

**Building sustainable
domestic MRV systems
for tracking and
reporting NDC
achievement +++**

CBIT 3rd workshop: Rome
23 May 2019

Presentation access



<https://tinyurl.com/yxrnyqo4>



What is the link?

Well functioning MRV
domestic Systems

There is much more
going beneath the
surface on than you
think!

Iceberg

Fruit Tree

Paris Agreement: Accelerating action

- **The Paris Agreement (UNFCCC)** - working together to achieve long-term temperature goal
 - Mitigation (Art. 4) – NDCs - rapid reductions in GHGs
 - Adaptation (Art. 7) - adaptation planning & actions
 - **Transparency (Art. 13) - clear understanding of climate change action**
 - Global Stocktake (Art. 14) - assess the collective progress



Why is Domestic MRV important?

“If you can't measure it, you can't manage it”

Inform and inspire “decision makers”

Build effective, integrated, climate sensitive strategies for all sectors

A “how to?” guide to building a low-carbon, carbon removing, climate resilient sustainable economy.”

Climate Action: What are our priorities, conflicts and co-benefits?



What are the wider impacts of climate change actions?

Climate change actions can have impacts beyond the intended goal of emissions reduction. These additional impacts can be positive (e.g. savings on fuel bills or improved health) or negative (e.g. increased risk of road accidents).



What does this graph show?

The graph shows the possible wider impacts of current climate change actions in Jersey in relation to the Future Jersey outcomes. Orange lines show where impacts may be negative and blue lines where impacts may be positive. The thicker the line, the stronger the impact.



How do I explore this graph?

To explore this graph, you can:

1. Use the filters
2. Click on or hover over a line. This will bring up additional information.
3. Click and drag over an icon to highlight related items.

More Information

Click on the icons to view key reports



Jersey sea level rise and coastal conditions climate review 2017



Wider Impacts of Climate Change Action in Jersey

Filter by Jersey Climate Change Actions

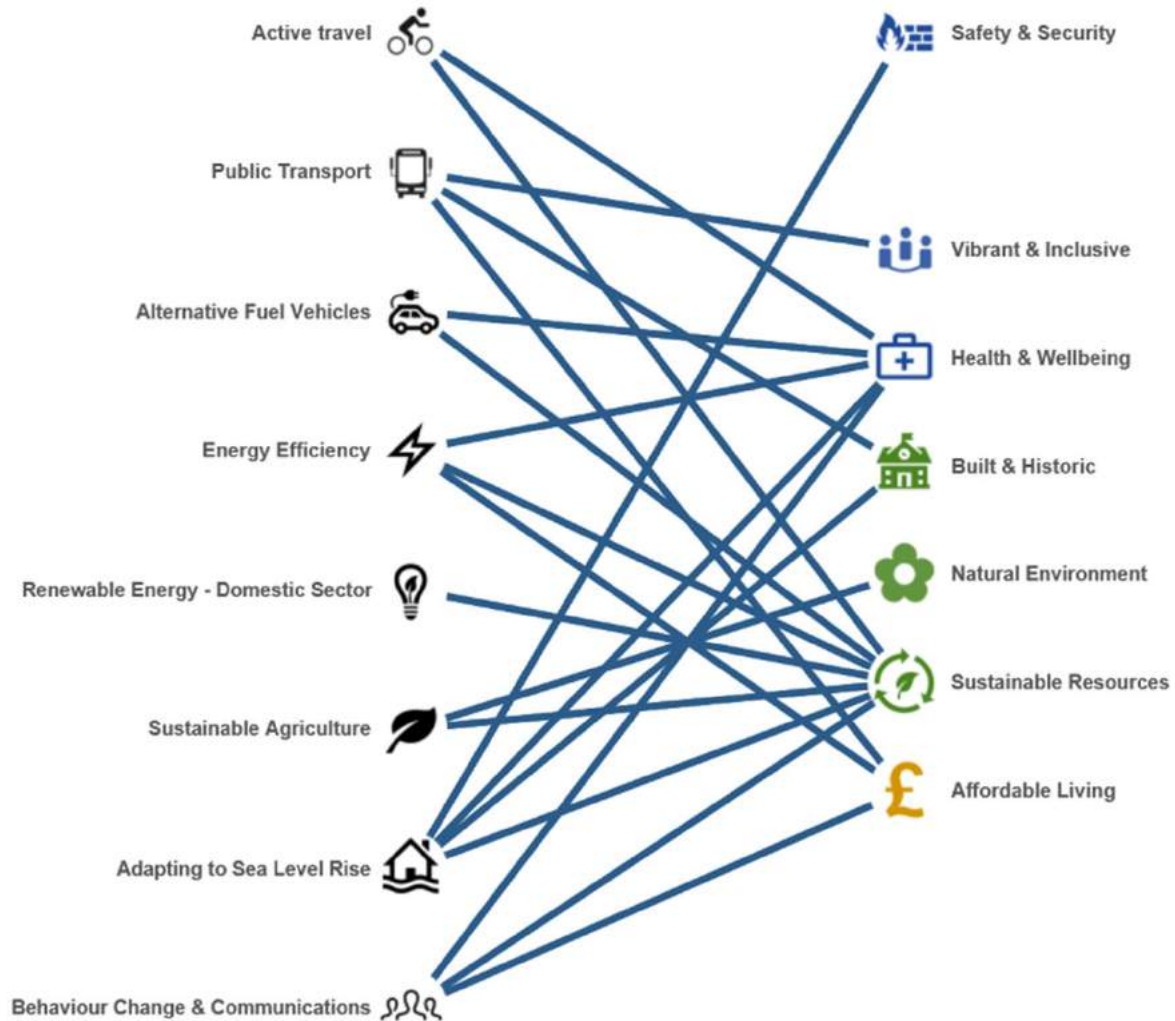
(All)

