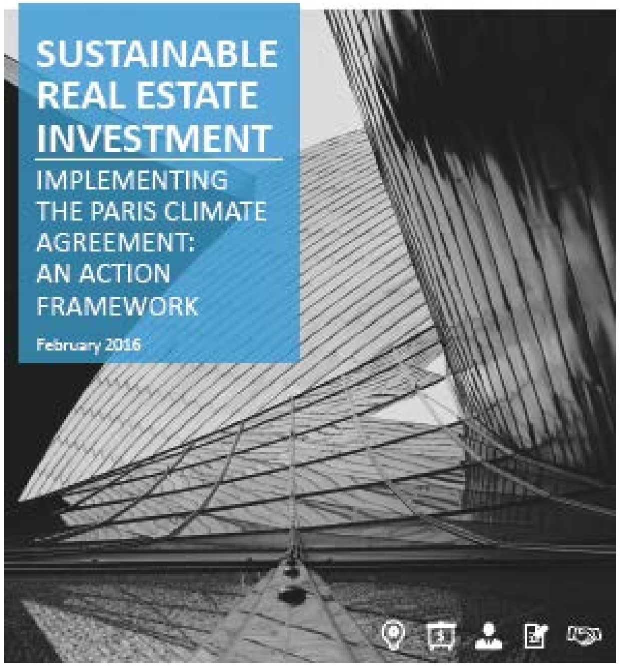
SUSTAINABLE REAL ESTATE INVESTMENT

Implementing the Paris climate agreement: an Action Framework



About UNEP FI

Founded in 1992 in the context of the "Earth Summit" in Rio, UNEP FI is a platform associating the United Nations and the financial sector globally.

Changing Finance: promoting the integration of sustainability concerns into mainstream financial system, and financial institutions' operations and decisions in all markets, as well as in their general business and governance.

Financing Change: mobilizing finance to foster a more sustainable economy.

UN Environment Finance Initiative

Working with the world's leaders in sustainable finance

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AFTER PARIS, TIME FOR ACTION

- In Paris, governments committed to limit temperature increase to 2°C, possibly 1.5°C, and phase out fossil fuel by the end of the century
- For the buildings sector to comply with that, it needs to reduce its CO_2 emissions by 77% compared to today's levels
- Role of the private sector was explicitly recognised in the final agreement.

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IIGCC
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PRI Principles for Responsible Investment
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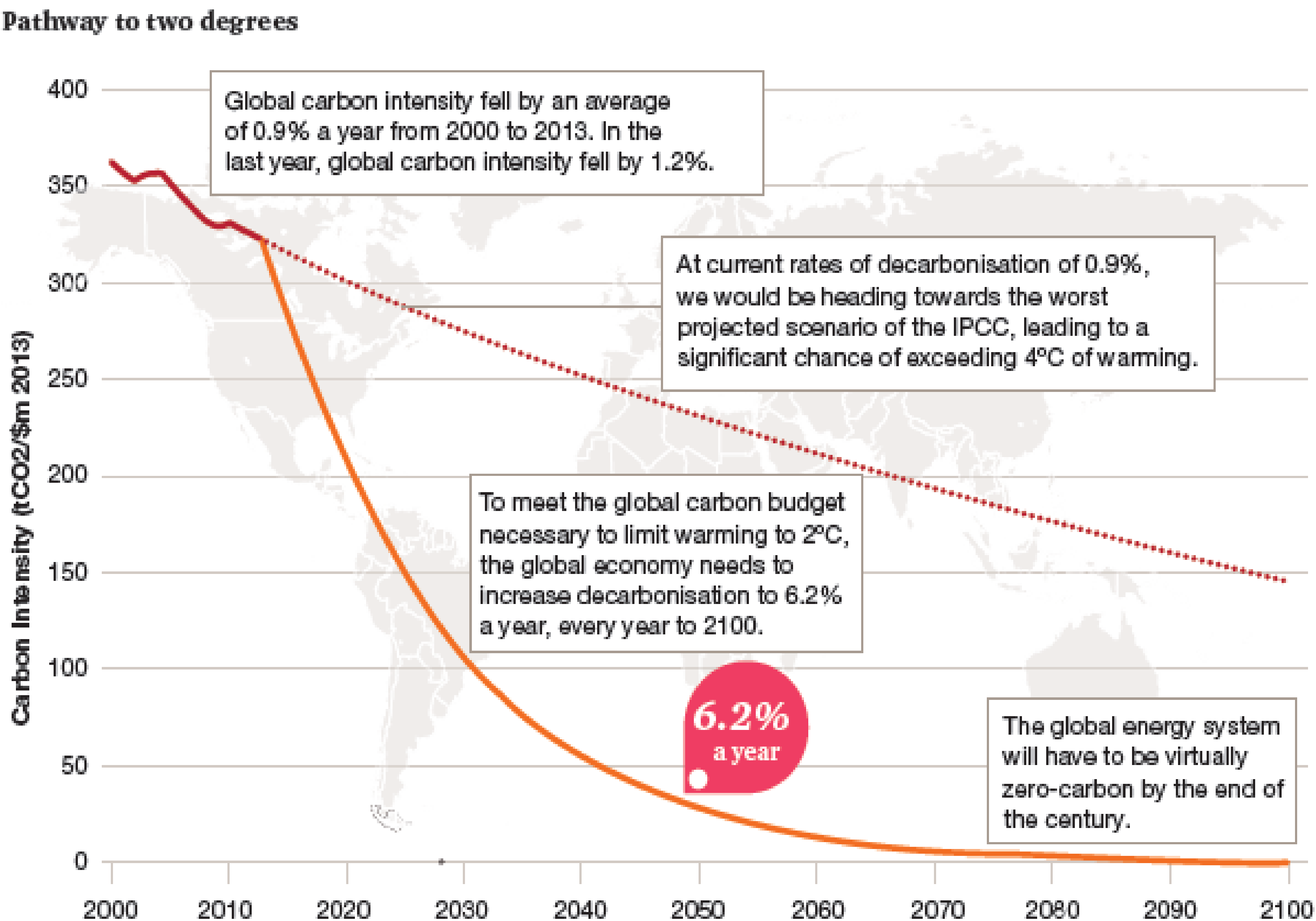

SOURCE: PWC Low Carbon Economy Index 2014

After Paris…

- Regulatory changes affecting investors are likely to increase.

- Physical impacts of climate change continue to pose risks to real estate.

REGULATORY TRENDS

- **In Europe**, the EU non-financial reporting directive on disclosure of non-financial and diversity information
- **In Australia**, SASB envisions a world where a shared understanding of corporate sustainability performance
- **In Japan** the Corporate Governance Code requires companies to take appropriate measures to address sustainability issues .

EXTREME WEATHER EVENTS

In 2070, 150 million people in the world's large port cities will be at risk from coastal flooding, along with US$35 trillion worth of property – 9% of global GDP.

FINANCIAL RISKS

Global direct losses to real estate and infrastructure by re-insurance companies were US$150 bn annually between 2002 and 2012.

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Opportunities to be seized

- **Enhance investment performance**
- **Productivity and socio-economic benefits to society, including job growth and increased employee productivity.**

Growing **evidence connects "green real estate" positively with investment fundamentals:**
• increased client demand, lower vacancy lengths, reduced rates of depreciation, lower operational costs, and higher liquidity;
• **lower risk of mortgage default** for green and energy certified office and residential buildings compared to non-certified properties.

A EU study found that **health benefits** from energy efficiency improvements in buildings could be worth **€40-80bn a year**.

The **investment opportunity** in energy efficiency building retrofits globally is around **US$300 bn annually** by 2020.

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FIDUCIARY DUTY

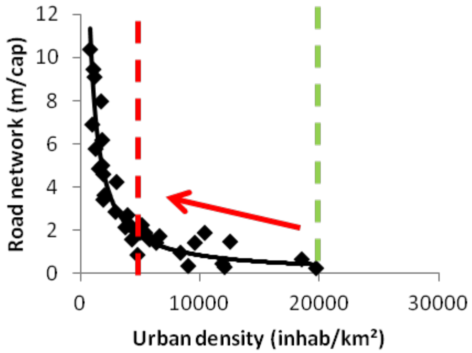
"Every real estate asset owner, investor and stakeholder must now recognise they have a clear fiduciary duty to understand and actively manage environmental, social, governance (ESG) and climate-related risks as a routine component of their business thinking, practices and management processes."

Now is the time to act

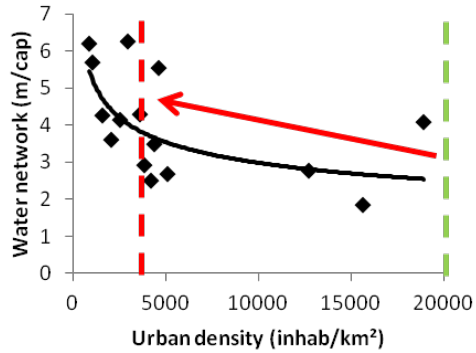
The importance that investors, regulators, other stakeholders and occupiers place on strategies to curb energy consumption and carbon pollution can only increase from here.

No matter where each organisation is on the journey to address these risks, now is the time to review investment programmes and benchmark current practices.

