

Delivering Success from your Carbon Management Plan

EAUC Conference, 7th May 2014



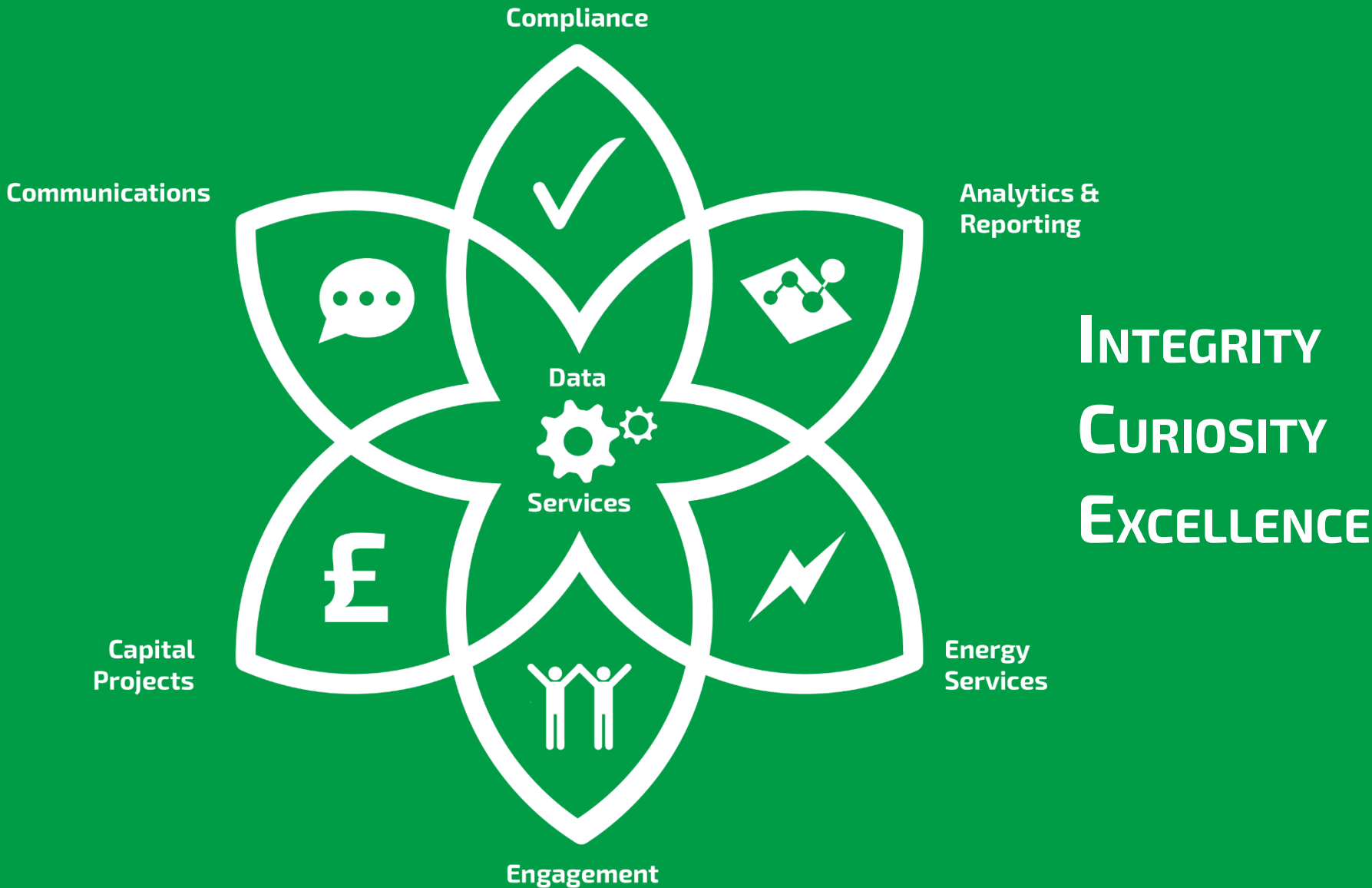


- Introduction to Carbon Credentials
- Learnings from our first HE Carbon Management Planning Workshop
- Key Components of a High Quality Carbon Management Plan
 1. Funding
 2. Scope 3 emissions
 3. Engagement
 4. Measurement and Verification
- Key Take Aways

Introduction to Carbon Credentials



Professional Services Overview



Key Public Sector Clients



NOTTINGHAM
TRENT UNIVERSITY



University of the
West of England



Imperial College
London



Kingston
University
London



GREATER
LONDON
AUTHORITY

The
Bloomsbury
Colleges
University of London

LONDON
SCHOOL of
HYGIENE
& TROPICAL
MEDICINE



UNIVERSITY OF
WESTMINSTER

RVC
Royal
Veterinary
College
University of London



Walsall Council



NHS
Isle of Wight



Maidstone and Tunbridge Wells
NHS Trust



Bedford Hospital
NHS Trust



Moorfields Eye Hospital
NHS Foundation Trust



Mersey Care
NHS Trust



West Middlesex
University Hospital
NHS Trust

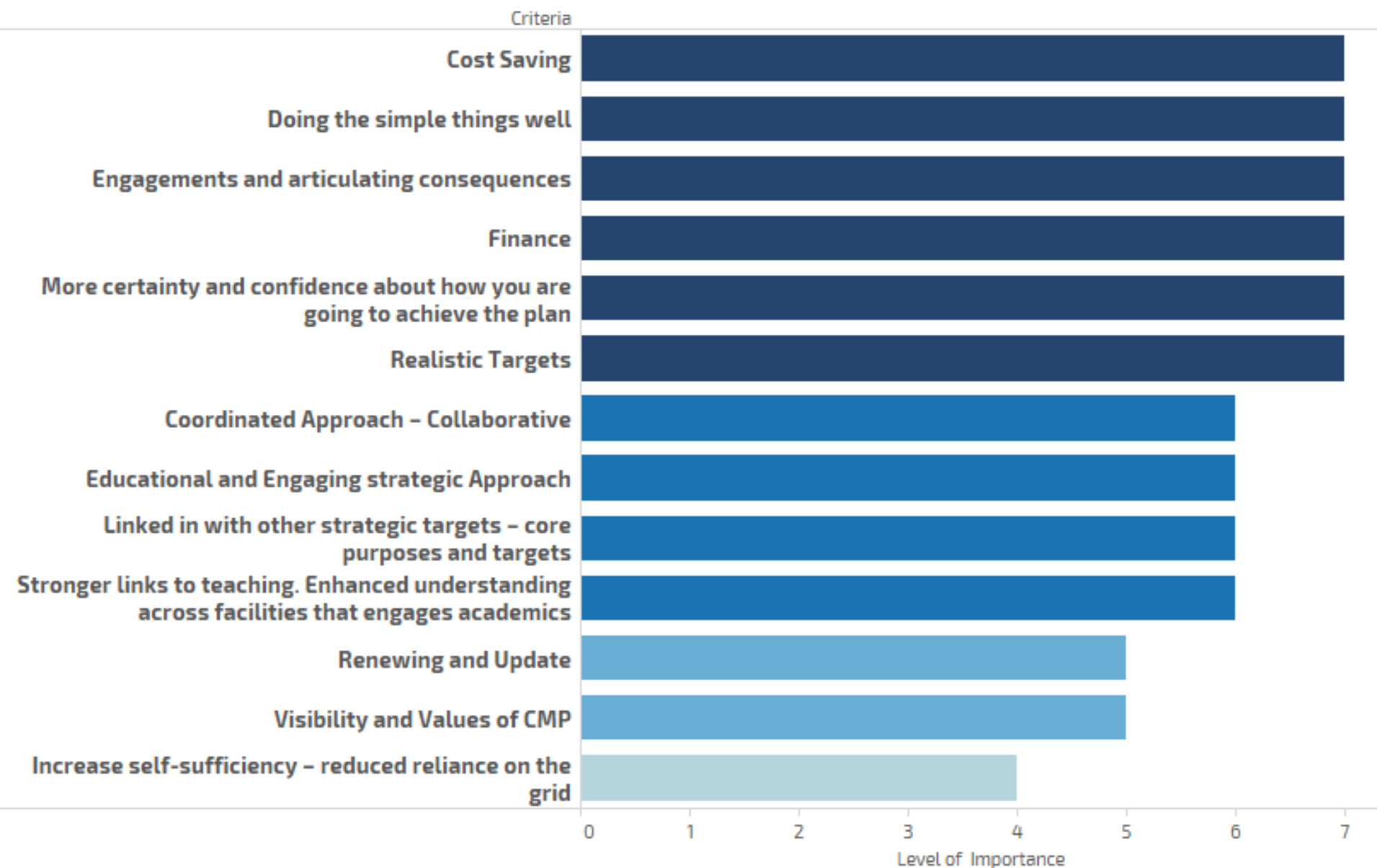


Our April HE Carbon Management Planning Workshop:

