for Sustainability Leadership to provide leadership training for CFOs. We also run a number of workshops and roundtables with CFOs around the world to share insights and explore practical action.

PROFESSIONAL  
QUALIFICATION

ON THE JOB  
TRAINING

MBA

EXECUTIVE  
TRAINING

Finance professional cycle of learning

#### Finance for the Future Awards

These awards recognise and reward leadership from finance teams that embed sustainability within their organisations to create resilient business models. The awards are free to enter and open to organisations globally.

Entries will open on the Finance for the Future Awards website from March 2016. You can find winners' success stories and best practice at [www.financeforthefuture.co.uk](http://www.financeforthefuture.co.uk)

Find out more  
at the Finance for the Future  
stand in 'The Street'.



## DEVELOPING PRACTICAL TOOLS

We work with finance teams, in particular members of our CFO Leadership Network, to develop practical tools, guidance and approaches that enable environmental, social and economic risks and opportunities to be reflected in decision making. Over time, our aim is to cover all areas of finance function activity and transform financial decision making.

### Topics covered to date:

- Uncertainty in decision making
- Strategic planning, budgeting and forecasting
- Integrated management reporting
- Capital investment appraisal
- Valuing natural, social and human capital
- Investor engagement
- Debt finance and treasury

In 2016, we will explore liabilities and discounting, and culture and behaviours, in addition to continuing implementation of existing topics.

## CREATING AN ENABLING ENVIRONMENT

### Transforming the capital markets

In addition to the work on equity markets and debt finance conducted through the CFO Leadership Network, A4S projects cover the following areas:

- Corporate pension funds and alignment with the sponsor
- Role of pension fund consultants
- Infrastructure finance
- Encoding a response to physical climate risk in the financial system
- Evolving understanding of fiduciary duty and directors' liability



### **Measure what Matters**

Partnership project to explore how global, national and corporate goals and approaches to measurement can be aligned, centred around the UN's 2030 Global Goals for Sustainable Development, agreed in September 2015.

Find out more  
at the Measure what Matters  
stand in 'The Street'.



### **Integrated Reporting and the Natural Capital Coalition**

A4S established the International Integrated Reporting Council in 2010 and we continue to support its work. A4S is also a founder member of the Natural Capital Coalition which released a draft Protocol that harmonises methods for measuring and valuing natural capital in November 2015.

## A4S AND THE CFO COMMUNITY



### CFO Leadership Network

The A4S CFO Leadership Network provides a forum for CFOs and their teams to demonstrate leadership, build capacity and address common challenges relating to the integration of economic, environmental and social matters into financial decision making. Membership is by invitation only, with a need to demonstrate both personal leadership and to represent an organisation that is committed to developing a sustainable business model.

### Network objectives

Network members all commit to the following objectives:

- **Support the CFO community** in the creation of sustainable business models through raising awareness of Network activities, the commercial benefits of sustainability and expanding the Network globally
- **Share insights, challenges and opportunities** to accelerate progress towards accounting for sustainability and collaborate with others to increase the reach and impact of Network activities
- Work together to **transform finance through the development of tools, methodologies and approaches** that enable sustainability to be integrated into decision making
- **Influence the environment** within which organisations operate through engagement with investors and other stakeholders

Find out more  
at the CFO Leadership  
Network stand in 'The Street'.



## A4S AND THE CFO COMMUNITY



### **Expansion towards a Global Leadership Network**

Expansion of the CFO Leadership Network was voted as a key priority to scale up action at last year's Summit. In 2015, roundtables were held in Canada, South Africa, Hong Kong, Singapore, Australia and New Zealand to explore setting up regional groups as part of a Global Leadership Network, with strong support received. In 2016, a number of these groups will be established, with additional engagement roundtables planned in the US, Japan, India and Brazil.

### **Circles of Practice**

In October 2015, A4S's first CFO Circle of Practice was launched in the Gulf Region in partnership with the Abu Dhabi Sustainability Group and the Pearl Initiative. The Circle of CFOs will meet twice a year to share best practice around integration of sustainability into finance.

## A4S AND THE ACCOUNTING COMMUNITY



A4S established the **Accounting Bodies Network (ABN)** in 2008, which brings together accounting bodies from around the globe with a joint membership of almost two million accountants from 176 countries. Their members collectively represent almost two thirds of the world's accountants.

Members have committed to a set of five principles to support integration of accounting for sustainability into everything they do. The principles are:

1. Influence and inform
2. Lead by example
3. Drive thought leadership
4. Collaborate through the Network
5. Incorporate accounting for sustainability within training and professional education

During 2015, the ABN have focused on three projects:

- Making the business case for sustainability
- How to engage accountants around environmental and social issues
- Engaging with policy makers on climate change

Find out more  
at the ABN stand in  
'The Street'.



## A4S'S WORK WITH BUSINESS SCHOOLS



In 2015, in partnership with the University of Cambridge Institute for Sustainability Leadership, A4S brought together leading finance and accounting professors, journal editors and other key stakeholders from business schools around the world to explore steps to integrate sustainability into research and MBA qualifications. A range of barriers were explored, common to many other sectors, including lack of data, lack of incentives or reward, and a skills gap.

During 2016, we will continue to work with business schools to shift the incentives in place, for example by bringing together data providers with researchers and journals to set a new research agenda. In addition, outputs from the CFO Leadership Network will be tailored to meet the needs of business schools to facilitate incorporation into teaching.

## A4S'S WORK WITH INVESTORS



A4S brings together Chairmen, CEOs, CIOs and others from the asset owner, asset manager and intermediary communities to explore the relevance of environmental, social and governance issues and ways to integrate these into investment decision making.

A particular focus of our work is to explore the role of different actors within the investment chain, and their ability to influence others either alone or through collaboration with others.

In 2015, one area of focus was on the role of infrastructure finance. A major expansion of investment in modern, clean and efficient infrastructure will be essential to achieving growth and sustainable development goals. Over the coming 15 years, the world will need to invest around \$90 trillion in sustainable infrastructure assets. Getting these investments right will be critical to whether or not we are locked into a high or low carbon trajectory, and whether other key social and environmental challenges can be tackled.

Another key focus is to explore the relationship between corporate pension funds and the sponsor company, in particular to achieve greater alignment in stated strategic objectives, as well as the influence and role of the pension fund consulting community.

## AVIVA INVESTORS



Aviva Investors are involved in a number of A4S's investor workstreams including debt finance, infrastructure and equity investors. They have kindly sponsored this year's Summit.