Filter by Strength of Impact

Strong

Filter by Future Jersey Theme

(All)



Aether:

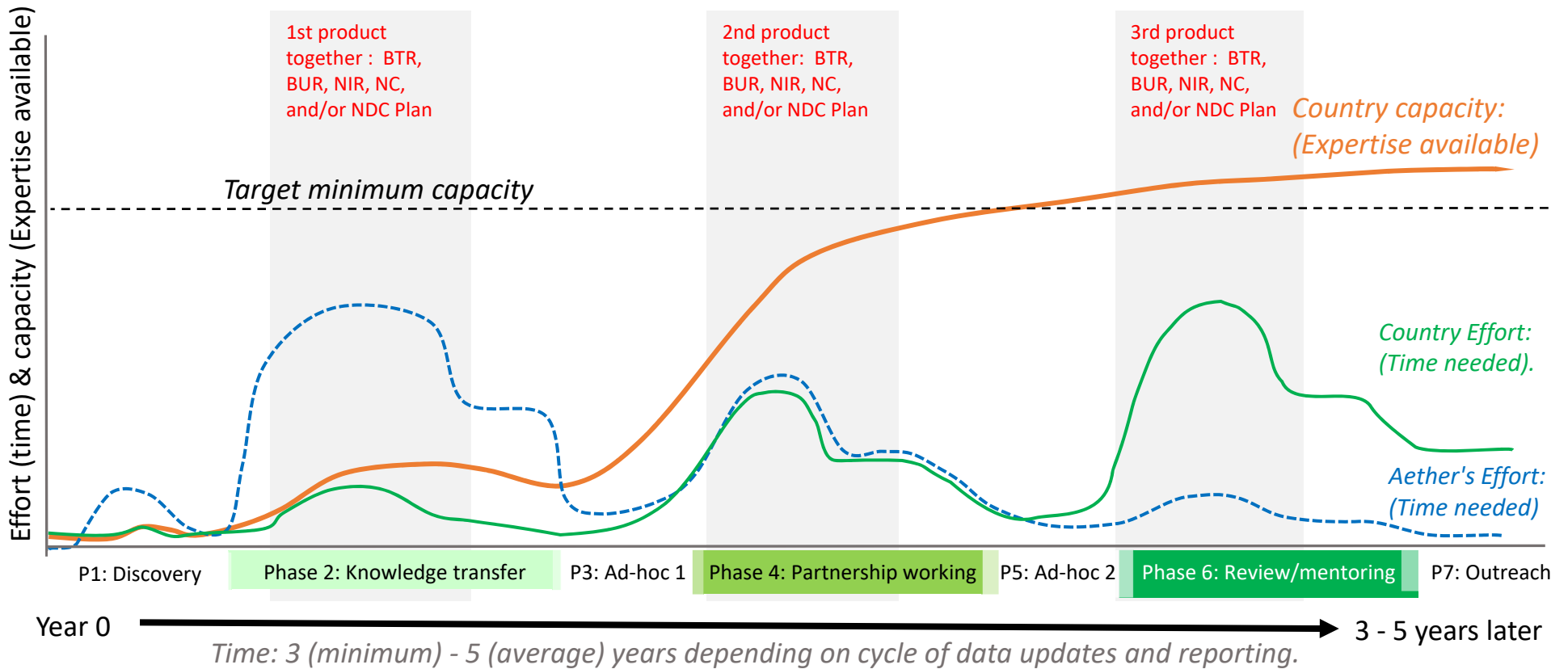
- **MRV systems and tools:** Institutional arrangements, Stakeholder engagement, online platforms, tools and templates.
- **Sectoral expertise:** All sectors (UNFCCC Review trained and multi country system experience)
- **Data gathering, compilation, reporting & review.** GHG & Air Pollution Inventories & Projections, Climate and air policies and measures (climate action) (NC, BUR/BTR/NDC/NAMA) support & mentoring.
- **Working with:**