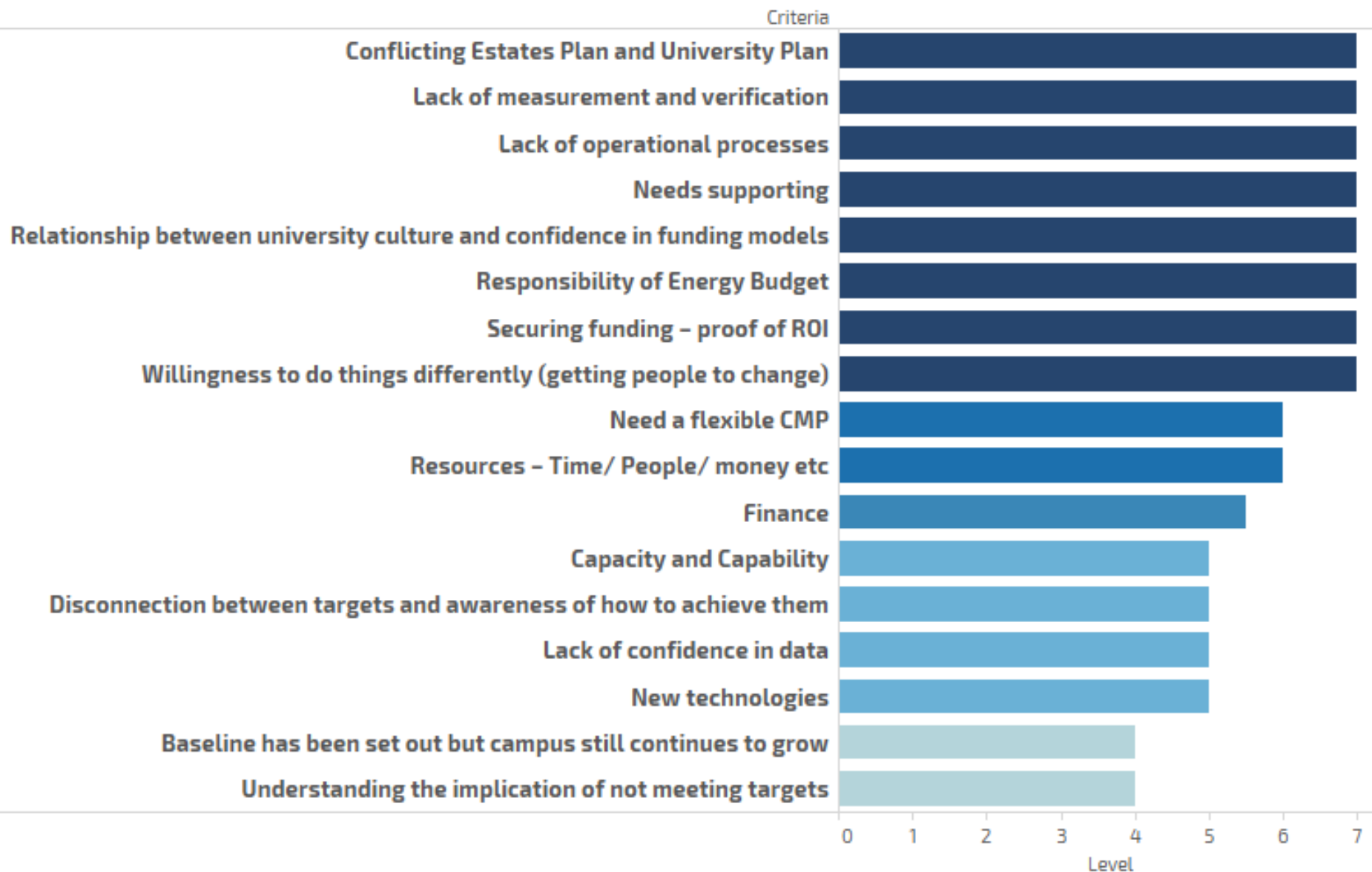
Shared Learnings



What Could You Achieve with an Optimised CMP

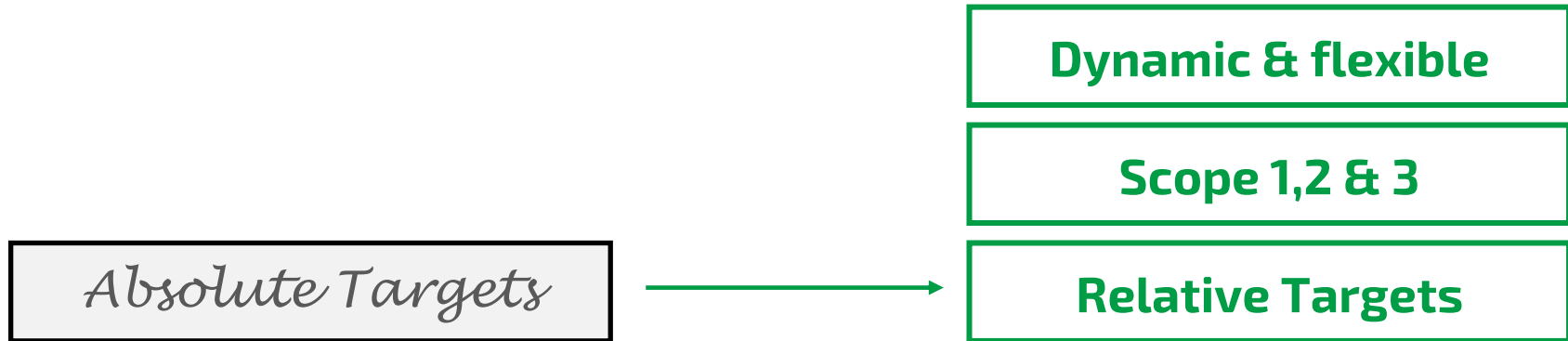


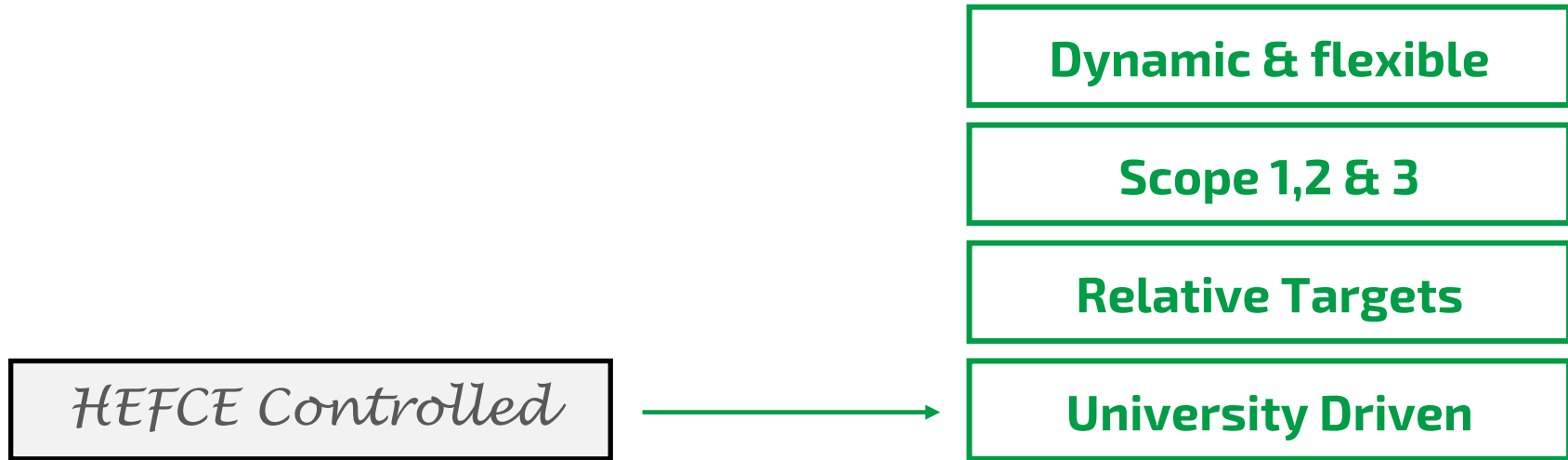
What is Inhibiting your Ability to Achieve this?