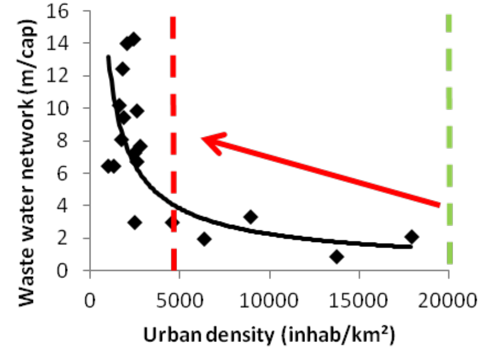
Low density increases infrastructure costs, energy consumptions and carbon emissions



Road Network

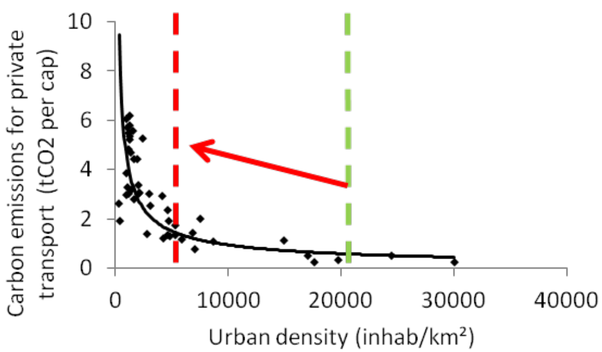


Water Network



Waste water Network

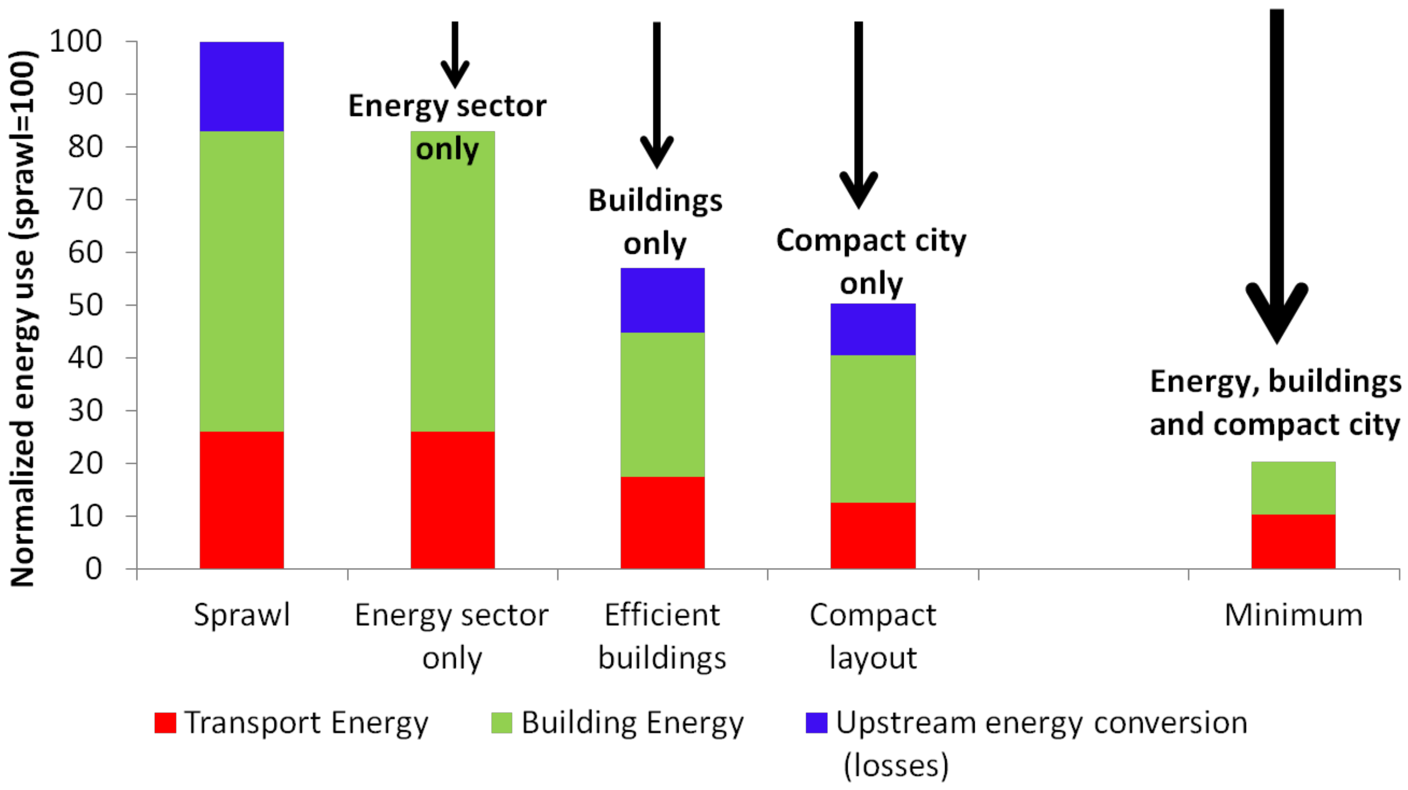
From Paris or Manhattan (≈20,000 inhab/km²) to the average Chinese city (5,000 inhab/km²)



Carbon emissions for transport per capita

- Road network investment cost per capita **+ 300%**
- Water network investment cost per capita **+ 40%**
- Waste water network investment cost per capita **+ 200%**
- Carbon emissions for transportation per capita **+ 150%**

Relative impact of individual policies
Compact urban form is the most powerful leverage



Adapted from GEA, 2013

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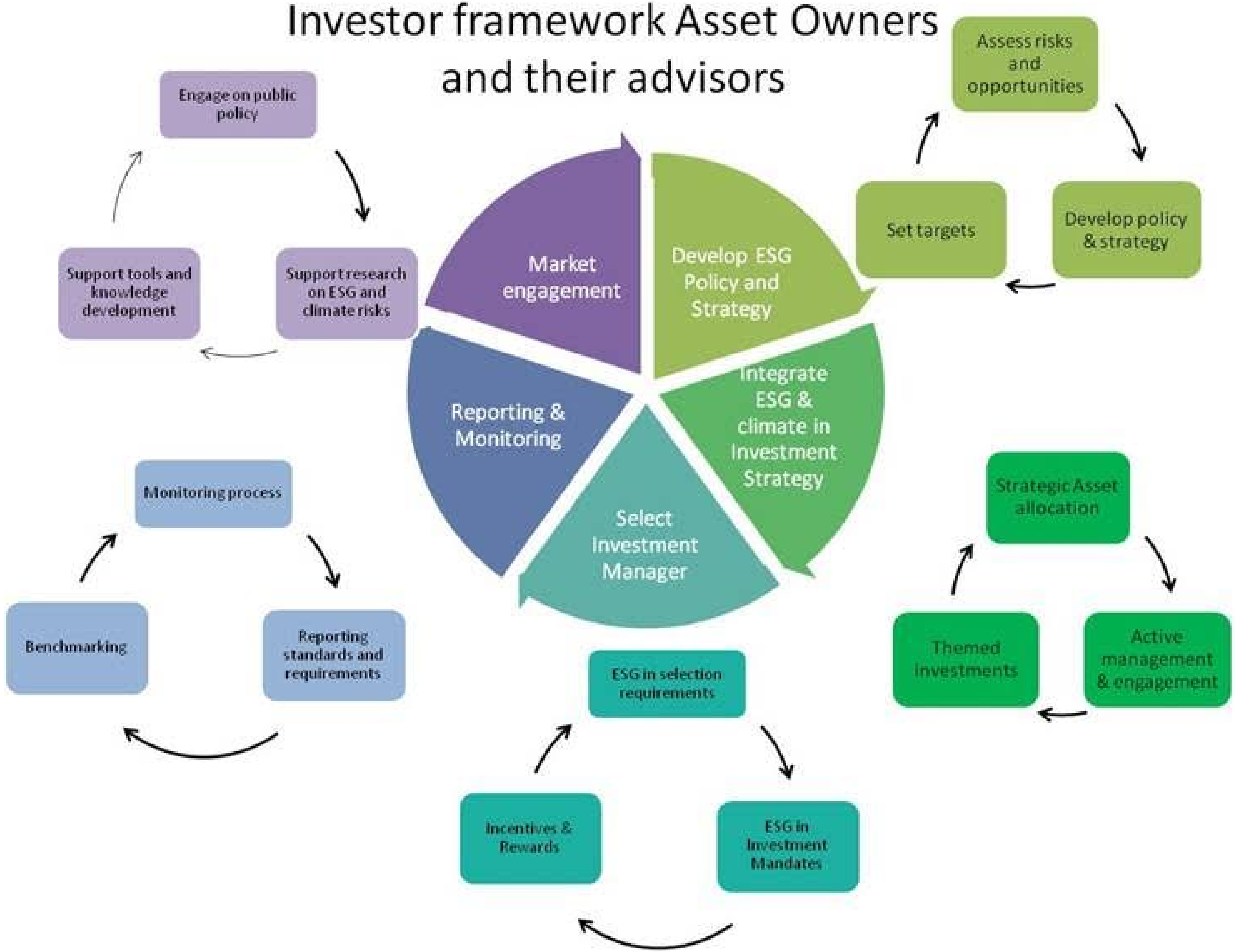
Investor framework Asset Owners and their advisors



The Action Framework

- Step-by-step framework and clear signposts for action to “flip the switch”
- Tool mapping to make sense of the abundance of tools, resources and information published over the last 5 years
- Focus the attention as to where to start and/ or how to increase the ESG integration with clear ‘should’ and ‘could’ actions

Audiences:

Asset Owners and Trustees and their Investment Advisors,

Direct Real Estate Investment Managers and Property Companies and their Real Estate Consultants,

Real Estate Equity and REITS, Bond and Debt Investors and their Financial Advisors.