Montenegro, Tanzania, South Africa, Mozambique, Barbados, Grenada, Antigua & Barbuda, St Vincent and the Grenadines, Jamaica, European Union, UK, Ireland, Malta, Iceland, Luxemburg, Germany, Italy, Spain, West Balkans, Turkey, Australia, UAE and more

Benefiting from over 20 years & > 50 countries lessons learned in MRV/Transparency systems.



Our approach to building domestic MRV



Key

- Country capacity: (Expertise available)
- Country Effort: (Time needed).
- - - Aether's Effort: (Time needed)



What are domestic MRV Systems?

- **Sustained teams of experts & reliable data flows.**
- **Organised, flexible “archive” containing re-usable information:**
 - To support decisions in national councils
 - To inform project based analysis (e.g. action impacts)
 - Provide regular reliable indicators & reports for tracking progress and a reality check on ambition
 - Quality International reports (NDC Plans, BUR, BTR, NC, NIR, AC)



Domestic → International MRV/Transparency

	Domestic MRV	International MRV
- Monitoring	Understanding the evidence: <ul style="list-style-type: none"> • data gathering and analysis • research & improvement, • data archive. 	<i>Contribute to global monitoring and analysis of trends, scenarios etc.</i>
- Reporting	Informing national action implementing stakeholders: <ul style="list-style-type: none"> • Progress, gaps & needs 	Communicate: <ul style="list-style-type: none"> • Progress indicators and input to: BTR/BUR, NDC, NIR, NC
- Verification	Quality assurance & control: <ul style="list-style-type: none"> • build confidence in data • consultation and review 	Build trust & understanding: <ul style="list-style-type: none"> • International review • FSV/FMCP • trust and understanding

➤ = Successful NDC implementation

➤ = Accelerated adaptation and resilience

Domestic MRV : The chance to link Mitigation, Adaptation and SDGs....

➤ Mitigation

- Trends in greenhouse gases
- Projection scenarios
- Mitigation targets
- Mitigation actions
- Direct and wider impacts
- Needs

➤ Adaptation

- Climate observations, events & impacts
- Risks, vulnerabilities,
- Climate Scenario
- Adaptation goals
- Resilience & adaptation actions
- Direct and wider impacts
- Needs