### Aviva Investors – why integrate sustainability and how Aviva Investors is responding

As asset managers, our industry has a fiduciary duty to do what we can to protect and enhance the value of client assets. For us, this includes active stewardship of the companies in which we invest and engagement with policymakers to address the key sustainability challenges within our capital markets and the broader economy.

We have always believed that companies conducting their business in a responsible and sustainable manner are more likely to succeed over time, benefiting our customers and society as a whole. This is why environmental, social and governance (ESG) considerations form an integral part of both our investment and research processes at Aviva Investors, across all asset classes and all regions. This approach enables us to offer better quality, more risk aware investment propositions for our clients.

We were one of the first global fund managers to integrate ESG issues into our investment decision making and one of the first to express our views through the power of shareholder voting. We are a founding signatory to the UN backed Principles for Responsible Investment (PRI) and one of the first signatories to the UK Stewardship Code. For us, it is about aligning our organisation and investment philosophy for the long term.

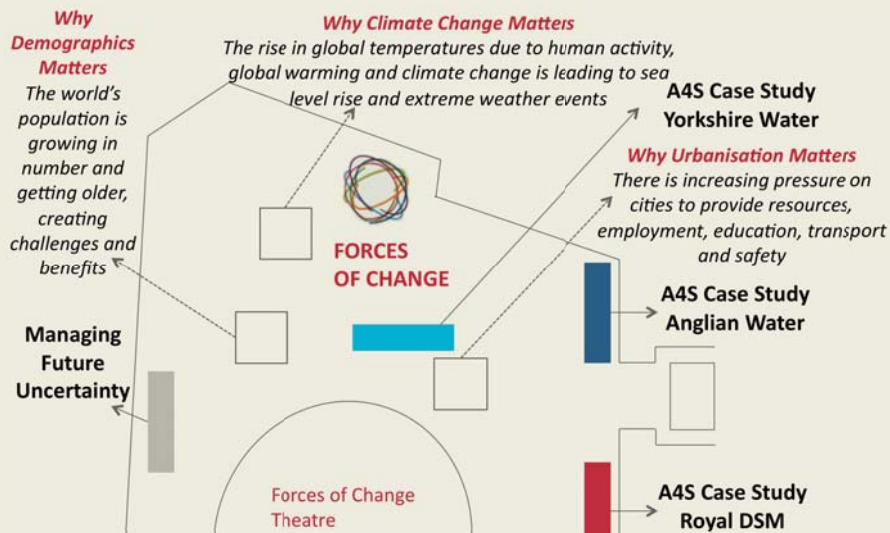
Find out more  
at the Aviva Investors stand  
in 'The Street'.



## ZONES 1,2 + 3: FORCES OF CHANGE

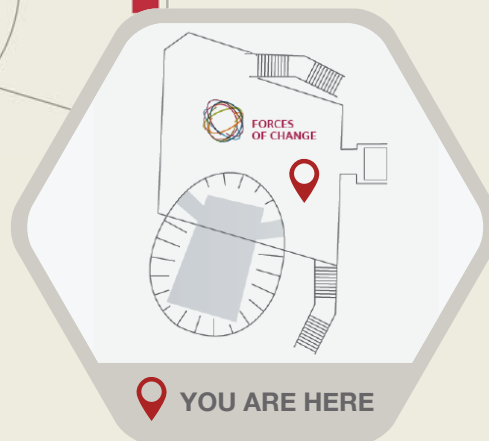
These zones introduce the future challenges for cities. They show how sustainability megatrends, such as demographic change, urbanization and climate change can impact people and businesses.

THE KEY SECTIONS TO SEE IN THIS ZONE ARE HIGHLIGHTED IN RED ITALICS



### NEXT STEP OPTIONS:

- Go to Zone 4 'Creating Cities' to learn about how cities are shaped, including the decisions made around resource usage & innovative solutions for capital expenditure
- Or Zones 5 + 6 'Smart Buildings' to see how buildings can be made more resource efficient





## INTEGRATING SUSTAINABILITY FACTORS INTO THE STRATEGIC PLANNING, BUDGETING AND FORECASTING PROCESS



### STRATEGIC PLANNING, BUDGETING & FORECASTING



#### WHAT:

- Leveraged our integrated 25 year strategic plan to set six strategic business priorities which reflect our overall commercial aims and associated sustainability ambitions
- Developed appropriate metrics to allow us to monitor whether the desired outcomes were being achieved, which were then incorporated into our budget and forecasting processes
- Focused on delivering outcome measures that reflect our broader performance and help us meet customer and regulatory expectations



#### WHY:

- Has resulted in improved customer outcomes whilst retaining focus on efficiency and cost savings
- An integrated plan allows us to monitor our performance in a more holistic way highlighting areas where action is needed or equally where we can reduce investment yet still achieve the same financial and non financial outcomes
- Increase business resilience as we can better respond to threats such as water stress from climate change by targeting outcomes that drive the right benefits for the business, its customers and stakeholders



#### HOW:

- As sustainability factors are part of our strategic plan, the focus on outcome based measures meant that social and environmental performance had to be reflected in our budgets, targets and forecasts
- We modelled each element of the plan, with budgeted costs linked to delivery of outcomes, and performed a risk review to identify areas where we could reprioritise investment to deliver improved performance across all outcomes
- Our Strategic Priorities Board reviewed options and decided which to progress, where additional expenditure was required, and where funding would come from to keep the overall plan in balance
- Having financial or reputational 'rewards' or 'penalties' for non financial metrics focused the attention of the business on non financial goals
- Aspirational long terms goals helped to change mindsets and deliver change quickly
- The finance team collaborated with the wider business in the development process facilitating high level buy in from the whole organisation

## TRANSITIONING TOWARDS A SUSTAINABLE BUSINESS MODEL



If you do not engage your investors around the environmental and social issues that are relevant to the commercial success of your business, why will they believe it is important? Explaining the link to future commercial success will help to facilitate their buy in for changes to your business model.

### WHAT:

Fifteen years ago, we began to refocus our operations in response to sustainability mega trends that presented both opportunities and threats to our business. We moved away from a fossil fuel petrochemical focused business and turned to health, nutrition and materials science. We took our investors on this journey with us to secure their support.