The Action Framework

Compiled and written by sector practitioners and coordinated by UNEP Finance Initiative's property working group (PWG)

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Project partners

Investor Group on Climate Change, Institutional Investors Group on Climate Change, Investor Network on Climate Risk, Principles for Responsible Investment, Royal Institute of Chartered Surveyors, UNEP Finance Initiative

Why use this guide?

Explains how informed and active asset management around climate and ESG represents a clear business opportunity.

Emphasises the physical impacts of climate change and highlights the potential socio-economic benefits of integrating climate and ESG.

Distils material from many sources into one guide that is easy to use and helps every type of real estate investor make sense of available resources.

Offers a Framework for all enabling alignment along often complex supply chains, as there is no size barrier for organisations addressing ESG and climate risks.

Provides investors with guidance for managers and advisors to move from inquiry and disclosure to prescriptive requests focusing on performance.

SUSTAINABLE REAL ESTATE INVESTMENT.

IMPLEMENTING THE PARIS CLIMATE AGREEMENT : AN ACTION FRAMEWORK .

Audiences
Real Estate Investors

- Owners & Advisers
- Direct Investor
- Equity, Bonds, Debt
- All

STEPS

Strategy: Develop ESG & climate Strategy

Execution: Integrate ESG & climate in Investment Strategy
- Owners & Advisers
- Direct investors
- Equity Bonds Debt

Alignment: Advisers and consultants selection process

Feedback loop: Monitoring & Reporting

Market Engagement

MUST DO ACTIONS

Strategy
- Assess material risks and opportunities that impact value.
- Develop ESG and climate strategy based on materiality and value assessment.
- Set ESG and Climate targets at all levels of the investment process and across the supply chain.

Execution – Owners & Advisers
- Passive mandates: Base selection on sustainability benchmarks and green property ratings.
- Active ownership: Prefer investment managers with proven active management approaches.
- Active engagement & proxy voting: Require equity and REIT investors to use shareholder power.

Execution – Direct investors
- Include ESG in investment calculations, due diligence with targets for green certification & benchmarking.
- Active Management: Clear set of ESG, community and climate targets and minimum requirements for green developments.
- Supply Chain: Work with occupiers to address split incentives and include ESG in sub-contractors agreements.

Execution – Equity Bonds Debt
- Equity/REITs: Select managers with proven active investment approaches; Be active in engagement & proxy voting.
- Bonds: Require green property bonds to be certified by recognised standards and information on assets' sustainability performance.
- Debt: Integrate ESG in due diligence at transaction, valuation assessment and include in loan documentation.

Alignment
- ESG in selection requirements: Require proven knowledge of sustainability; set clear and prescriptive ESG expectations.
- Include ESG and climate expectations and targets in legal contracts for investment mandates & service agreements.
- Incentivise and reward contractors based on delivering sustainability goals.

Feedback loop
- Monitor delivery of ESG and climate strategies and targets, focusing on impact to value using Sustainability Management Systems.
- Report performance to clients and the public, on agreed frequency, using recognised industry standards.
- Contribute to sustainability benchmarking at portfolio and operational levels and assess performance results.

Market Engagement
- Engage on public policy with sector organisations to ensure regulation matches with market needs.
- Support research initiatives to understand risks and integrate ESG.

Strategy: Develop ESG & Climate Strategy

STEPS

Strategy: Develop ESG & climate Strategy

Set ESG and Climate targets at all levels of the investment process and across the supply chain.

Asset owners & their advisors

Set targets	SHOULD ✓ Determine and set appropriate, verifiable and material targets, both quantitative and qualitative, to manage environmental, social and governance issues in their portfolios. Issue clear directives to external managers or REITs managing their property assets to deliver these targets, including requirement for their executives to be responsible for delivery of performance. Targets can include: • Quantitative and material targets to reduce energy, carbon intensity, water and waste of the portfolio over specified timeframe. • Set a goal to measure and reduce the environmental/ resource intensity of a portfolio against relevant benchmarks over a given time period. • Set qualitative targets for achieving relevant green property certifications for a percentage of the portfolio over a specified timeframe, targets can aim to grow over time. • Set quantitative and qualitative targets to address social impacts of the portfolio, including community engagement and contribution to local communities. • Set quantitative targets for the inclusion of green lease clauses in the lease agreements with tenants. • Set quantitative targets to measure and provide minimum quality levels for indoor air quality, affecting health and productivity. • Target for a specified proportion of the fund's assets in real estate to be powered by clean energy, to be highly energy efficient, to achieve minimum requirements for renovations, or to be "best in class" with respect to resource intensity. • Require periodic reports on progress against targets. COULD ~ Engage with property managers, operators and maintenance to ensure that "best in class" energy/ carbon reduction technologies and operating procedures are in place across a growing percentage of the managed portfolio over a given timeframe. Require ESG and climate risk "learnings" to be socialized among internal stakeholders.

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Strategy: Develop ESG & Climate Strategy

Recommended resources, excerpt

"Investing in a time of climate change" Mercer 2015, Global
"An-Investment-Framework-for-Sustainable-Growth"
Mercer 2014
"Climate change scenarios: Implications for strategic asset allocation" Mercer 2011

These three studies help asset owners and investors better understand and estimate the impacts of climate change on investment strategies and financial performance. They address the following questions: Which financial impact could climate change have- at which magnitude and when? What are the key risks and opportunities, how do we manage and integrate those into current investment processes?; Which actions could an investor take to become more resilient to climate change?

"Climate Change Investment Solutions Guide"
IIGCC 2015, Europe

The aim of this guide is to provide asset owners with a range of investment strategies and solutions to address the risks and opportunities associated with climate change. While the guide is targeted at asset owners it also contains insights for asset managers which are directly relevant to equity real estate investors. The guide proposes a four-step framework for considering climate change investment solutions. It also affirms that corporate and policy engagement are important complementary strategies, which can address climate change risks across portfolios and facilitate new investment opportunities. It provides specific questions that asset owners and investors can ask the companies they invest in, to reduce and report their carbon intensity.

"Developing an asset owner climate change strategy"
PRI 2015, Global

This pilot framework offers a step-by-step approach for addressing climate change across three main strategies: engage, invest and avoid. Case studies outline existing examples of asset owner action, including several initiatives that have been started by project participants during the project.

"Advancing Responsible Business in Land, Construction and Real Estate Use and Investment"
RICS / UN Global Compact, 2015, Global

The document provides a guide to the practical application of the 10 principles of the UN global Compact to the land, construction and real estate sectors. It helps set the strategic agenda for companies operating in the sector, real estate users and investors, through clear action items supported by a list of benefits and real life case studies.

"Investing through an adaptation lens", IGCC 2015
'Assessing climate change risks and opportunities for investors - Property and Construction Sector'
IGCC 2013, Australia

The later guide provides practical insights on how investors can and should be investing through an adaptation lens.
The former provides information to help investors assess and integrate climate risk and opportunity within the property and construction sector into investment analysis.
The guide covers the following key areas and steps for this process: Identify current risks; Identify risk variance and impacts; Identify the adaptation strategies and mitigation measures; Assess materiality. The guide then proposes steps to integrate the information into investment processes.

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Execution: Integrate ESG & climate in investment strategy

STEPS

Execution:
Integrate ESG & climate in Investment Strategy

Owners & Advisers

Active engagement & proxy voting: Require equity and REIT investors to use shareholder power.

Asset owners & their advisors

Active engagement & Proxy Voting	
	SHOULD ✓ Require equity investment managers to actively engage with underlying listed real estate companies or investment managers, need to ensure they: • Have dedicated procedures in all investment management phases: asset acquisition, management, operation, upgrade, rental, planning and manager selection which are impacted by ESG and climate risk strategy. • Monitor portfolio and underlying real estate assets performance in carbon, energy and natural resource intensity (e.g.: portfolio level and individual asset case studies), and social impacts such as community engagement and contribution to local communities. • Use relevant Real Estate sustainability benchmarks to monitor and compare absolute and performance against peers. • Publicly report their ESG and climate risk assessments and management activities. • Engage with managers and request them to report on the extent to which they support or resist ESG and climate risk policies at the regulatory level. Require equity investment managers to use their shareholders right to contribute to proxy voting including: • Supporting motions that strengthen ESG and climate risk management. • Introducing motions to request active management of ESG and climate risk. **COULD** ~ Monitor manager performance at asset level: • Require reporting based on relevant asset level benchmark. • Require detailed monitoring and reporting through integrated and seamless data management systems providing building and asset level information to owners in a timely, usable way.