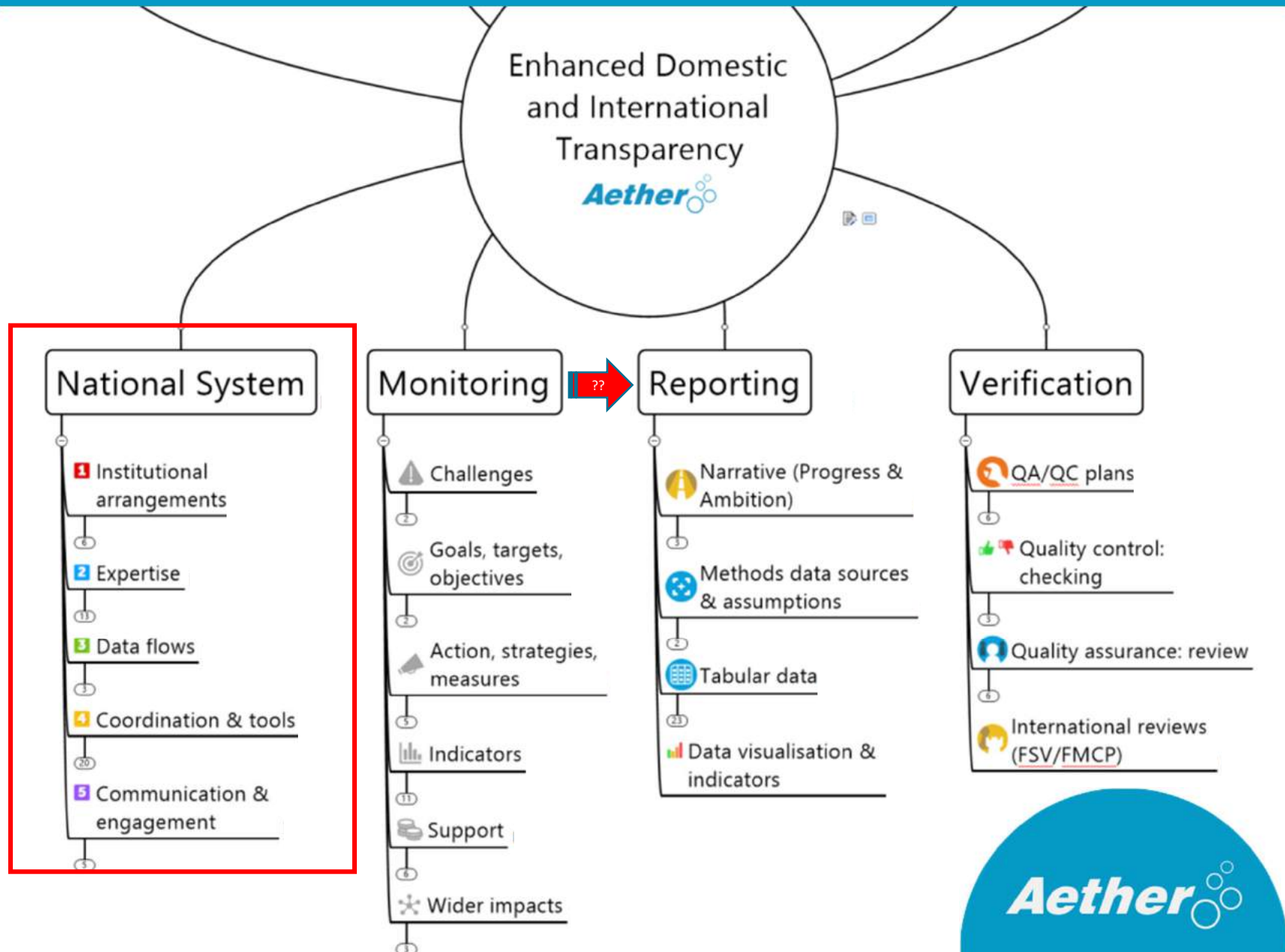
SDGs

➤ Support

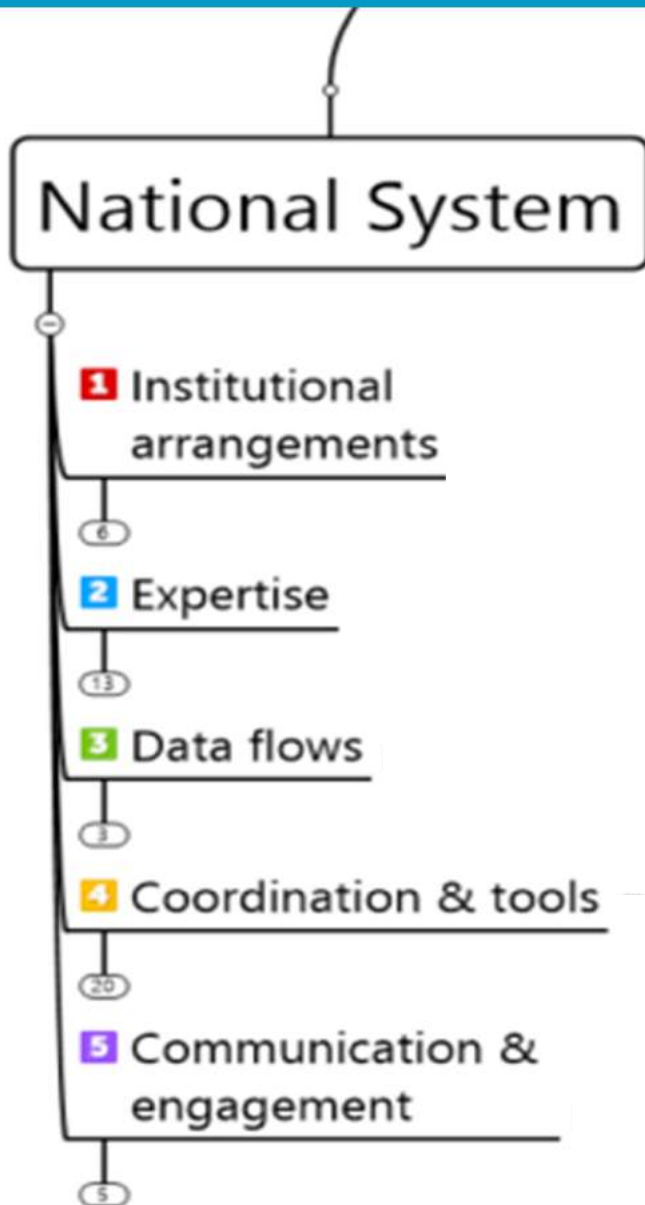
- Financial support
- Capacity building
- Technology transfer