### HOW:

- Successfully developed sustainability as a strategic growth driver within our business – 95% of our innovation pipeline and 45% of running sales were from ECO+ products in 2014
- Altered our business model, strategic priorities and operations within our global business groups
- Drew clear links between macro sustainability trends and our future commercial success to engage our investors
- Targeted investors with a long term outlook who would come on the journey with us



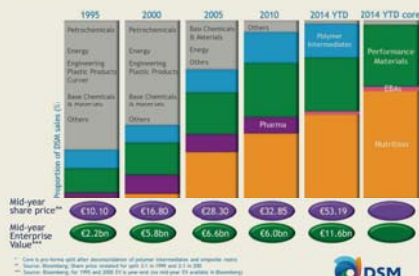
## ENHANCING INVESTOR ENGAGEMENT



### WHY:

- Perceived a significant opportunity for our business and long term success by responding to macro sustainability trends. However, we also saw threats to our future business if we did not respond.
- Wanted to capitalise on the opportunities this change presented across the value chain
- Recognised the need to demonstrate the commercial drivers to bring our investors with us – and the need to actively target investors who would share our long term outlook to build a sustainable business

### Significant value creation by portfolio transformation



## BUILDING A RESILIENT BUSINESS BY IDENTIFYING LONG TERM EXPOSURE TO MACRO RISKS



### MANAGING FUTURE UNCERTAINTY



#### WHAT:

We wanted to identify and fully understand the risks and opportunities our business was likely to face over the next 25 years from macro sustainability trends, the necessary strategic responses and how they aligned to our vision and strategic objectives.



#### WHY:

- Provide insight into the changing nature of the water sector over the next 25 years, including customers' long term expectations
- Allow short term business planning to be set in the context of a long term direction, improving future resilience and gaining buy in to the short term plan

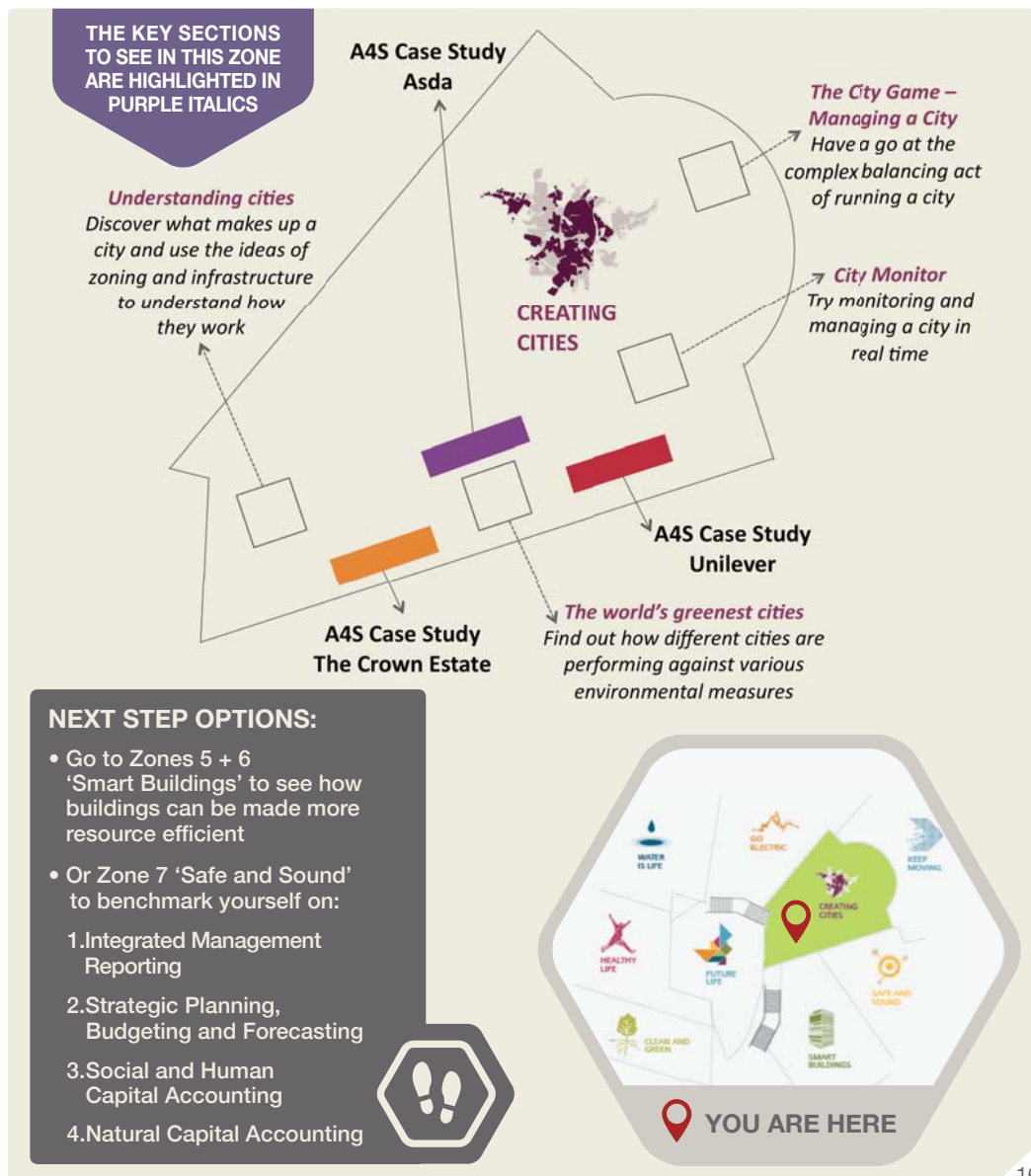


#### HOW:

- Formed an internal cross business steering group, sponsored by the Board, to determine key sustainability risks and opportunities
- Used the Political, Economic, Social, Technological, Legal and Environmental (PESTLE) risk identification framework to determine key sustainability risks and opportunities over the next 25 years. This involved using experts to develop evidence based forecasts of the world (and Yorkshire) in 25 years and the likely risk and opportunity impacts of change.
- Aligned short term risks and opportunities to our risk register and assessed them, both qualitatively and quantitatively, within a scoring matrix to determine materiality and the necessary level of control
- Set milestones towards long term outcomes by 2040 and included them in our objectives, targets and scorecards
- Progress is monitored by our Board and Executive Team and publicly reported in our Annual Report and Accounts

## ZONE 4: CREATING CITIES

This zone explores decisions to shape and run cities sustainably. It covers natural resource usage, innovative solutions for capital expenditure, and meeting societal challenges.