Execution: Integrate ESG & climate in investment strategy

STEPS

Execution:
Integrate ESG & climate in Investment Strategy

Direct investors

Include ESG in investment calculations, due diligence with targets for green certification & benchmarking.

Direct investors

Investment strategy: ESG in investment calculations and valuations

SHOULD ✓

Be more explicit about how sustainability affects the value of individual assets and the risk of depreciation of entire portfolios.

- Measure how these factors impact on real estate investment performance and how they influence real estate market fundamentals.
- Capture the value of property level sustainability investment at the fund or corporate level Leverage work of RICS and US Appraisal Institute to work with valuation professionals and adopt internal investment models to integrate ESG and climate risks considerations in the assessment of value.
- Provide valuers with building sustainability characteristics information.
- Collaborate with valuers to incorporate sustainability data as part of the standard valuation assessments.
- Consideration should be given to the impact on a property's likelihood to command top market rents, become vacant, remain vacant, and other market fundamentals that drive value.
- Request valuers' opinion on risk posed by the sustainability characteristics of buildings, according to RICS rules.

COULD ~

Integrate ESG and climate risk information into the discounted cash flow models of real estate investments and the valuation assessment of portfolios.

- Working on Discounted Cash Flow models taking account of sustainability metrics.
- Link existing Discounted Cash Flow models with Monte Carlo Simulation techniques.

Execution: Integrate ESG & climate in investment strategy

STEPS

Execution:
Integrate ESG & climate in Investment Strategy

Equity
Bonds
Debt

Debt: Integrate ESG in due diligence at transaction, valuation assessment and include in loan documentation.

Equity, bond & debt investors

Debt Portfolios	SHOULD
	Integrate ESG and climate criteria into valuation and debt investment assessments. Due diligence issuer for ESG and climate risks at transaction points with a focus on: Energy Performance Certificates, Flood Risks, Green Building Certifications, On-Site renewable Energy Generation, EcoPAS Questionnaire, Borrower Sustainability Credentials. Include ESG and climate risk factors in loan documentation (if involved in the primary issuance or private placement). Evaluate managers on their use of ESG and climate criteria in daily fund management activities.
	COULD
	• Review existing loan portfolios for ESG and climate risk. • Require ESG and climate risk data from issues of all existing loan portfolios. • Consider divestment from issuers with "worst in class ESG and climate performance".

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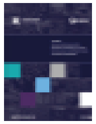
Execution: Integrate ESG & climate in investment strategy

Recommended resources, excerpt

"Advancing Responsible Business in Land, Construction and Real Estate Use and Investment"
RICS / UN Global Compact, 2015, Global

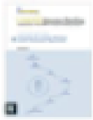


The report helps set the strategic agenda for companies operating in the sector, real estate users and investors, through clear action items supported by a list of benefits and real life case studies.

"Assessing climate change risks and opportunities for investors - Property and Construction Sector"
IGCC 2013, Australia

This guide provides information to help investors assess and integrate climate risk and opportunity within the property and construction sector into investment analysis. The guide covers the following key areas and steps for this process: Identify current risks; Identify risk variance and impacts; Identify the adaptation strategies and mitigation measures; Assess materiality. The guide then proposes steps to integrate the information into investment processes. The follow up guide in 2015 provides practical insights on how investors can and should be investing through an adaptation lens.

"Unlocking the energy efficiency retrofit investment opportunity"
UNEP FI 2014, Global



The energy efficiency report provides a detailed briefing on the business case and why investors should invest in energy efficiency retrofit opportunities. It provides a clear and simple seven-step approach to effectively increase the supply of financeable energy retrofit projects in real estate portfolios.

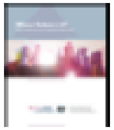
"Trustee's Guide: Protecting value in real estate through better climate risk management" IIGCC 2014

This guide covers the key questions which asset owners and investment managers should be asking themselves when developing their ESG and climate policy and strategy and their investment strategy to integrate ESG and climate risks into their businesses. It covers four areas: Assessing risks and opportunities, managing regulatory risks, manager selection, incentives and rewards.

"Sustainability metrics: translation and impact on property investment and management"
UNEP FI et al 2014, Global

The report provides a framework for a corporate real estate sustainability management (CRESM) system for property investment and management organisations, and offers a pragmatic three level approach (corporate, portfolio and single building level) that aims to help the industry manage the complexity of sustainability metrics and to organize information flows more efficiently.

"Whose Carbon is it? GHG Emissions and Commercial Real Estate" REALpac and ICF 2011, North America



At the completion of this document, the reader should have an appreciation for the complexities of greenhouse gas accounting, knowledge of the critical factors involved in accounting for greenhouse gases in the commercial building sector, and the ability to apply suggested guidance to their portfolio.

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Alignment: Advisers and consultants selection process

STEPS

Alignment: Advisers and consultants selection process

Incentivise and reward contractors based on delivering sustainability goals.

Equity, bond & debt investors

Set and reward clear performance targets

SHOULD ✓

The mandate should include appropriate, verifiable and material targets, both quantitative and qualitative, to manage environmental, social and governance issues in portfolio. Targets can include:

- Quantitative targets to undertake voting and engagement activities where appropriate (Equity, bonds, debt).
- Quantitative and material targets to reduce energy, carbon intensity, water and waste of the portfolio over specified timeframe.
- Set a goal to measure and reduce the environmental/ resource intensity of a portfolio against relevant benchmarks over a given time period.
- Quantitative and qualitative targets to address social impacts of the portfolio, including community engagement and contribution to local communities.
- Set quantitative targets for the inclusion of green lease clauses in the lease agreements with tenants.
- Target for a specified proportion of the fund's assets in real estate to be powered by clean energy, to be highly energy efficient, to achieve minimum requirements for renovations, or to be "best in class" with respect to resource intensity.

Require periodic reports on progress against targets Specific incentives are provided for ESG and climate.

COULD ~

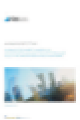
Provide specific incentives for performance against agreed ESG and climate risks requirements.

- Incentivize pro-active seeking and reporting of ESG and climate risk management improvements.
- Reward with economic incentives/ penalties as appropriate, for performance against agreed ESG and climate portfolio targets for both, absolute and benchmarks performance.

Alignment: Advisers and consultants selection process

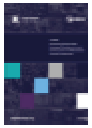
Recommended resources, excerpt – Equity, bond & debt investors

"Aligning expectations: guidance for asset owners on incorporating ESG factors into manager selection, appointment and monitoring" PRI 2013, Global



This guidance helps asset owners assess whether their managers' investment policies and processes are consistent with their ESG expectations. It aims to support them in their dialogues with managers so that they gain a clear understanding of the ESG risks and opportunities affecting their portfolios and how their managers are addressing them.
This guidance is also relevant for fund-of-fund managers who outsource investment activities and who need greater confidence that managers are aligned with their own expectations.

'Advancing Responsible Business in Land, Construction and Real Estate Use and Investment'
RICS / UN Global Compact, 2015, Global



The document provides a guide to the practical application of the 10 principles of the UN global Compact to the land, construction and real estate sectors. It helps set the strategic agenda for companies operating in the sector, real estate users and investors, through clear action items supported by a list of benefits and real life case studies.

"Trustee's Guide: Protecting value in real estate through better climate risk management" IIGCC 2014 Global

"Protecting value in real estate: Managing investment risks from climate change" IIGCC 2013, Europe

This guide covers the key questions which asset owners and investment managers should be asking themselves when developing their ESG and climate policy and strategy and their investment strategy to integrate ESG and climate risks into their businesses. It covers four areas: Assessing risks and opportunities, managing regulatory risks, manager selection, incentives and rewards.

"Investing through an adaptation lens", IGCC 2015 Australia &

"Assessing climate change risks and opportunities for investors - Property and Construction Sector"
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This guide provides information to help investors assess and integrate climate risk and opportunity within the property and construction sector into investment analysis.
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The follow up guide in 2015 provides practical insights on how investors can and should be investing through an adaptation lens.

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Monitoring & reporting

STEPS

Feedback loop: Monitoring & Reporting

Monitor delivery of ESG and climate strategies and targets, focusing on impact to value using Sustainability Management Systems.

Asset owners & their advisors

Monitoring Process

SHOULD ✓

Include ESG and climate risk-related expectations in manager monitoring requirements against investment strategies and quantitative ESG and climate risk performance targets:

(See step 1 "Define ESG and climate policy and strategy").

- Request the investment manager to monitor performance through an Environmental Management System (EMS) that applies to the entity level.
- Request regular monitoring against selected benchmarks and information around exemplar or best-in-class activities.
- Monitor performance against specific agreed targets, both absolute and relative performance compared to selected portfolio level benchmarks.

COULD ~

- Request for Environmental Management System (EMS) to be aligned with a standard and/or verified or certified by an independent third party.
- Include external verification or assurance where data or conclusions will be published or where material decisions will be taken based on this data.
- Request information from manager on underlying real estate asset performance in carbon, energy and natural resource intensity (portfolio level and individual case studies).
- Within each portfolio require the identification of "best performer" and "worst performer" (asset type, geography or portfolio) to allow focus on effective intervention and performance improvement.
- Ensure "deep dive" on divergent assets (with positive or negative impact) to understand the overall portfolio effect of these and what the manager proposes as the "learning's" arising from this analysis.
- Keep track of new technologies, which may allow ESG and climate, risks to be reduced on a portfolio basis.