A “working framework for capacity building on transparency”



Working framework: “National Systems”



1. Institutional Arrangements: Organisations, TORs, Laws, Roles and Responsibilities

2. Expertise: Compilation co-ordination, Sectoral, Reporting.

3. Data Flows: Datasets, Data Supply Agreements, Curation

4. Coordination & Tools: Workplans & Tools, Documentation, Templates, Archives, Guidance & Training

5. Communication and Engagement (ownership): National Councils, Briefings, Websites, Education & awareness, Events and activities

Useful structuring for: Needs assessment, Capacity building support, underpinning laws and institutional arrangements. Breakdown silos.

1: Institutional Arrangements

Steering committee:



Transparency
system owner



Management &
coordination:



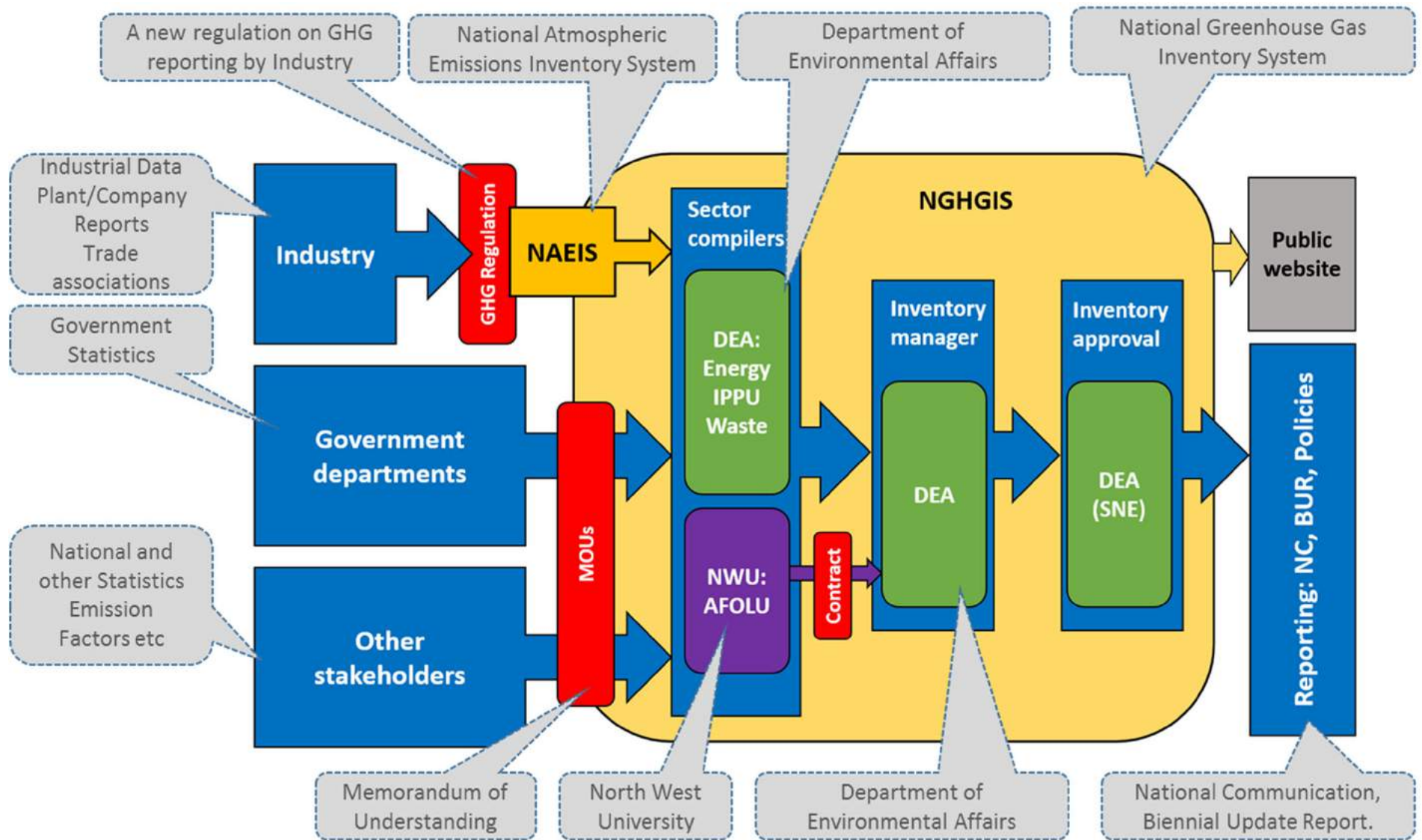
Sectoral experts:



Data
Providers:



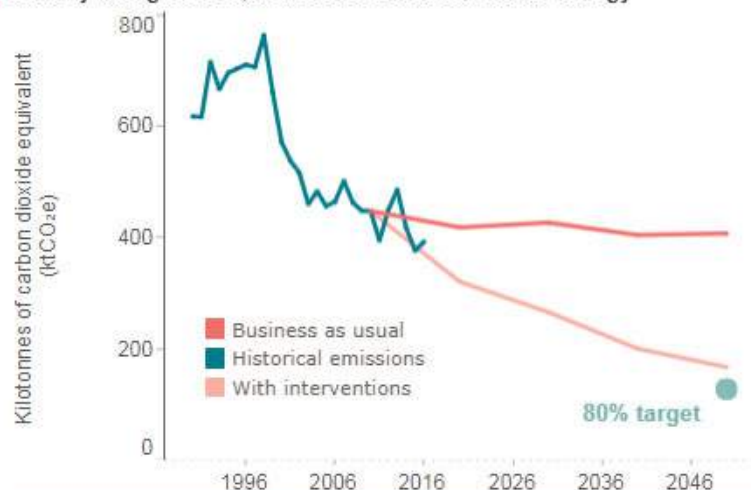
2: Data Flow



5: Communication and Engagement

Home page | Summary of the headlines | What's happened in the past? | What does action mean for us? | What does the future look like?

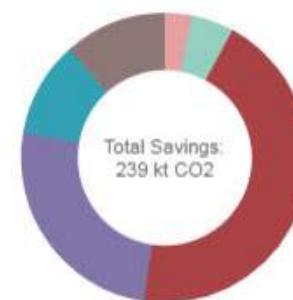
i By 2050, Jersey aims to reduce emissions by 80% compared to 1990 by using secure, affordable and sustainable energy



Emissions are predicted to decrease by 73% with interventions

In 2050 emissions savings (compared to business as usual) will be made from the following sectors:

- Savings from aviation
- Savings from agriculture
- Savings from road transport
- Savings from domestic sector
- Savings from HFCs & PFCs & SF6
- Savings from industrial and commercial sector



The largest savings will come from road transport.

i The top 5 policies for emissions savings:

Policy description	Projections Sector	Policy contribution to savings	The total saving from this policy until 2050 (ktCO ₂ e)
Introduction of Ultra Low Emission Vehicles (ULEVs)	Road transport	22,01 %	138,33
Energy efficiency measures applied to pre-1997 stock of properties	Domestic sector	21,66 %	136,08
Improved EU emissions standards for cars	Road transport	11,54 %	72,50
Energy efficiency improvements in the Private Sector	Industrial and Commercial Sector	10,49 %	65,92
Energy efficiency improvements in the Public Sector (States of Jersey)	Industrial and Commercial Sector	5,98 %	37,58