## EVALUATING SUSTAINABILITY ALONGSIDE COMMERCIAL METRICS DURING INVESTMENT APPRAISAL



CAPEX

### WHAT:

Used carbon efficiency to drive design innovations for a new build chilled distribution centre

Developed a scorecard to identify technologies that were technically feasible and cost effective

The project led to the use of technologies for energy efficiency, as well as renewable and low carbon energy generation

### WHY:

- Deliver significant carbon savings as per our strategic plan – predicted to be 300 tonnes annually per distribution centre
- Deliver best value for money through cost savings achieved
- Encourage innovative lower carbon and lower cost solutions

### HOW:

- Assembled a cross functional project team to bring different perspectives to the design process
- Designed and used a scorecard to enable evaluation of commercial and sustainability characteristics of technology options e.g. absolute cost, financial payback, technical design constraints and annual carbon savings
- Investment options for technologies were given a Red/Amber/Green (RAG) status to facilitate decision making

## DEMONSTRATING THE SIGNIFICANT VALUE WE CREATE BEYOND OUR FINANCIAL RETURNS



### NATURAL & SOCIAL CAPITAL ACCOUNTING



#### WHAT:

In order to account for the significant value we create for the economy and society beyond our financial returns, we developed a 'Total Contribution' methodology to value all our impacts. This approach considers environmental and social impacts and dependencies alongside economic considerations, with impacts valued in monetary terms using recognised or emerging methodologies applied to relevant business metrics.

Our approach has evolved from that communicated in our Total Contribution report (2013) to full monetisation across a larger number of indicators. It is being further developed to make it a tool to inform decision making, looking at our impacts beyond financial return.



#### WHY:

- Provide insight into the impacts of our full value chain; from our direct operations through to our indirect and enabled activities
- Better understand the social, environmental and economic impact of projects, both positive and negative, so we can focus on maximising benefits delivered
- Enable the broader implications of our activities to be taken into account in business planning to facilitate better decisions
- Improve business resilience and help to build stronger relationships with partners leading to increased collaboration, innovation and ultimately competitive advantage



#### HOW:

- Set up a cross business team to work with external experts to develop the methodology and embed the approach within the business. This included the CFO and key members of the finance team who developed robust systems and methodologies to collect and collate the data.
- Used a principles based framework using performance indicators based on their materiality to the business, with boundaries based on our sphere of control and influence
- Financial values were calculated e.g. since 2010 over 1000 unemployed were helped to find work in the West End which equates to a total £10.9m contribution to the UK economy and the individuals concerned



## USING OUR INTEGRATED STRATEGY TO TALK TO OUR INVESTORS



### ENHANCING INVESTOR ENGAGEMENT



#### WHAT:

We build our investor communications around our integrated business strategy, "the Compass", to demonstrate who we are as a business and underline the central importance of issues we see as fundamental to the ongoing commercial success of our business. The Compass sets out our purpose and vision:

- Purpose: "to make sustainable living commonplace"
- Vision: "to double the size of the business, whilst reducing our environmental footprint and increasing our positive social impact"



#### HOW:

- At the beginning of investor roadshow presentations we focus on our strategy and business model to set the discussion in the context of our purpose and long term focus. We have used the "Winning today, Winning tomorrow" theme to break down the discussion and explain how we are positioning the business to take advantage of, and reduce the risks arising from, global sustainability mega trends.



#### WHY:

- Need to respond to the sustainability mega trends such as rising temperatures, water shortages, scarce food supplies, population growth and an increasing gap between rich and poor if we are to have a resilient business model into the future
- Sustainable, equitable growth is required to help to future proof our business
- Our investors need to understand how these activities underpin our commercial returns
- By developing an integrated strategy, and building our investor communications around this strategy, we reinforce the connections between commercial success and sustainability for our investors

#### Global megatrends create new opportunities



## ZONES 5 + 6: SMART BUILDINGS

These zones highlight solutions for making buildings more efficient, such as smart buildings, reducing resources, and using sustainability to challenge suppliers on identifying innovative solutions.





## VALUING THE RETURN FROM INVESTMENT IN SKILLS OF LOCAL WORKERS



### SOCIAL CAPITAL ACCOUNTING



#### WHAT:

In 2003, we set up the Source Skills Academy training centre for retail and customer service training in collaboration with Sheffield City Council. In 2013, we carried out a review to evaluate the Academy's success and to identify initiatives with the greatest social impact; this focused on the intended outcomes of the Academy, principally attendees' skills and employability.

This showed that the Academy created an estimated Social Return on Investment (SROI) of £53.4 million or £3.70 for every £1 invested in its first 10 years.



#### WHY:

- Inform decision making and influence investment strategy by revealing which initiatives had the greatest social impact and were most cost effective around supporting local jobseekers, growing local businesses and supporting apprenticeships
- To communicate to local authorities the social value that can be generated for local economies through partnership initiatives with property developers



#### HOW:

- Placed monetary values on training outcomes to enable considerations of future investment alongside the values generated
- Independent consultants estimated the 'net additional value generated' from these activities using third party data
- Considered factors such as increased economic outputs and tax revenue from upskilling workers and from lower unemployment in the local area

## A FLAGSHIP STORE TO PILOT FOR SUSTAINABLE TECHNOLOGIES WHICH MEET TRADITIONAL HURDLE THRESHOLDS

CAPEX



### WHAT:

Building upon the £145m in cost savings achieved to date from the use of sustainable solutions in our stores, we wanted to deliver further innovation through design of sustainable technologies in our properties. This included developing a flagship sustainable store to prove concepts that could be rolled out across our entire portfolio.



### WHY:

- Prove the viability of new technologies so that they can be scaled up and rolled out across the business
- Drive further cost savings, for example, energy and carbon savings project to result in 30% lower energy costs
- Enhance employees' health and wellbeing, reinforce colleague engagement and provide a platform for community engagement
- Contribute to targets in our sustainability strategy, Plan A



### HOW:

- A cross-functional team of M&S architects, engineers and procurement experts identified sustainable store technologies with acceptable paybacks and rates of return
- The sustainable design options were appraised against standard hurdle thresholds (NPV, ROCE, payback and IRR) to demonstrate the projects' commercial viability
- Installed a range of new technologies e.g. recycling of waste heat and focus on refurbishment and recycling, where possible

## DELIVERING FINANCIAL AND SUSTAINABILITY BENEFITS HAND IN HAND – THE NEXT GENERATION OF TRIPLE ZERO STORES

CAPEX



### WHAT:

The aim was to demonstrate the benefits of sustainable stores through making our two largest new stores in Weymouth and Leicester the most sustainable stores yet – zero operational carbon and "off the grid" for energy, water neutral and, like all Sainsbury's stores, disposing of zero waste to landfill – they also had to be commercially viable and replicable.