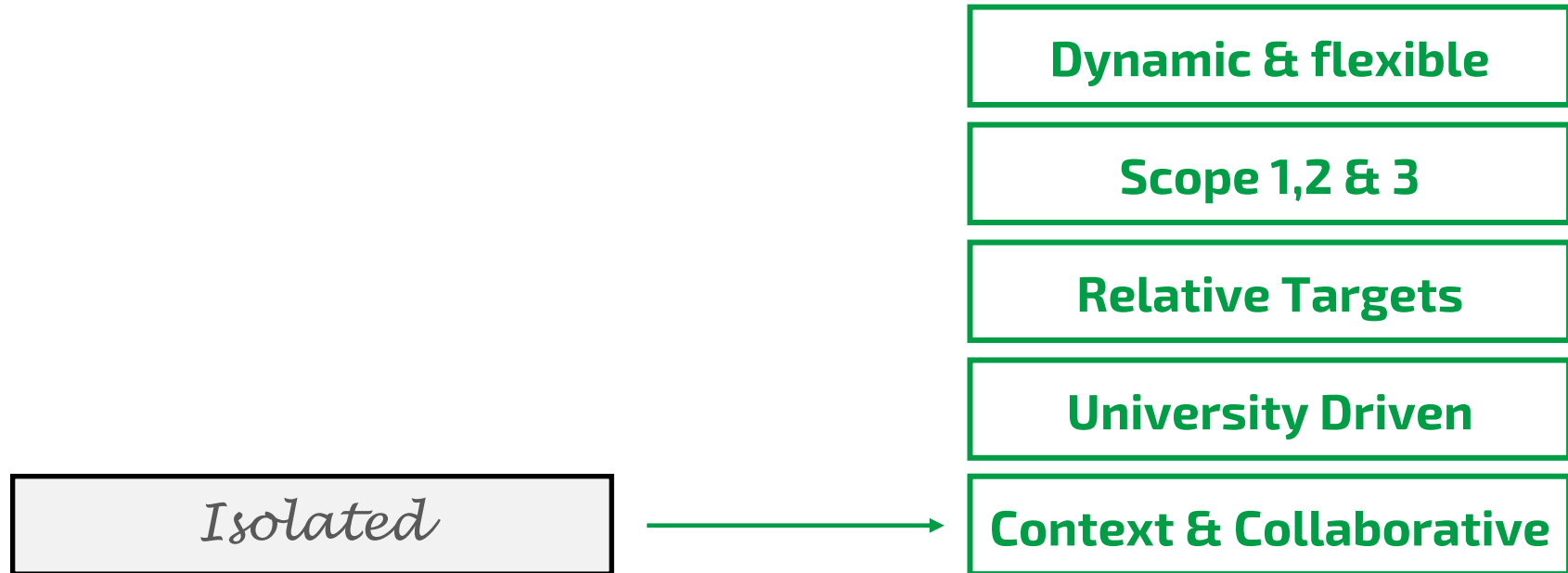


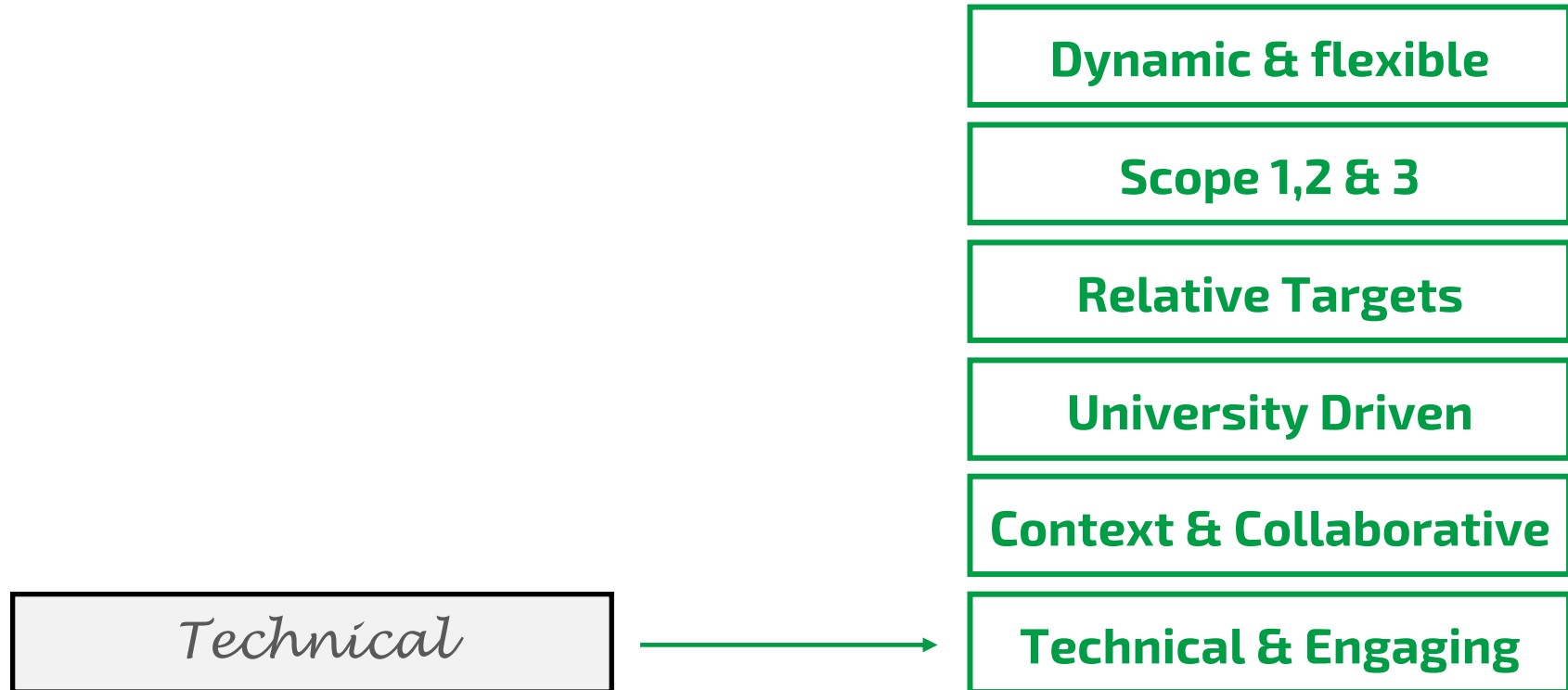


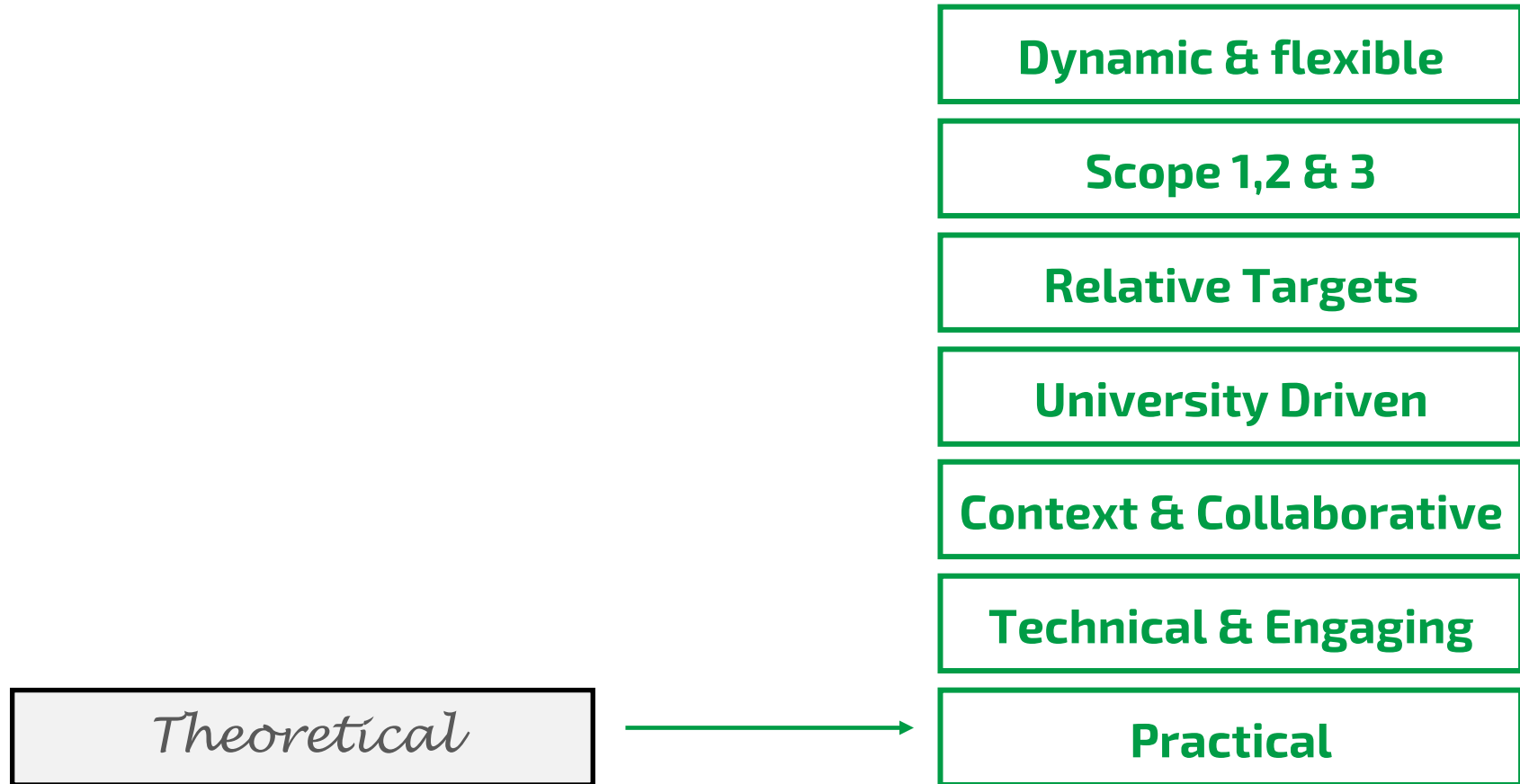


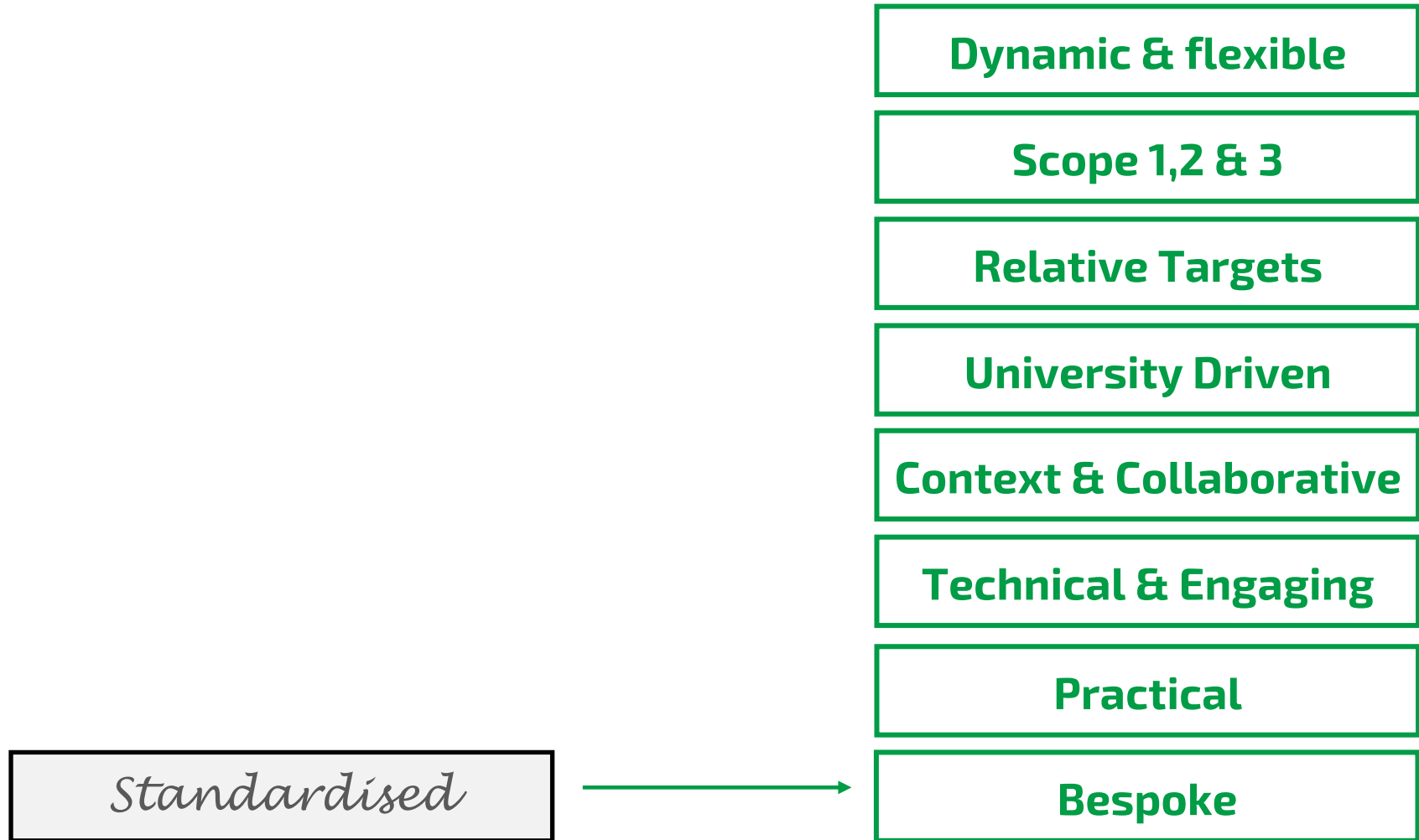














Dynamic & flexible

Scope 1,2 & 3

Relative Targets

University Driven

Context & Collaborative

Technical & Engaging

Practical

Bespoke

Key Components of a High Impact CMP:

1. Funding



“

My **main challenge** in delivering the Carbon Management Plan is **lack of available funding...**

My Finance Director **wont sign the cheques.**

”

“

I need **low risk** projects and plans to invest in that will deliver **good cash-flows**, a strong **Return on Investment & Net Present Value**

”