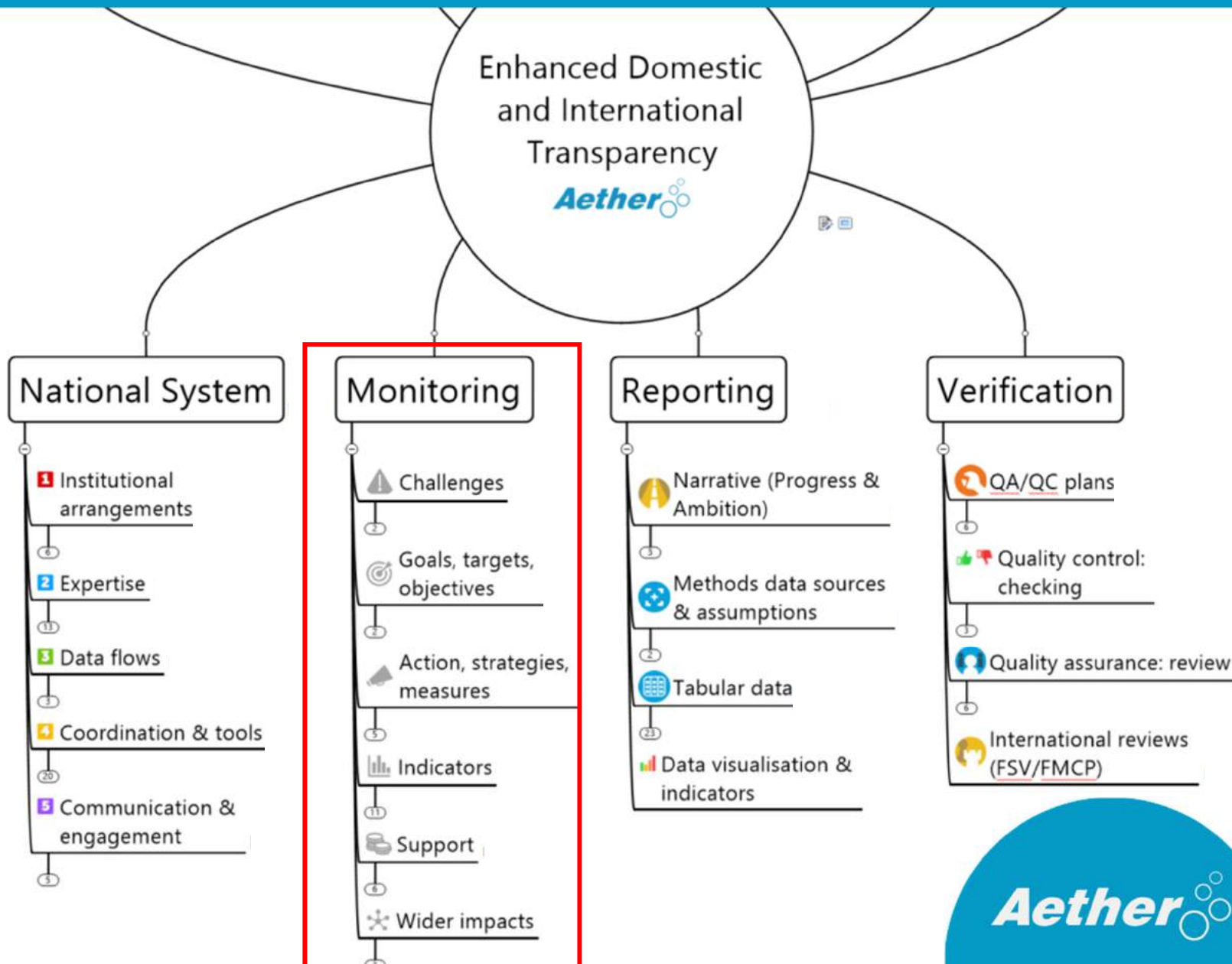
Jersey will continuously monitor and review these policies so as to be effective in meeting their target.

More information

For more information on policies, click on the icons to the right. This will take you to 'Pathway 2050: An Energy Plan for Jersey' and 'Analysis of Future Jersey indicators that are at high risk from climate change'



A “working framework for capacity building on transparency”



Working framework: “Monitoring”



- Build your “Archives” and **indicators to influence and track progress & understand uncertainties for:**
 - GHG trends, projections, **mitigation** actions and support
 - Climate trends, scenarios, impacts, **adaptation** actions and support
 - Wider impacts on SDGs, National Strategies and other national priorities
- Supports:** National reports + NDC plans, Adaptation plans, communication (and reports (e.g. BUR/BTR) on climate action.