### WHY:

- Accelerate progress towards our aim to become the UK's greenest grocer, which also reduces our energy costs and helps us to provide better savings for our customers
- Increase our financial return on investments – projects where carbon consumption has already been cut through investment in sustainable technologies are achieving better than expected financial results and accelerated cash back periods by one year



### HOW:

- Sought insight from experts on the proposed sustainable technologies at the pre-evaluation assessment stage
- Evaluated the proposed investments against our usual financial hurdles to ensure they were commercially viable (cash payback, NPV and IRR)
- Assigned a dedicated finance team to support the project to conduct financial appraisals and quantify cost savings
- Incorporated a range of proven sustainable technologies into construction, including electricity and heating from gas-fired CHP generators, a biogas offset scheme, and partnerships with community water saving projects

## ZONE 7: SAFE AND SOUND

This zone showcases the maturity maps for four of The A4S CFO Leadership Network projects. Come and see how you compare to others in these key areas.



## 2015 MATURITY MAPS



### **BENCHMARK YOURSELF FOR THE FOLLOWING TOPICS:**

- Integrated Management Reporting
- Strategic Planning, Budgeting and Forecasting
- Social and Human Capital Accounting
- Natural Capital Accounting

### **YOU CAN ALSO BENCHMARK YOURSELF ON:**

- Managing Future Uncertainty (go to Zone 1, 2 + 3)
- Capital Expenditure Appraisal (go to Zone 5 + 6)

## ZONE 8: KEEP MOVING

This zone explores the increased need for transport infrastructure, covering green transport choices, integrated traffic solutions and e-mobility. It also includes how business is using environmental factors within decision making to reduce impact and save costs.

THE KEY SECTIONS TO SEE IN THIS ZONE ARE HIGHLIGHTED IN BLUE ITALICS

**A4S Case Study  
National Grid**

*Electrifying transport*

*Learn how the future of transport in cities is being driven by the provision of clean electricity*

**KEEP  
MOVING**

*The last mile*

*Learn how intelligent freight and logistics systems can be used to provide integrated last mile deliveries*

*How did you get here today?*

*Calculate the CO<sub>2</sub> footprint of your journey*

### NEXT STEP OPTIONS:

- Go to Zone 9 'Go Electric' to learn about the new electricity age
- Or to Zone 7 'Safe and Sound' to benchmark yourself on:
  1. Integrated Management Reporting
  2. Strategic Planning, Budgeting and Forecasting
  3. Social and Human Capital Accounting
  4. Natural Capital Accounting



## DELIVERING VALUE THROUGH SUSTAINABLE DESIGN



### WHAT:

In 2011, we began a seven year project to rewire London's high voltage electricity network via deep underground tunnels. We worked with our suppliers to develop innovative designs that minimised carbon emissions and waste as well as delivering significant cost savings.



### WHY:

- Experience had taught us that lower carbon and lower waste equals lower cost
- Embedding sustainability into our design led to upfront cost savings of £3 million
- We want to achieve long term operational cost reduction. We estimate £400,000 will be saved from lower energy running costs over 20 years.
- The carbon savings we achieved of over 40% are helping to meet corporate reduction goals



### HOW:

- Worked with suppliers to develop more innovative standard tunnel designs that minimised carbon emissions and waste
- Used a carbon modelling tool to measure the projected carbon emissions for different design options
- Qualitatively compared the sustainability characteristics of different options by using a Sustainable Options Appraisal Tool

## ZONE 9: GO ELECTRIC

This zone highlights the difficulty of matching energy supply with demand and providing clean energy. It presents solutions for energy generation, smart grids, energy storage and uptake of renewables.

THE KEY SECTIONS TO SEE IN THIS ZONE ARE HIGHLIGHTED IN ORANGE ITALICS

*Sustainable Power*  
Learn about energy generation mixes and how we need clean, safe, sufficient power supply from multiple sources

*Banking energy*  
Learn about the growing efficiency of energy storage systems

**A4S Case Study SSE**



*Moving energy around the world*  
See how energy transmission and distribution are made more efficient with the supergrid

### NEXT STEP OPTIONS:

- Go to Zone 10 'Water is Life' to find out about the importance of water and solutions for managing it more effectively
- Or Zone 11 'Healthy Life' to learn about the impact of aging populations on healthcare systems





## UNDERSTANDING THE VALUE OF OUR HUMAN CAPITAL AND THE IMPACT IT HAS ON BUSINESS PERFORMANCE

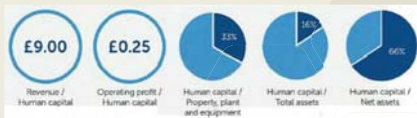


### SOCIAL & HUMAN CAPITAL



### WHAT:

We calculated the economic value of our human capital (£3.4 billion in 2014) to develop our understanding of the primary drivers for either enhancing or eroding it. This was benchmarked against several of our key financial indicators to assess its relative importance to our overall business.



Benchmarking our human capital against key financial indicators



### WHY:

- Assess the business and societal case for creating sustainable jobs and investing in training and development
- Progress our understanding of what it takes to be a good employer that individuals want to work for over a prolonged period of time
- Help us to explore what impacts our human capital, for example retention rates, incentives, skills development and ability for career development



### HOW:

- We used an income based approach to estimate the value of our total 'stock' of human capital
- This assumed that (i) the value of each individual's human capital is equivalent to their expected total lifetime earnings and (ii) the company's human capital is the sum of that embodied within all employees for the duration of their employment in the organisation

$$\begin{array}{c} \text{Sum of} \\ \text{expected future} \\ \text{labour earnings} \end{array} \times \begin{array}{c} \text{Adjustments} \\ \text{for time spent} \\ \text{with SSE} \end{array} \times \begin{array}{c} \text{Discount factor} \end{array} = \begin{array}{c} \text{Economic} \\ \text{value of} \\ \text{human capital} \end{array}$$

## ZONE 10: WATER IS LIFE

This zone focuses on the importance of water and explores solutions for managing it more effectively.