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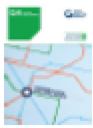
Monitoring & reporting

Recommended resources – asset owners

"G4 Sustainability Reporting Guidelines: Construction and Real Estate Sector Disclosures", GRI 2015, Global



This resource is the definite guidance on performance indicators and reporting processes for anyone who invests in, develops, constructs, or manages buildings. The GRI Guidelines, help reporting organizations disclose their most critical impacts – be they positive or negative – on the environment, society and the economy. They can generate reliable, relevant and standardized information with which to assess opportunities and risks, and enable more informed decision-making – both within the business and among its stakeholders. The GRI's Construction and Real Estate sector guidance makes reporting relevant and user-friendly for organizations in this targeted sector.

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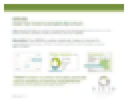
"PRI reporting framework – Asset Owners, Direct, Equity and Debt investments" PRI, Global

The PRI Reporting Framework seeks to answer one question: How do you govern and implement responsible investment? The framework is composed of modules, with general modules tailored for multiple asset class investors and dedicated modules focused by asset class. Reporting through the Framework is mandatory for all PRI signatories and responses are translated into Transparency Reports which are available on the PRI website as a public demonstration of signatories' commitment to implementing the Principles for Responsible Investment.

"Global Real Estate Sustainability Benchmark – Asset Owners, Direct, Equity and Debt investments"
GRESB 2015, Global



Through GRESB, direct real estate investor members are able to monitor the annual GRESB survey results for all their direct investments and, if they invest in listed real estate securities, all listed real estate companies' results. By using the GRESB Portfolio Analysis tool, investors are able to select investments to compare results, e.g. for a particular investment manager, a region or country, or a particular property type. They are also able to undertake portfolio analysis for self-selected groups of their investments.

The GRESB debt survey represents an initial step in monitoring real estate debt and assessing how to integrate ESG and climate risks into this growing financial instrument for real estate investment. The survey aims to increase transparency in the debt market and guide investors on best practice implementation.

Investor Group on Climate Change

IIGCC

Investor Network on CLIMATE RISK a project of Ceres

PRI Principles for Responsible Investment

RICS

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Market engagement

Engage on public policy with sector organisations to ensure regulation matches with market needs.

Asset owners
Direct investors
Equity, bond and debt investors

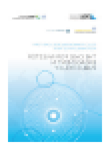
Recommended Actions

There are three key areas in which all real estate investment stakeholders can optimise their engagement with public policy:

1. Engage, directly or indirectly, on public policy to manage risks.
2. Support research on ESG and climate risks;
3. Support sector initiatives to develop resource to understand risks and integrate ESG.

Recommended resource

PRI Policy Frameworks for Long-Term Responsible Investment: The Case for Investor Engagement in Public Policy, Global



This PRI policy framework shows why public policy engagement is essential for long-term investors, provides examples of investor engagement in public policy, lessons learned, and offers practical recommendations for better integration of ESG factors in the public policy-making process.

Investor Group on Climate Change | IIGCC | Investor Network on CLIMATE RISK a project of Ceres | PRI Principles for Responsible Investment | RICS | UNEP FINANCE INITIATIVE

Tool mapping of selected resources

In order to visualise the wealth of evidence and publications covering these issues, the 'Tool mapping" graph below helps categorise each publication by relevance to each audience and each step of the investor framework.

Audiences Real Estate Investors

Owners & Advisers | Direct Investor | Equity, Bonds, Debt | All

Global Resources	Strategy: Develop ESG & climate Strategy	Strategy: Develop ESG & climate Strategy	Alignment: Advisers and consultants selection process	Feedback loop: Monitoring & Reporting	Market Engagement
'Investing in a time of climate change', Mercer 2015, Global; 'An-Investment-Framework-for-Sustainable-Growth', Mercer 2014; 'Climate change scenarios: Implications for strategic asset allocation', Mercer 2011, Global	Owners & Advisers; Equity, Bonds, Debt				
'Developing an asset owner climate change strategy', PRI 2015, Global	Owners & Advisers	Owners & Advisers; Equity, Bonds, Debt			
'Financial institutions taking action on climate change' 'UNEP et al 2014, Global	All	Equity, Bonds, Debt			
Advancing Responsible Business in Land, Construction and Real Estate Use and Investment', RICS / UN Global Compact, 2015, Global	All	Owners & Advisers; Direct Investor; Equity, Bonds, Debt	Equity, Bonds, Debt		
'Sustainability metrics: translation and impact on property investment and management', UNEP FI et al 2014, Global		Direct Investor	Equity, Bonds, Debt		
'Unlocking the energy efficiency retrofit investment opportunity', UNEP FI 2014, Global	Direct Investor	Direct Investor			
'Sustainability and commercial property valuation - Professional Guidance Note, Global', RICS 2013, Global		Direct Investor			
'What the leaders are doing', UNEP FI 2012, Global	All				

Investor Group on Climate Change | IIGCC | Investor Network on CLIMATE RISK a project of Ceres | PRI Principles for Responsible Investment | RICS | UNEP FINANCE INITIATIVE

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'Climate Change Investment Solutions Guide' IIGCC 2015, Europe	Owners & Advisers; Equity, Bonds, Debt	Equity, Bonds, Debt			
'The-21st-century-investor-ceres-blueprint-for-sustainable-investing', Ceres 2013, North America		Owners & Advisers; Equity, Bonds, Debt	Equity, Bonds, Debt		
Trustee's Guide: Protecting value in real estate through better climate risk management', IIGCC 2014; 'Protecting value in real estate: Managing investment risks from climate change', IIGCC 2013, Europe	All	Owners & Advisers; Direct Investor; Equity, Bonds, Debt	Equity, Bonds, Debt		
'Investing through an adaptation lens', IGCC 2015 & 'Assessing climate change risks and opportunities for Investors - Property and Construction Sector', IGCC 2013, Australia	All	Owners & Advisers; Direct Investor; Equity, Bonds, Debt	Equity, Bonds, Debt		
'Whose Carbon Is It? GHG Emissions and Commercial Real Estate', 2010, RealPAC and ICF, North America		Direct Investor			
Green Property Bonds Standards, Climate Bonds Initiative 2015, Regional	Owners & Advisers; Equity, Bonds, Debt	Owners & Advisers; Direct Investor; Equity, Bonds, Debt			
'A statement of Investors expectations for the Green Bonds Market', 2015, CERES,		Equity, Bonds, Debt			
'Green bond guidance for real estate sector', GRESB, regional		Equity, Bonds, Debt			
'Debt tools - New lending decisions framework & Loan documentation', BBP 2015, Regional	Equity, Bonds, Debt	Equity, Bonds, Debt			

Investors managing close to USD 4 trillion support the G20 Energy Efficiency Investor Statement

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AFL-CIO
alecta
Amundi ASSET MANAGEMENT
FÖRSTA AP-FONDEN
Andra AP-fonden
AP3 Tredje AP-fonden
Sjätte AP-fonden
australianethical
AVIVA INVESTORS
AXA INVESTMENT MANAGERS
BOSTON COMMON ASSET MANAGEMENT
CALSTRS HOW WILL YOU SPEND YOUR FUTURE?
Calvert INVESTMENTS
CANDRIAM INVESTORS GROUP A NEW YORK LIFE COMPANY
cbus
Church of Sweden
Environment Agency Pension Fund
RAFP Retraite additionnelle de la Fonction publique
First Affirmative Financial Network, LLC
generation
storebrand
HERMES INVESTMENT MANAGEMENT
Humanis Protéger c'est s'engager
inflection point CAPITAL MANAGEMENT
Caisse des Dépôts
Southwark Council
NATIXIS ASSET MANAGEMENT
PAX Pax World Management LLC
ROBECO The Investment Engineers
sonen capital
mirova Responsible Investing
TORONTO ATMOSPHERIC FUND
TRILLIUM ASSET MANAGEMENT
Triodos Investment Management
WHEB Group
Celebrating 40 Years of Impact Walden Asset Management
ECOFI INVESTISSEMENTS
Handelsbanken Asset Management
FJÄRDE AP-FONDEN Fourth Swedish National Pension Fund

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PRI Principles for Responsible Investment
Ceres
WE MUST CAN WILL
Lima-Paris Action Agenda

G20 Energy Efficiency Investor Statement

As our contribution to the work of the G20 Energy Efficiency Finance Task Group, as managers and investors, we share a common understanding of the positive economic and societal benefits of energy efficiency. In order to ensure that our activities promote and support energy efficiency, and in consideration of our fiduciary responsibility: **We recognize the need to fully embed energy efficiency into our investment process.** We, the undersigned, undertake to:

- Embed material energy efficiency considerations into the way in which we **evaluate** companies;
- Include energy efficiency as an area of focus when we **engage** with companies;
- Take into consideration energy efficiency performance, to the extent relevant to the proposal being considered, when we **vote** on shareholder proposals.
- To the extent relevant, incorporate energy efficiency investment considerations when we **select** managers;
- Assess our existing real estate assets and managers and **monitor and report on** their energy efficiency performance;
- Seek appropriate opportunities to **increase energy efficiency investments** in our portfolios