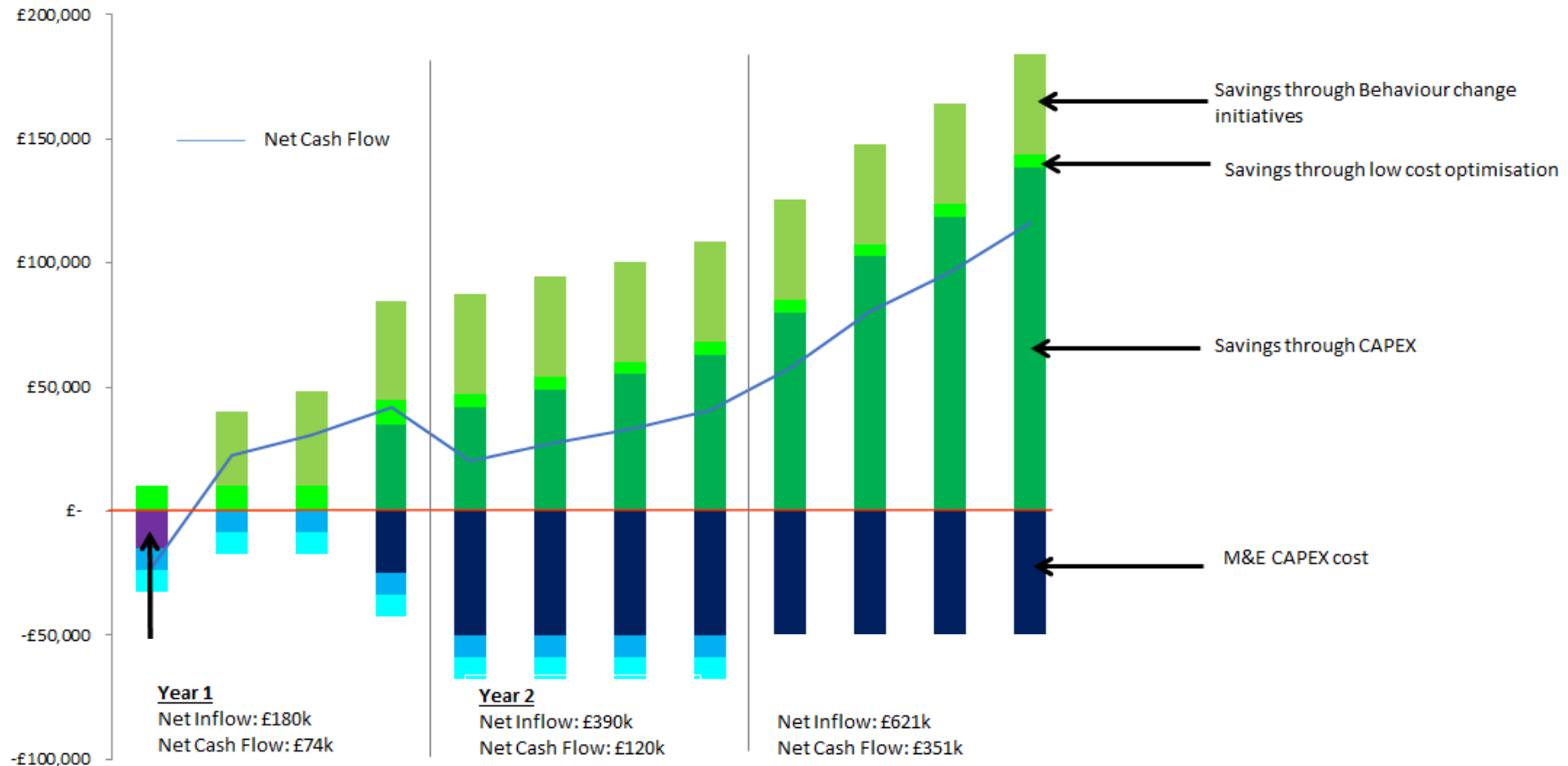


CMP

£££

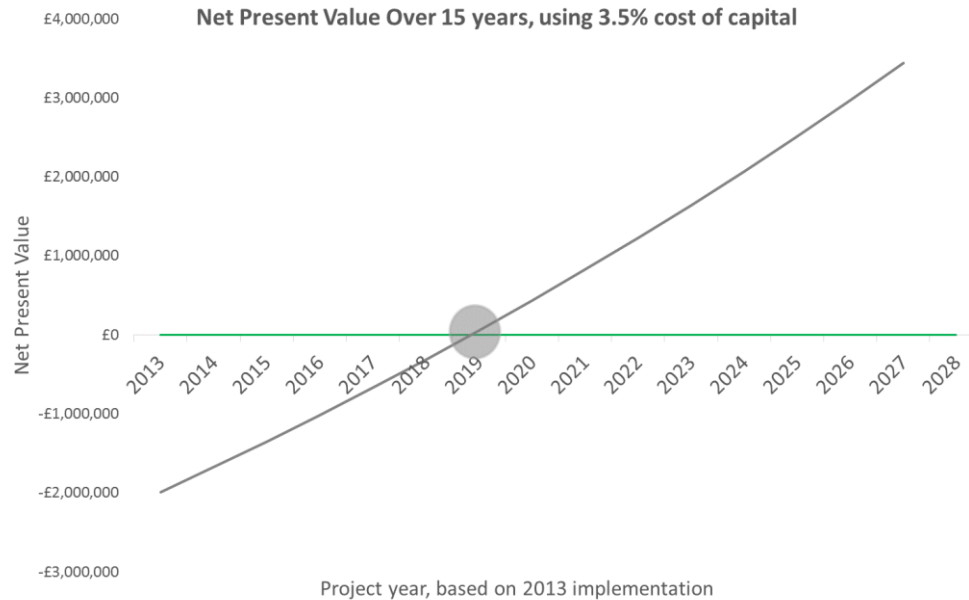


Building the Business Case





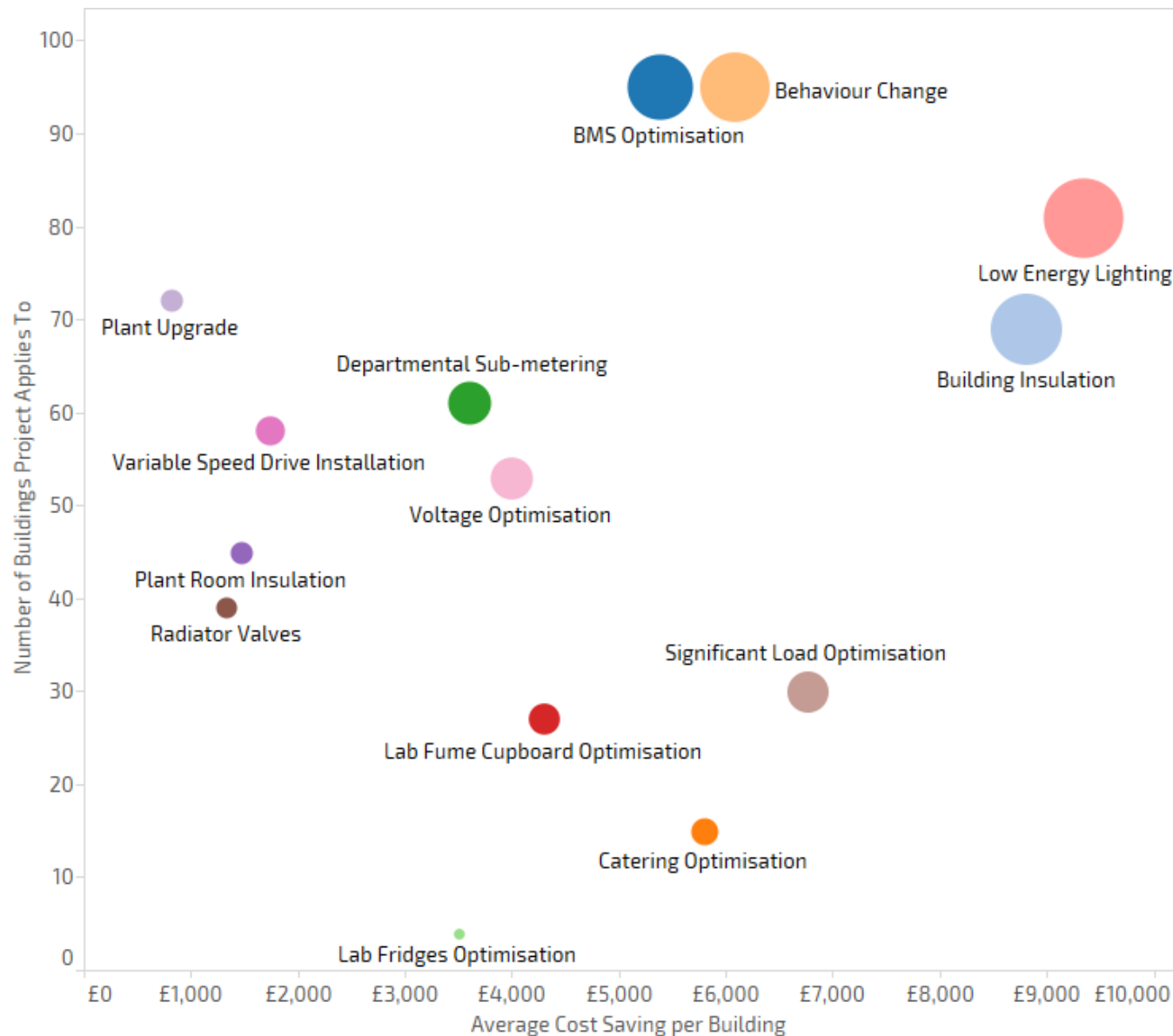
Building the Business Case



		Year 1 cost saving		
		Mid case -20%	Mid case	Mid case +20%
Cost of capital	3.5%	£2,876,000	£3,440,000	£4,645,000
	6.0%	£1,908,000	£2,410,000	£3,205,000
	8.5%	£1,350,000	£1,610,000	£1,875,000

15 Year NPV sensitivity analysis

Funding the plan, not the project



Total CapEx:
£15.9m

Total Annual
Cost Saving:
£3.6m

15 Year NPV:
£30.1m

Internal Rate
of Return:
26%

Simple
Payback:
4.4 years

Carbon
Saving:
20.4%



Finding the best investment source

- ✿ Internal funding routes
- ✿ Energy Service Companies (ESCOs)
- ✿ Technology Suppliers
- ✿ HE specific funding routes
- ✿ On-balance sheet funding options
- ✿ Off-balance sheet funding options