THE KEY SECTIONS TO SEE IN THIS ZONE ARE HIGHLIGHTED IN BLUE ITALICS

*Reduce your water footprint  
Try the water footprint calculator*



*Drinking from the ocean  
Learn about desalination technology*

*Harvest the rain  
Learn about the technology available for harvesting rainwater*

*Put a plug in it  
Find out about technology used for leakage monitoring and prevention*

**A4S Case Study  
South West Water**

### NEXT STEP OPTIONS:

- Go to Zone 11 'Healthy Life' to learn about the impact of aging populations on healthcare systems
- Or Zone 12 'Clean and Green' to find out about the latest technologies for using resources efficiently



## INVESTING IN NATURAL ASSETS IN PREFERENCE TO CAPITAL ASSETS, DELIVERING BENEFIT TO COST RATIO OF 65:1



### NATURAL CAPITAL ACCOUNTING



#### WHAT:

Natural capital accounting was used to identify a new approach to assess investment decisions that would deliver improvements to water quality. This highlighted that investing in natural assets upstream, through collaborative work with third parties to improve upstream catchment areas, was preferable to capital investment in water treatment plants. This move away from traditional intensive water treatment approaches signalled a new 'preventative' rather than 'detective' approach, which helps avoid capital investment and improves security of supply.



#### WHY:

- Looking for innovative solutions to reduce operating costs by taking preventative measures to create a better long term payback
- Avoid or defer capital investment in new plants, and reduce energy use and chemical costs – identified a benefit to cost ratio of 65:1
- Improve security of supply and increase resilience to climate change
- Reduce pollution at source by investing in natural assets
- Carbon savings from restoration of peat land



#### HOW:

- Used a range of techniques to quantify and value projected benefits drawing upon natural capital accounting
- Finance team helped to calculate and communicate the tangible benefits to investors, regulators and wider stakeholders to gain their support
- Collaboration across the business and with third parties outside our asset base e.g. farmers and other land users to implement the solutions

## ZONE 11: HEALTHY LIFE

This zone shows the impact of a growing and aging population on healthcare systems and highlights solutions, including reducing costs through efficient processes and infrastructure.

THE KEY SECTIONS TO SEE IN THIS ZONE ARE HIGHLIGHTED IN RED ITALICS

*Live well*  
Learn about changing to healthier behaviours

*Healthy healthcare*  
Learn how more efficient public healthcare can speed up treatments and improve outcomes

HEALTHY LIFE

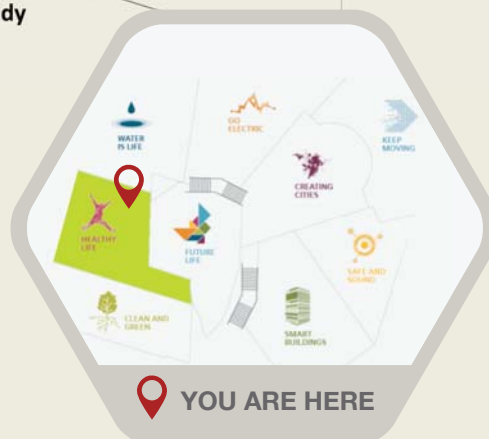
A4S Case Study  
Bupa

*Catch it early*  
Find out how scanning and diagnostics can help identify diseases early

*Personalised medicine*  
See how medical treatments can be tailored to individuals, enabling better outcomes

### NEXT STEP OPTIONS:

- Go to Zone 12 'Clean and Green' to find out about the latest technologies for using resources efficiently
- Or Zone 14 'Future Life' to record your "Imagine if..." video



## DEVELOPING AN INTEGRATED PERFORMANCE TRACKER FOR OUR 2020 VISION



### INTEGRATED MANAGEMENT REPORTING



#### WHAT:

To create a common framework with financial, employee, environmental, health and customer measures for tracking progress against our long term aspirations for 2020.

The results are reported to our Executive and Leadership teams on a quarterly basis who use it to assess progress, determine priorities and refine aspirations.



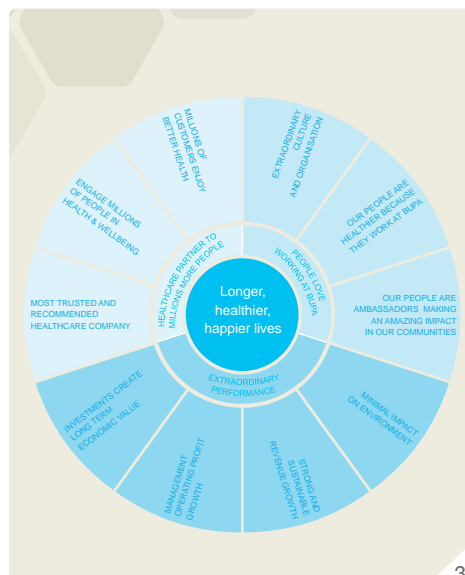
#### WHY:

- To give top management oversight of the level of progress made across all areas of our 2020 vision
- To highlight areas not previously tracked, identify priority areas for action and give the wider business an understanding of progress