Investor Group on Climate Change | IIGCC | Investor Network on CLIMATE RISK a project of Ceres | Global Alliance for Buildings and Construction | PRI Principles for Responsible Investment | RICS | UNEP FINANCE INITIATIVE

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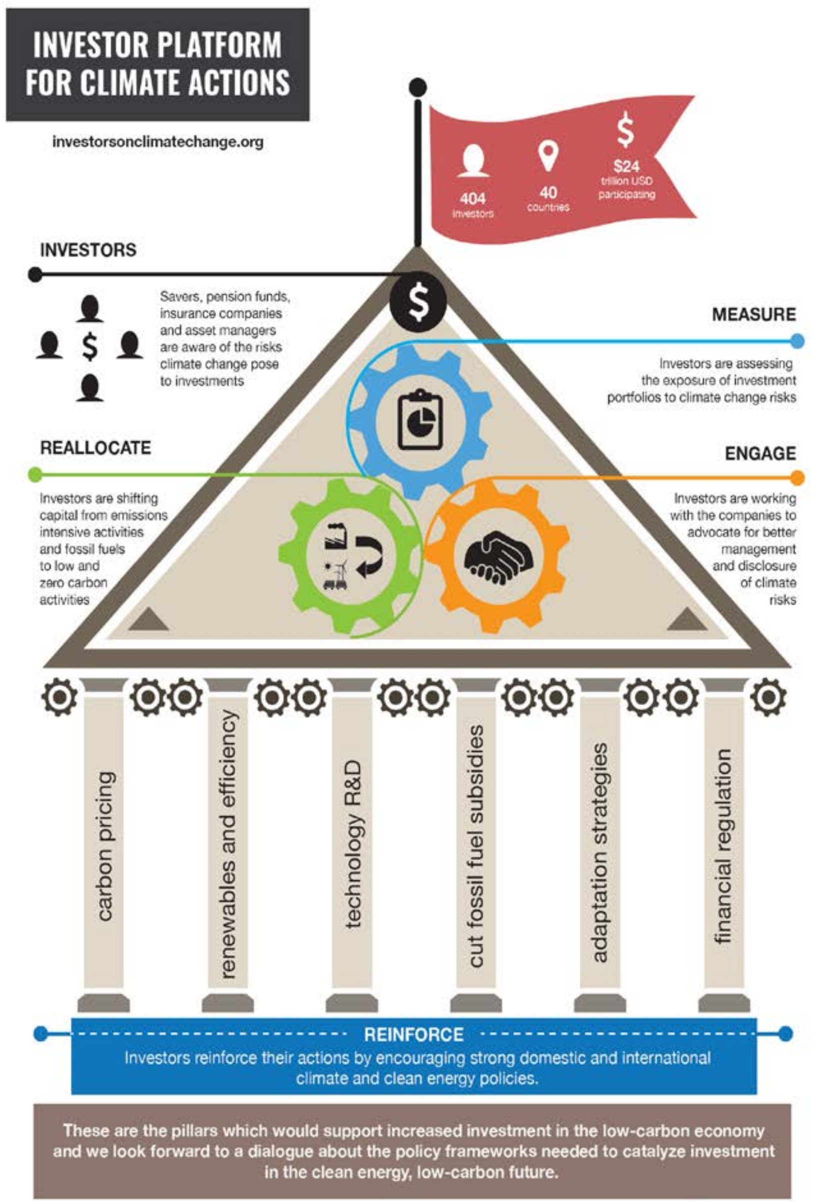

INVESTOR PLATFORM FOR CLIMATE ACTIONS

investorsonclimatechange.org

MEASURE

Montreal Carbon Pledge

118 signatories | 18 countries | $10.3 Participating AUM (trillion USD)*

Measurement is assessing the exposure of investment portfolios to climate risks. Signatories to the Montréal Pledge commit to measure and disclose the carbon footprint of their portfolios.

ENGAGE

Collaborative engagement

300+ investors | 25 countries | $22 trillion USD participating | 9 initiatives

Investors engage collaboratively with companies to influence long-term sustainable business strategies and advocate for improvements in management and disclosure of climate risks.

REALLOCATE

Portfolio Decarbonisation Coalition

25 investors | 11 countries | $600 Billion USD Committed

Members of the Coalition commit to reducing the carbon-intensity of their investment portfolios through engagement, divestment, 'green investing', and 'carbon-tilting'.

Low Carbon Registry

53 investors | 12 countries | $50 Billion USD Committed

Investors make low carbon investments and other actions to reduce emissions and record them in the Registry – a voluntary, public online database of low carbon and clean energy investments.

REINFORCE

Global Investor Statement on Climate Change

404 investors | 40 countries | $24 trillion USD participating

The Statement sets out steps that investors can take to address climate change, and calls on governments to support a new global agreement on climate change by 2015, in addition to national and regional policy measures.

*Total assets under management of signatories to the Pledge, not the total amount being footprinted.

Financing the SDGs – Global Imperative & Market Opportunity

Topics

Economic Development

- SME development
- Entrepreneurship
- Small-holder farming
- Base of the pyramid

Infrastructure

- Access to energy, water
- Public transport
- Smart cities

Resource Efficiency

- Circular economy
- Energy efficiency
- Water efficiency
- Waste management

WHY THE POSITIVE IMPACT INITIATIVE?

ADDRESSED DEMAND			UNADDRESSED DEMAND
15%?	10%?	10%?	65%?
PUBLIC SECTOR	**PUBLIC & PRIVATE SECTOR**	**PRIVATE SECTOR**	**WHO?**
Grants, subsidies etc.	PPPs, blended finance	Corporate loans, green/social bonds, impact investing...	What solutions for food security, mobility, smart cities, circular economy, etc.?
Non profitable / bad risk	Risk/ reward Ok with public support	Risk/ reward OK	Non profitable / Bad risk?

THE POSITIVE IMPACT MANIFESTO
A COMMON VISION

Sustainability issues should be understood as an integral part of the economy. They are a strategic, not a peripheral concern.

A new, impact-based business and financing paradigm is needed.