Green
Investment
Bank

HIGHER EDUCATION
FUNDING COUNCIL
FOR ENGLAND

SDCL

SALIX

Foresight
group

RBS
The Royal Bank of Scotland

de laze landen
partners in finance

Scottish Funding Council
Promoting further and higher education

AVIVA
INVESTORS

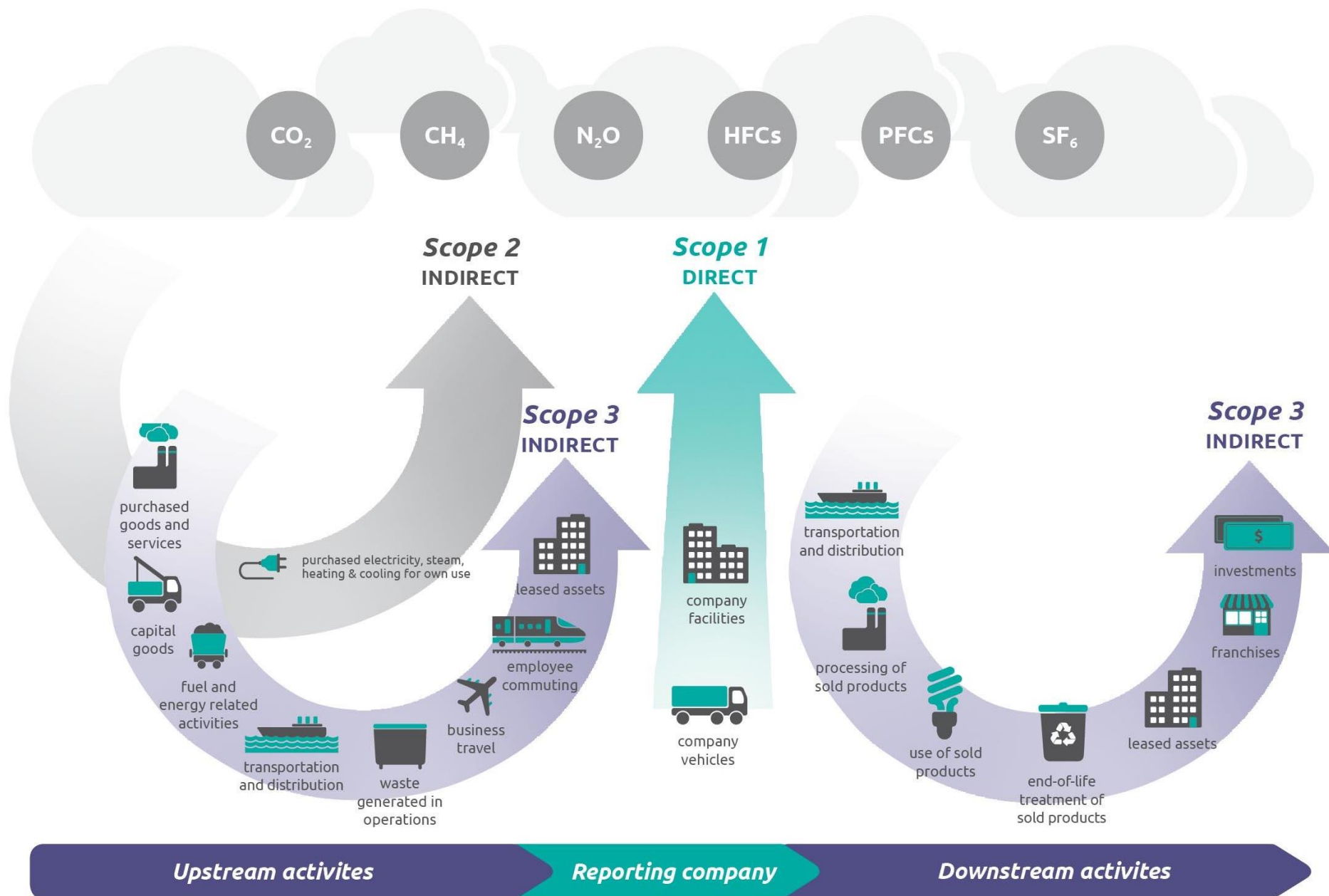


Key Components of a High Impact CMP:

2. Scope 3 Emissions



What are Scope 3 emissions?





“Carbon management strategies and plans: A guide to good practice”

HEFCE 2010/02 (Updated September 2010)

- *“Institutions are encouraged to measure a baseline for scope 3 emissions and in the longer term we will expect these to be included”*
- Essentially, Scope 3 emissions management and reporting was considered optional...





“Reducing Carbon Emissions: Frequently Asked Questions”

www.hefce.ac.uk (Updated June 2012)

- *“From 2012-13 there will be provision in Estates Management Statistics (EMS) for the calculation of all Scope 3 emissions ”*
- *“All institutions are required to have a carbon management plan (CMP) that contains...an implementation plan to achieve carbon emission reductions in scopes 1, 2 and 3 including timescales and resources”*
- *“HEFCE expects carbon management plans to include arrangements for managing scope 3 emissions”*



What are HEFCE's Scope 3 Requirements?

GHG Source/Line Item	Mandatory	Emissions calculations undertaken by
Water Supply	✓	Higher Education Statistics Agency
Wastewater Treatment	✓	Higher Education Statistics Agency
Waste	✓	HEIs (provision of the emission figures is not mandatory)
Travel	✗	HEIs
Supply Chain (<i>Procurement</i>)	✗	Procurement consortia – and provided to HEIs for inclusion in EMS returns

Source: HEFCE.ac.uk “Reducing Carbon Emissions FAQ”



- Consider how this will change your current:
 - Carbon reduction strategy
 - Carbon Management Plan
 - Measurement techniques and methodology
 - Data management systems
 - Policies, processes and procedures
 - Allocation of roles and responsibilities
 - Baseline and target
 - Internal/external communications
- Also: *“Carbon requirements under any future Capital Investment Framework are expected to be more demanding”*



- In our engagement with HEIs, the following key issues have been encountered:
 1. Institutions are not regularly reporting publicly on progress towards targets
 2. Institutions are using the most convenient or established method of measurement, even when more accurate techniques exist
 3. Institutions are not accounting in full for Scope 1 and 2 GHG sources, and are unable to provide justify the choice of boundary for their CMP
 4. Limited evidence is usually available to support GHG assertions, particularly baseline emissions
 5. Limited information management system documentation is available
 6. Typically no evidence of control procedures in place to ensure accuracy and integrity of data

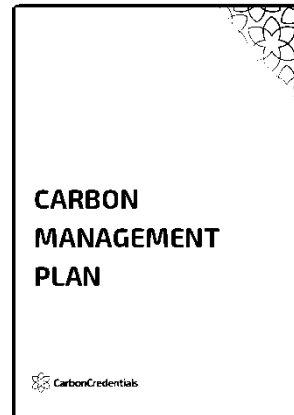
Successful carbon management planning relies on the effective quantification, monitoring, reporting and auditing of organisational GHG emissions

Key Components of a High Impact CMP:

3. Engagement



Bringing Your CMP to Life: Two Objectives



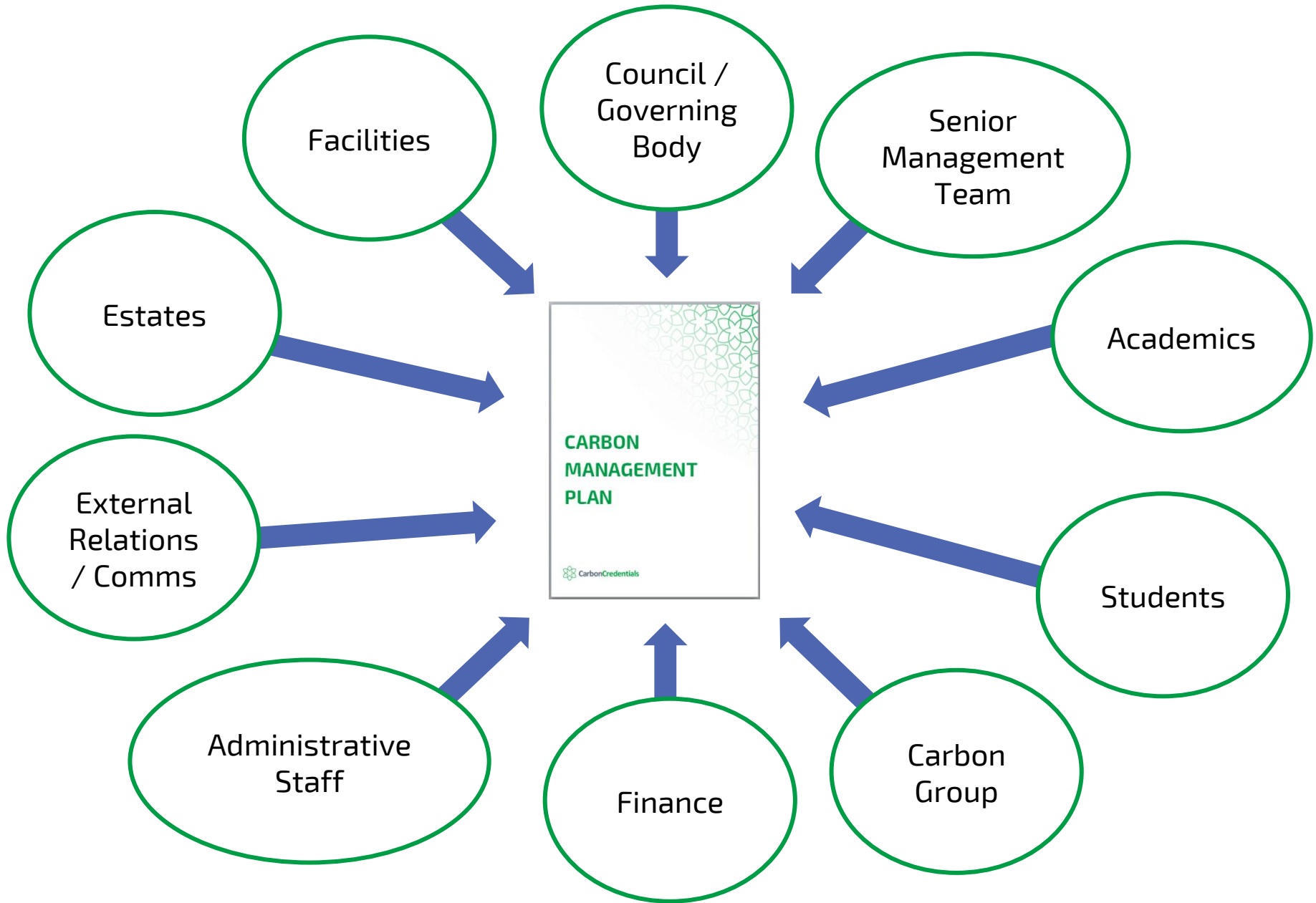
1. Develop a CMP that has Stakeholder Buy-in



1. Develop a CMP that has Stakeholder Buy-in

- a) Assess how their role influences and impacts carbon efficiency
- b) Identify opportunities for involvement and contribution
- c) Understand stakeholder challenges and priorities
- d) Align plan with their objectives and needs

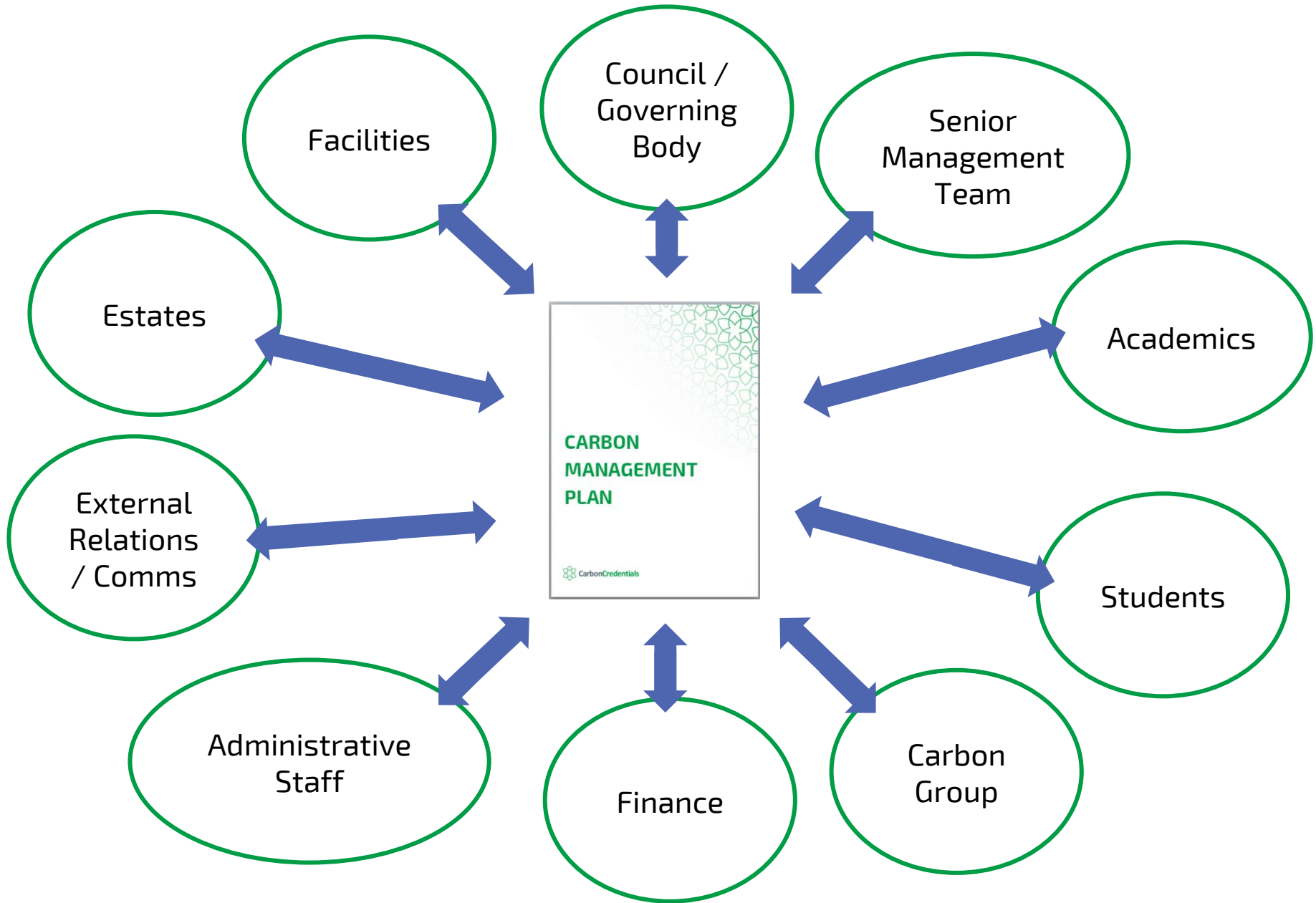
1. Develop a CMP that has Stakeholder Buy-in



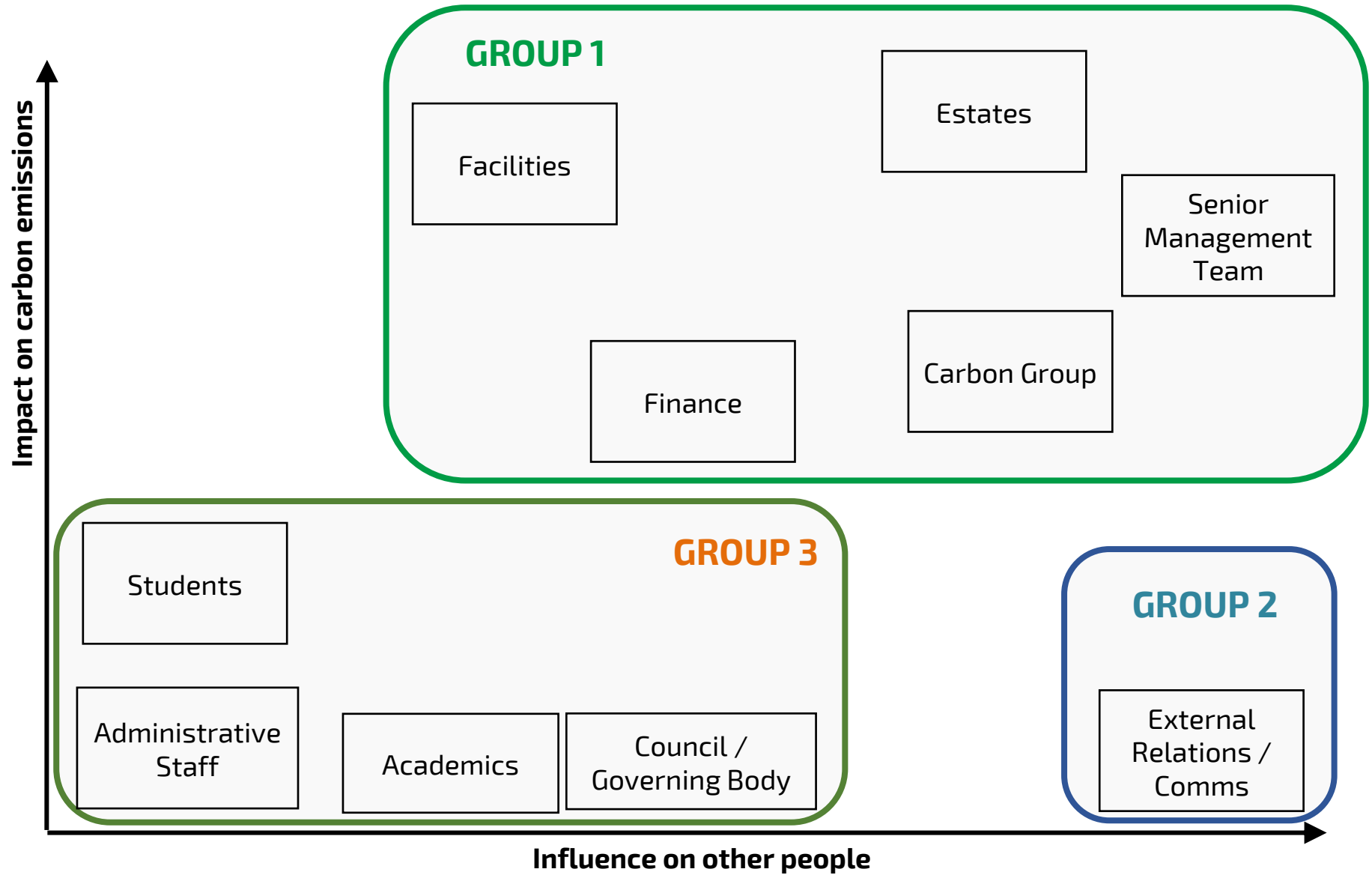
2. Use the CMP as a tool to engage stakeholders and drive change:

- a) Acts as a communications tool
- b) Establishes governance structure
- c) Defines project management and reporting framework
- d) Informs approaches to direct engagement
- e) Supports on-going communication and performance reporting

2. Use the CMP to Engage & Drive Change

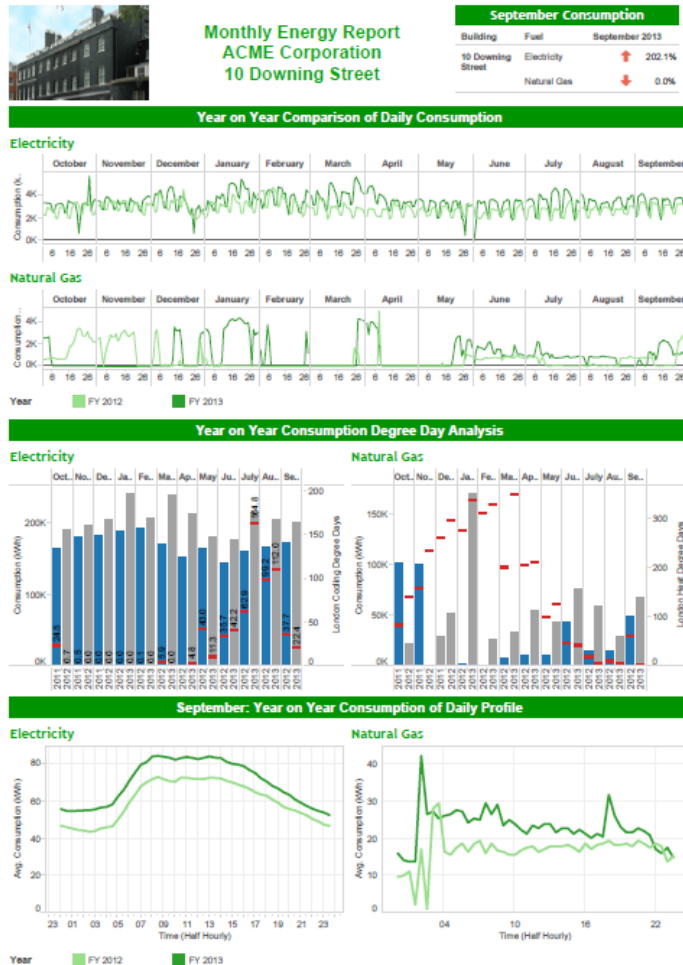


Stakeholder Mapping

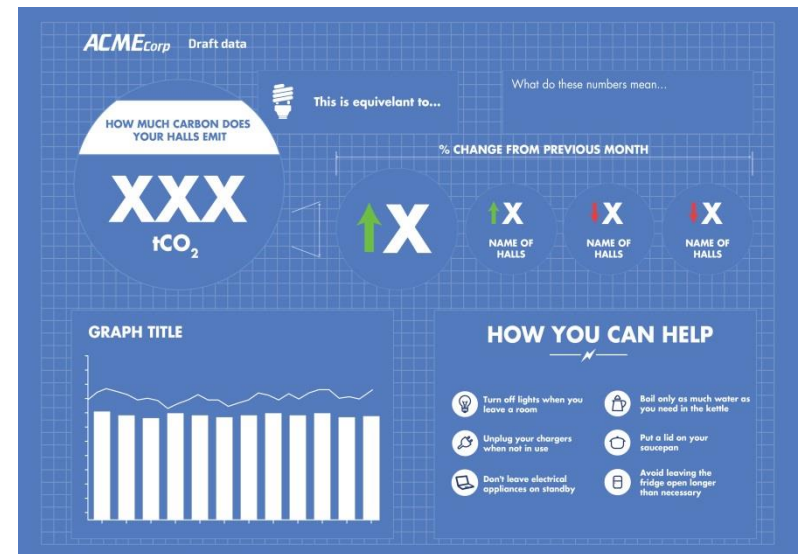


Tailored Communications to Stakeholder Groups

GROUP 1



GROUP 3



How to Maintain Momentum?

- **Direct Engagement** >>> *Groups or individuals to create momentum*
- **Governance** >>> *Generating accountability and supporting momentum*
- **Project Management** >>> *Maintaining momentum*
- **Broadcast Communications** >>> *All stakeholders to inform & motivate*

Key Components of a High Impact CMP:

4. Measurement & Verification





1. Create a plan

Value of M&V

- Higher accuracy of calculation





1. Create a plan

2. Agree plan with stakeholders

Value of M&V

- Higher accuracy of calculation
- Increased transparency – helps with understanding of risk





1. Create a plan
2. Agree plan with stakeholders
- 3. Implement project(s)**

Value of M&V

- Higher accuracy of calculation
- Increased transparency – helps with understanding of risk
- Keeps focus on energy savings
- Reduces commissioning risk
Keeps focus on energy savings





1. Create a plan
2. Agree plan with stakeholders
3. Implement project(s)
- 4. Monitor measurement**

Value of M&V

- Higher accuracy of calculation
- Increased transparency – helps with understanding of risk
- Keeps focus on energy savings
- Reduces commissioning risk
Keeps focus on energy savings
- Early warning of under-performance





1. Create a plan
2. Agree plan with stakeholders
3. Implement project(s)
4. Monitor measurement
5. **Verify savings and report**



Value of M&V

- Higher accuracy of calculation
- Increased transparency – helps with understanding of risk
- Keeps focus on energy savings
- Reduces commissioning risk
Keeps focus on energy savings
- Early warning of under-performance
- Provides robust and verifiable feedback to stakeholders
- Proves savings and stimulates further investment



An optimised CMP should have a clear strategy for M&V

- Assess historical data available
- Install metering and monitoring systems
- Understand short, medium and long term plans for the estate
- Assess the concerns of stakeholders and what they would consider 'evidence' of success
- Assess the value of utilising an approved process, i.e. IPMVP, or the draft ISO 50015

High Impact Carbon Management Planning:

Key Take Aways





Key Take Aways

1. Start with the end in mind
 2. Future Proof your CMP
 3. Enable your CMP to be a tool for change
 4. One size does not fit all
 5. Fund strategically as well as on a project basis
-

Carbon Management Diagnostic



1. SWOT analysis of current Carbon Management Plan
 2. Benchmarking against best practice across five key areas
 3. Stakeholder mapping exercise
 4. High-level historic data analysis
 5. Gap analysis with CMP Optimisation Roadmap
 6. Presentation of Diagnostic within stakeholder workshop
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Contact Us....

Ingram House

3rd Floor
15 John Adam Street
London
WC2N 6LU

Telephone: [0203 053 6655](tel:02030536655)

Email: info@carboncredentials.com

Website: www.carboncredentials.com

Twitter: [@CCESLtd](https://twitter.com/CCESLtd)

Linkedin: [linkedin.com/company/carbon-credentials](https://www.linkedin.com/company/carbon-credentials)