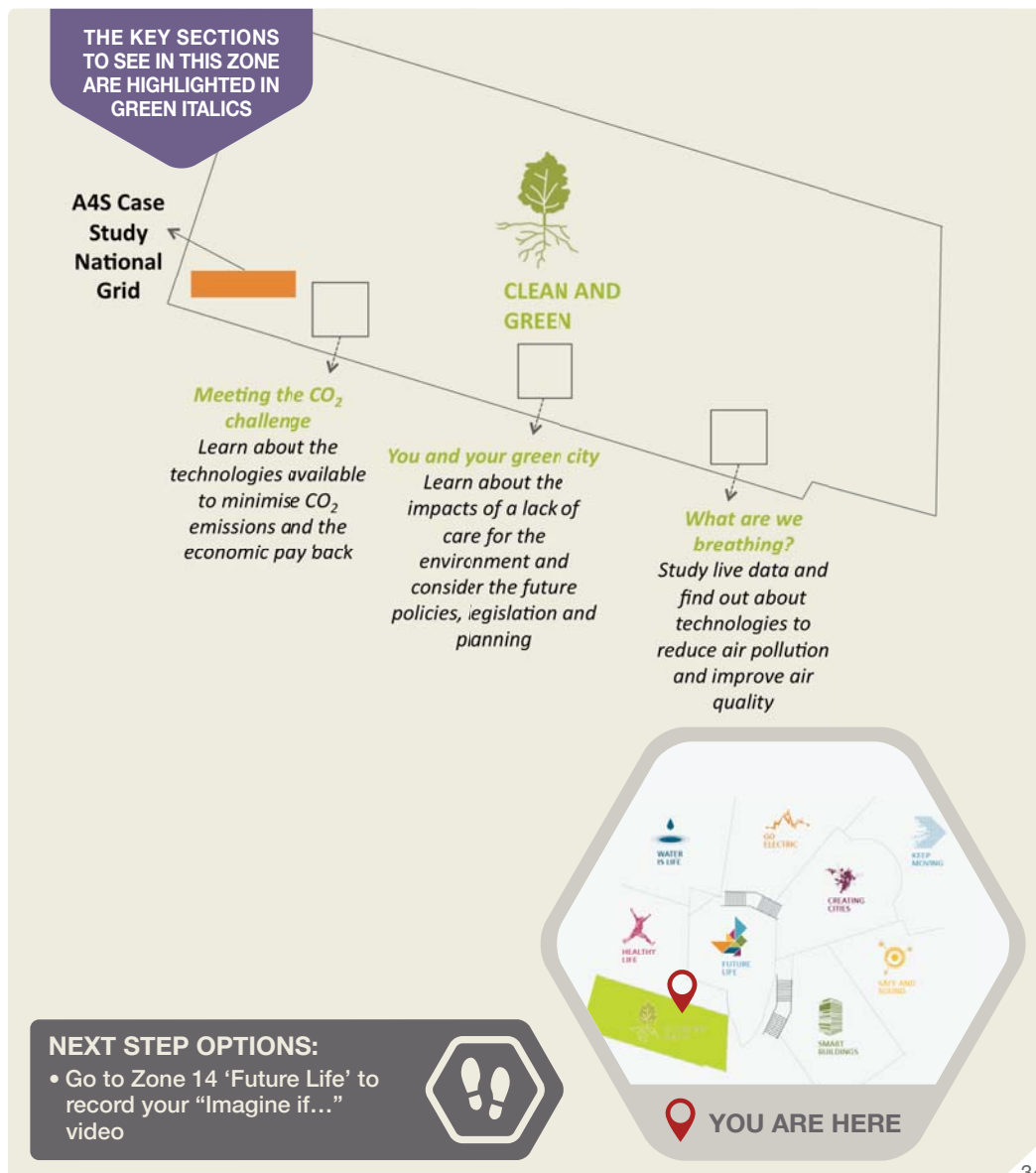
#### HOW:

- The coordination of the development and subsequent tracking of performance was led by the finance team, alongside representatives from across the business
- A selection of the scorecard measures are used within our Long Term Incentive Plans to assess overall performance and associated remuneration. This has led to a strong sense of ownership and a focus on actions to influence measures that are not on track.



## ZONE 12: CLEAN AND GREEN

This zone exhibits the pressure that increased waste, pollution and reduced air quality places on our environment. It showcases how businesses are responding to this.



## INCORPORATING NATURAL CAPITAL IN DECISION MAKING BY USING AN ACCOUNTING TOOL THAT ESTIMATES MONETARY VALUES



### NATURAL CAPITAL ACCOUNTING



Placing monetary values on key natural capital values enables these to be incorporated into investment decisions and facilitates scenario planning.

#### WHAT:

Developed an analytical tool which monetises natural capital. It does this by estimating the value of 12 benefits it provides (e.g. flood control, recreation, air quality) in order to support decision making for estate management.



#### WHY:

- Quantify natural capital stocks, assess the value of the services and identify risks and opportunities for value creation
- Support decision making on investment strategies by allowing monetised values to be used in scenario planning for different investment options
- Reduce costs and build long term growth – we have found investing in natural capital can leverage more than eight times the initial financial investment