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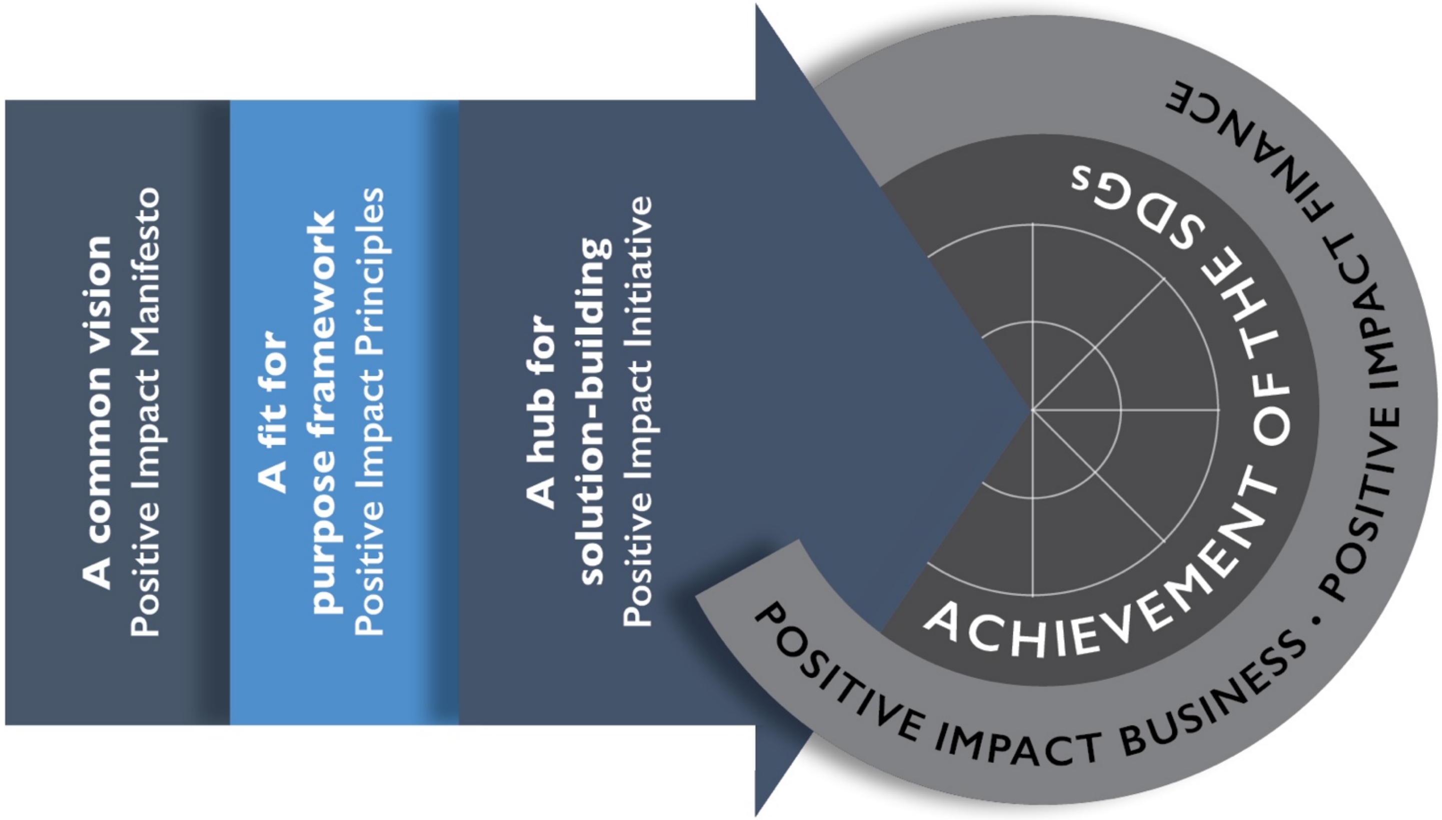
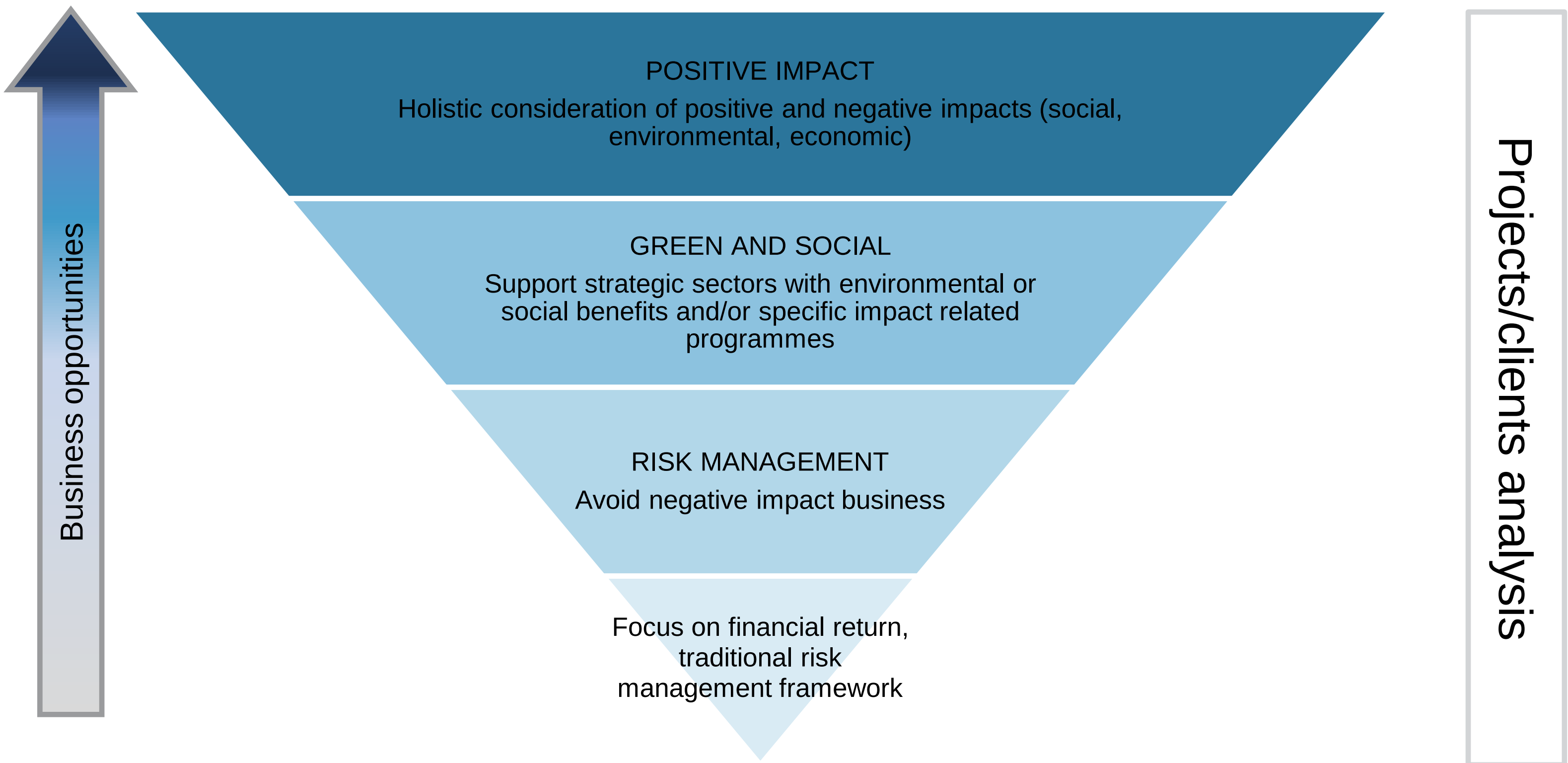
ABN·AMRO
australianethical
BMCE BANK OF AFRICA
BNP PARIBAS
GROUPE Caisse desDépôts
Desjardins
FIRSTRAND
HERMES INVESTMENT MANAGEMENT
ING BANK
Itaú
mirova Responsible Investing
NEDBANK
PAX Pax World Management LLC
For Tomorrow
PIRAEUS BANK
SEB
SOCIETE GENERALE Corporate & Investment Banking
Standard Bank
Triodos Bank
Westpac Australia's First Bank
YES BANK EXPERIENCE OUR EXPERTISE

THE POSITIVE IMPACT ROADMAP



A NEW WAY OF LOOKING AT BUSINESS



THE PRINCIPLES FOR POSITIVE IMPACT FINANCE:
A FIT FOR PURPOSE FRAMEWORK

Launch, in Paris France, on January 30th 2017

ABOUT THE PRINCIPLES

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- **Define what a ‘positive impact’ financial product or service is**

✓ Basis for issuing Positive Impact products & services (i.e. business oriented)

✓ Applicable across financial products & services the finance sector

- **Developed by PI members & Secretariat, with input from stakeholders:**

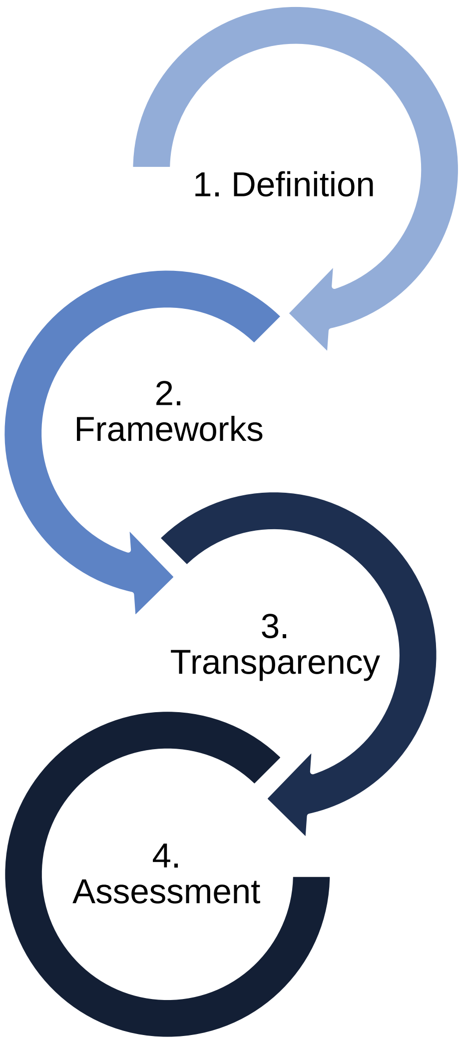
✓ Auditors

✓ Analysts

✓ Extra-financial raters

✓ Secretariats of existing frameworks

THE PRINCIPLES



Positive Impact Finance =

- Positive contribution to one or more of the three pillars of sustainable development
- Potential negative impacts to any of the three pillars duly identified and addressed

- Processes, methodologies and tools to identify and monitor positive impact

- Activities, projects, programs, and/or entities financed and intended positive impacts
- Processes to determine eligibility, and to monitor and to verify impacts
- Impacts achieved

- Should be based on impacts achieved

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IN CONCLUSION

- ✓ **Practical**

3 pillars of sustainable development encompasses all SDGs and beyond

Do not replace current frameworks (e.g. EP, PRI, UNGC, GBP, etc.) but build on them to go further

- ✓ **Flexible**

No set taxonomy or methodology

- ✓ **Credible**

Positive & negative integral analysis

Transparency requirement on both process and outcomes

- ✓ **Game-changing**

Common framework across products: enables originate to distribute dynamics and the basis for a new level of dialogue with stakeholders

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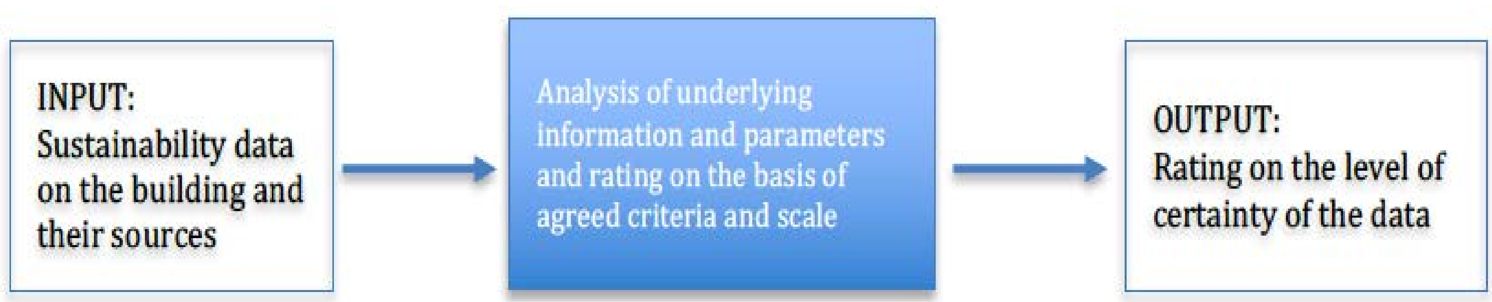
SUSTAINABLE DATA ANALYTICS