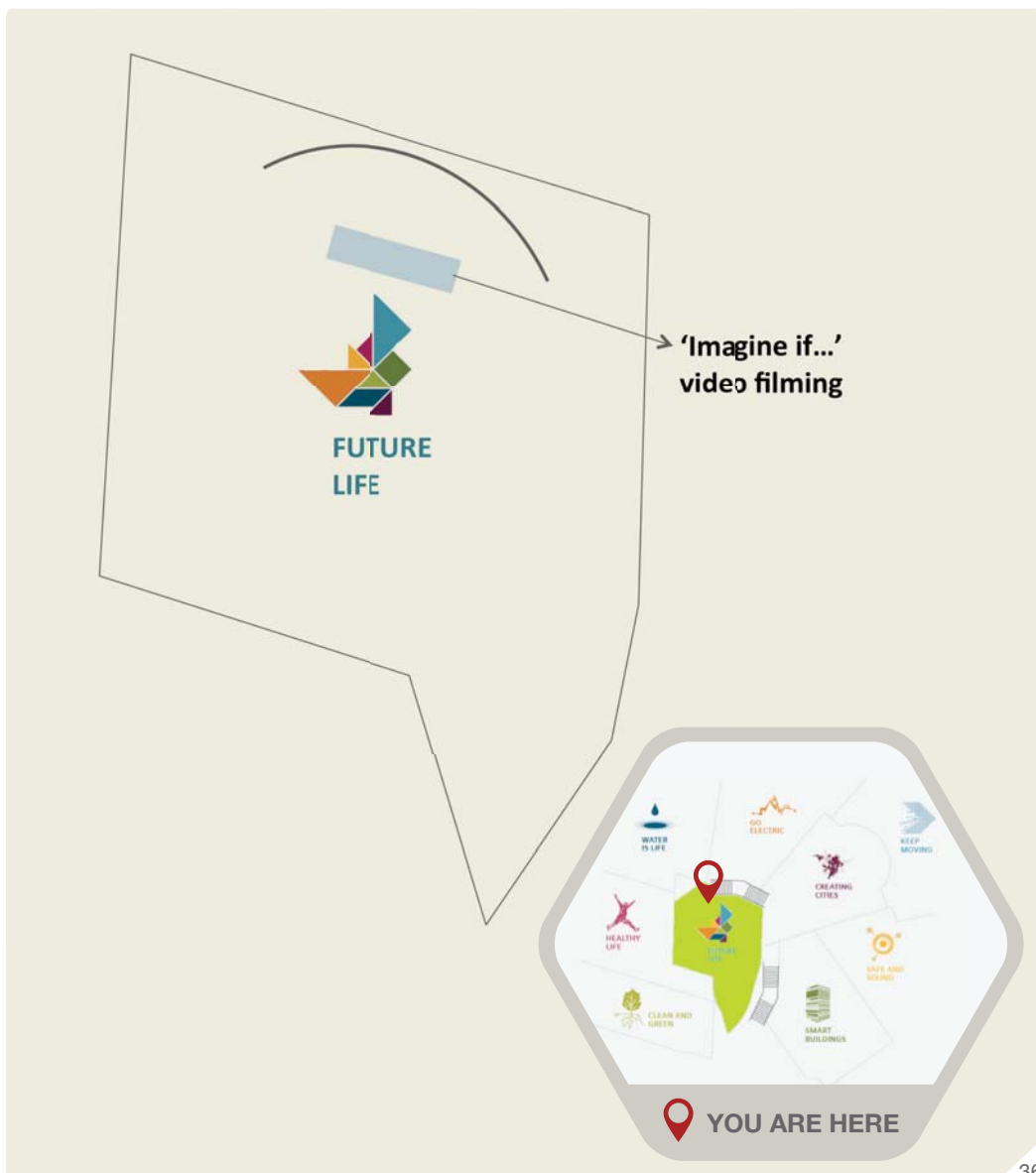


#### HOW:

- Worked with experts to develop a tool that incorporates respected valuation techniques and publicly available values
- Workshops and consultations to adapt the tool so it meets the needs of business users
- Brought information on each benefit type together in a clear and simple way that can be used in scenario planning, for different options, with a current 'as is' baseline vs results from a number of different site management and development scenarios
- Now used on a site by site basis with a view to roll out to all majors sites by 2020

## ZONE 14: FUTURE LIFE

This final zone has been set aside as a hub for you to record your “Imagine if...” video to inspire others to act.





## VIDEO RECORDING HUB 'IMAGINE IF...'



Guests will have the opportunity to record a short message during the evening by visiting the recording hub located in this zone. This will form part of a campaign that A4S is launching at the Summit titled "Imagine if...".

Each video clip will be approximately 50 to 80 words or 30 seconds, and should begin with an aspirational but realistic goal followed by a very short summary of what you or your organisation is doing in response, including the commercial benefits expected.

*“Imagine if we could reach zero carbon emissions for all properties by 2025. Here at Company A, we are on track to get there – all our new stores are zero carbon and we are now developing technologies that enable us to retrofit our old properties. In addition to reducing the risk of dangerous climate change, our efficient store design has saved us over XX million dollars to date. Imagine if you did the same.”*

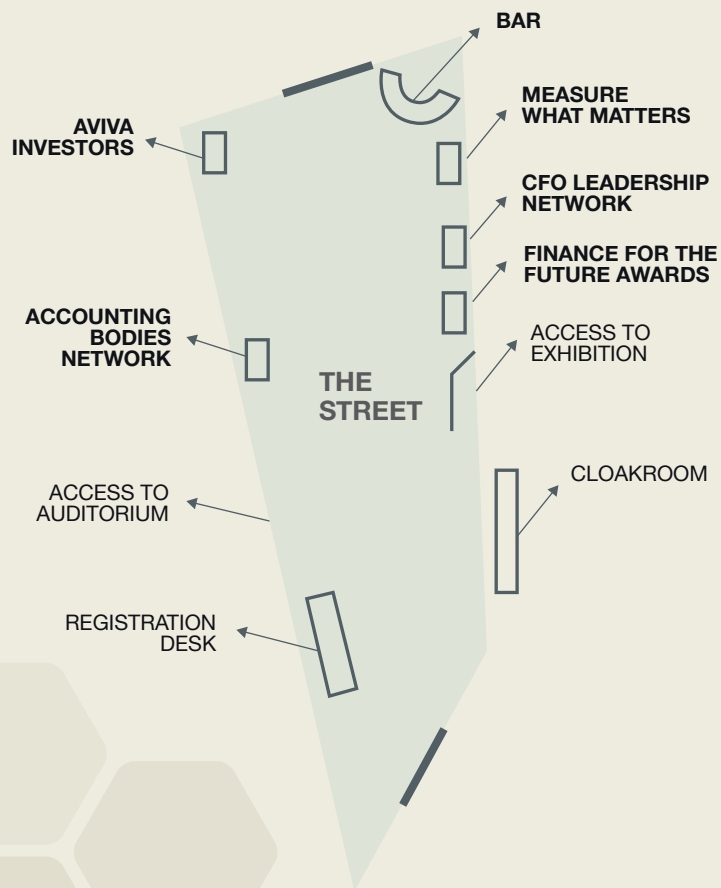
*“Imagine if all asset owners selected their fund managers based on ability to take environmental and social risks and opportunities into account across the whole portfolio. At Pension Fund A, we monitor the performance of our funds and fund managers based on environmental and social criteria alongside financial ones. Our track record shows it is possible to protect the financial interests of our beneficiaries as well as investing for a sustainable future. Imagine if you did the same.”*

## EVENT MAP

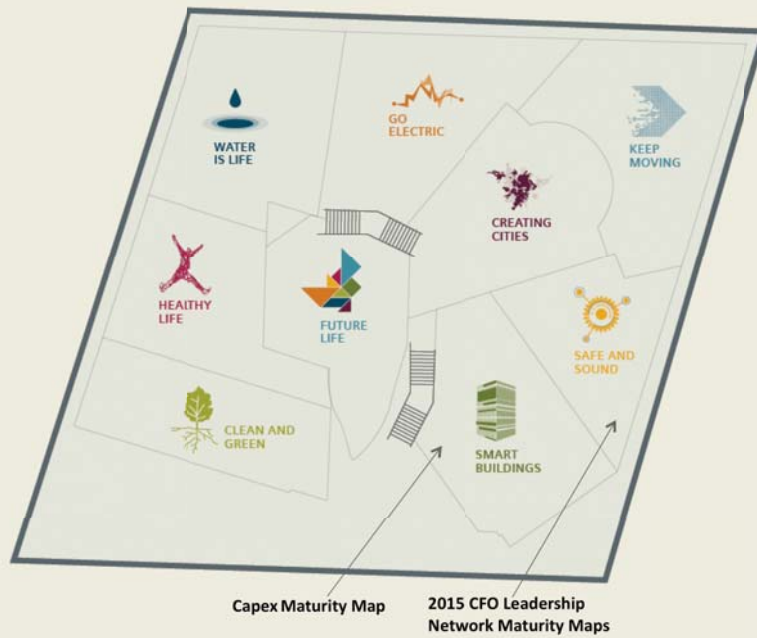
Please see below maps for different areas within The Crystal:

1. The Street
2. The Ground Floor Exhibition Space
3. The Upper Floor

### 1. THE STREET



## 2. THE GROUND FLOOR EXHIBITION SPACE



## 3. THE UPPER FLOOR - FORCES OF CHANGE (ZONES 1-3)