Why do we need this:

- Massive investments needed to achieve Paris goal and SDGs
- Risk managers currently don't use data regarding the sustainability of buildings
- One major reason is that they don't trust (lack of quality) and understand available data

Scope, objectives and desired outputs

- In collaboration with risk managers of investors, banks and insurance companies develop a process to assess the quality of available sustainability data as illustrated below:



NEXT STEPS:
THE POSITIVE IMPACT STRATEGY

Outreach & engagement

*Outreach events and workshops in 10 countries

*Consultations

Collaborative action

- Working Groups

Individual action

*Internal adjustments

*Delivering PI compliant products and services

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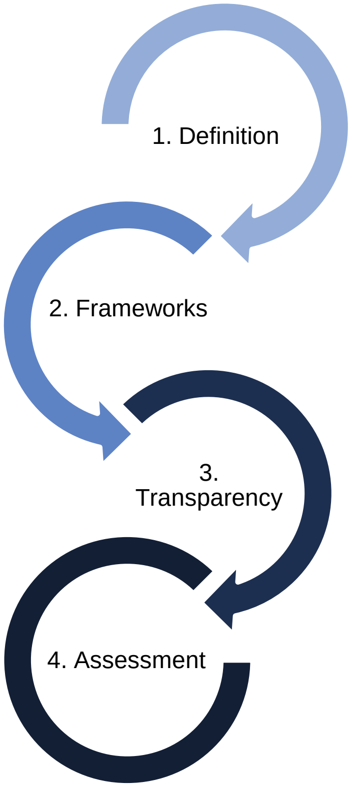
IMPLEMENTING THE PRINCIPLES FOR POSITIVE IMPACT FINANCE : WORKING GROUPS

3 Working Groups created to develop guidance notes

Working Group	Main questions to answer
1. Frameworks	How to implement positive impact analysis, building on frameworks currently used by financial institutions'? What is a Principles – compliant product/service?
2. Impact categories & Indicators	What impact categories to use to identify potential positive impact in the market and inside portfolios? How to monitor, measure and report on impact?
3. Assessment	How and by who can products and services be verified as Positive Impact? Can they be certified? Can they be rated based on their degree of impact?

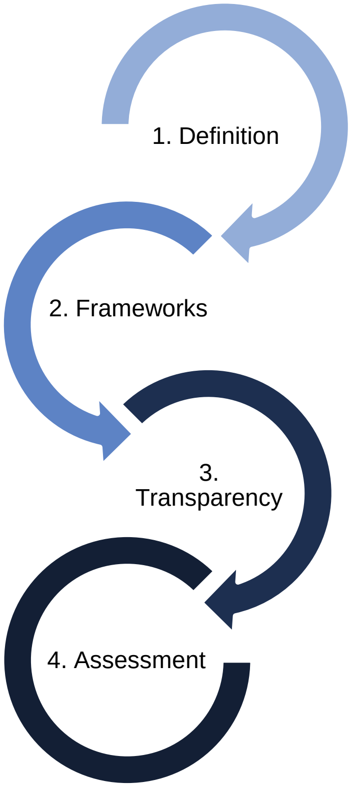


IMPLEMENTING THE PRINCIPLES FOR POSITIVE IMPACT FINANCE : GUIDANCE NOTES

Guidance notes based on underlying & financial products:

- Review of existing standards and frameworks
- Gap analysis vis a vis the positive impact approach
- Guidance and recommendations to implement positive impact (first sets of guidance end of 2017)

Products / Underlying	Equity	Bonds	Loans (etc.)
Counterparties (e.g. corporates, individuals, sovereign, etc.)		e.g. GBP	
Projects			e.g. EP
Physical assets (e.g. real estate)			



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DEVELOPING POSITIVE IMPACT BUSINESS TO FINANCE THE SDGS

Position Paper:

- Clarification of the financing gap vs the investment need – what needs to be financed and where?

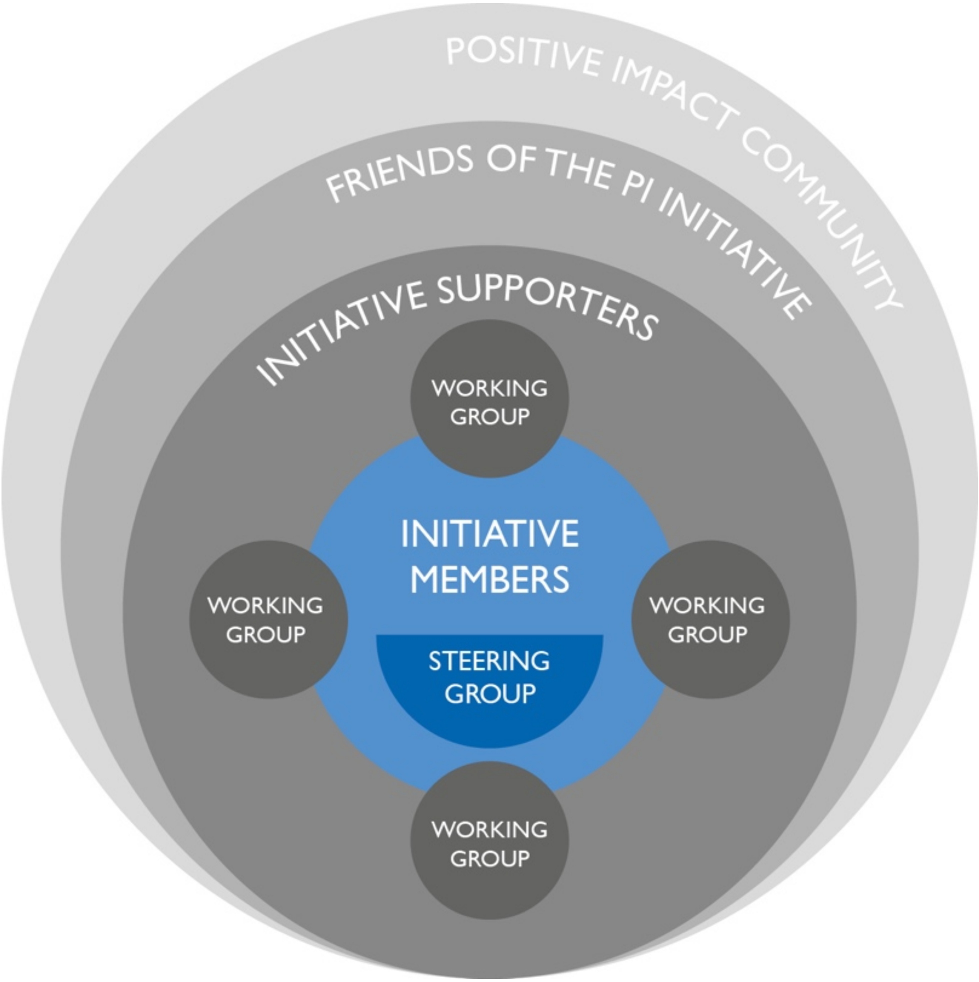
- Distinguishing between the “shift” and “add” agendas:
  oShift: reallocating capital from (existing) unsustainable to (existing) sustainable business.
  oAdd: developing new business

- The potential for scale through impact-based business models and the role of the finance sector

- In partnership with WBCSD and PWC

- To be released in 2017

BECOME INVOLVED



Who can become involved?

- Banks
- Investors
- Auditors
- Service-providers
- Corporates
- Development banks
- Government agencies
- Civil society organisations
- Others

From a linear model to a new, iterative model

TOP-DOWN MODEL

Macro planning

(IMF, WB, AfDB, UNEP, Governments…)

Implementation

Ministries, request for proposals

- Project Finance:
(blended / non blended)
- Retail banks:
supported funding, support by MLA/DFIs (blended / non blended)

SOLUTION PROVIDERS

NEW ECONOMY

Big data crunching, digitalization, artificial intelligence, connected objects…

NEW BUSINESS MODELS

OLD ECONOMY

-Industries & manufacturing

ITERATIVE MODEL

Macro planning

Concerned stakeholders

"Positive Impact" proposals

Request for Positive Impact Proposal

Public / private iterative implementation of the macro planning

THANK YOU!

TO DOWNLOAD AN INTERACTIVE COPY OF THIS FRAMEWORK PLEASE GO TO:

http://www.unepfi.org/work-streams/property/SustainableREI/

FOR ANY QUESTIONS RELATING TO THIS PUBLICATION PLEASE CONTACT

PROPERTY@UNEPFI.ORG