Montenegro MRV system Conceptual Framework

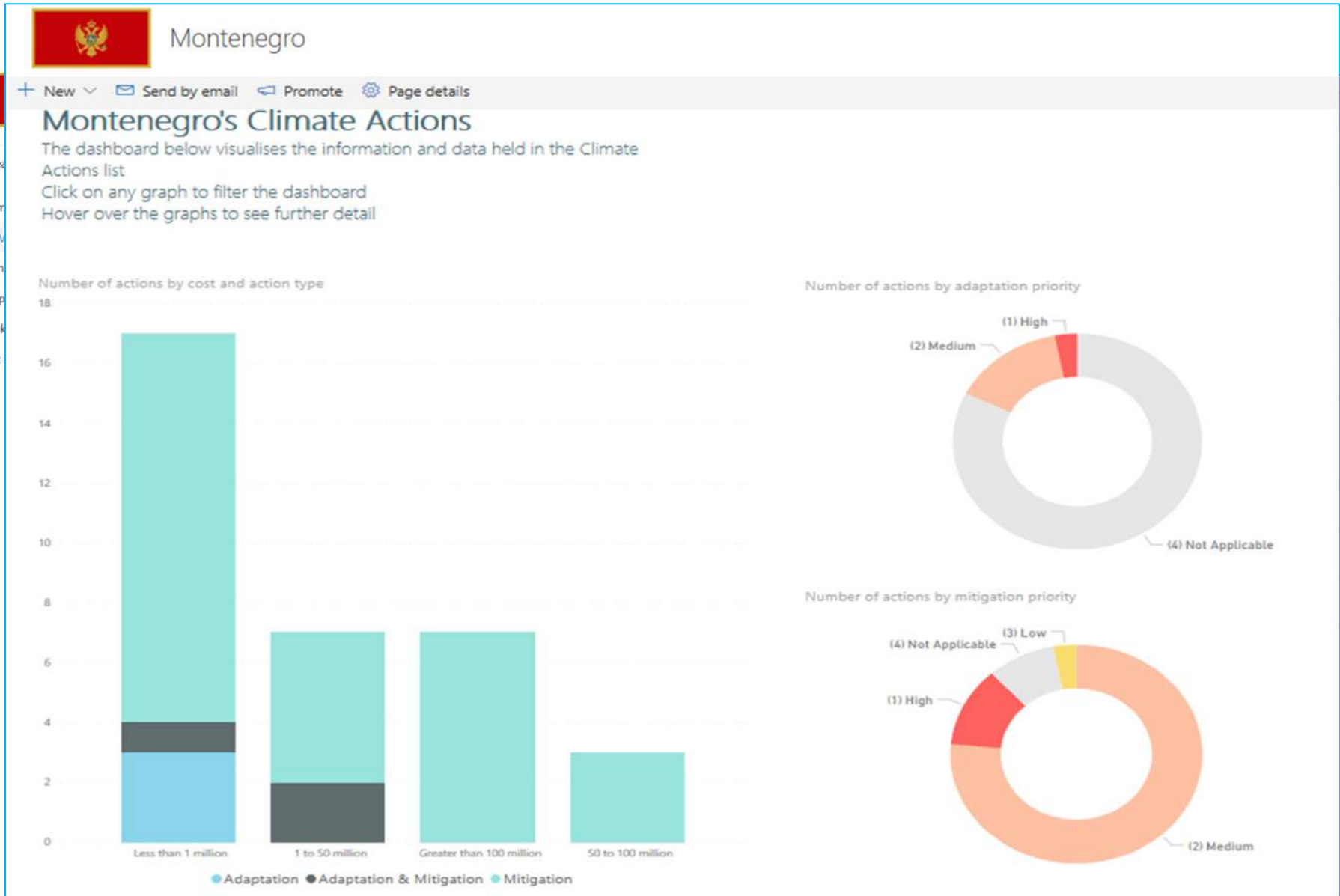


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Montenegro MRV System Portal:



South Africa's: MRV Portal (GHG) & (TnE)



DEA Climate MRV Portal

NGHGIS

T+E Portal

 EDIT LINKS

DEA Climate MRV Portal

Welcome to the DEA MRV Portal for GHG Inventory and Action Tracking and Evaluation

The buttons below show the sites that are available in this Site.

Please click the buttons to go to the site.



National Greenhouse Gas Inventory System (NGHGIS)

This site provides the greenhouse gas estimation team and key stakeholders with a place to manage content needed for the national greenhouse gas inventory and national system reports.



Tracking and Evaluation Portal (T+E Portal)

This site provides a system for enhanced transparency and tracking progress of climate actions. It records mitigation and adaptation actions alongside associated information such as challenges, indicators and wider impacts.



Support

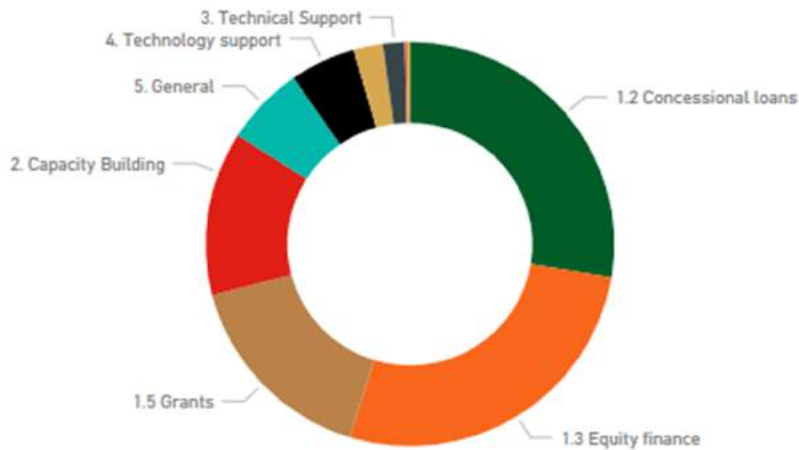
In order for South Africa to implement effective climate action, support is required to fund programmes. The financial support, categorised by type and current status, required by South Africa to implement action is presented below.

Click on the graph segments and legends to explore the data. Hover over the graphs to see more information.

Support channel

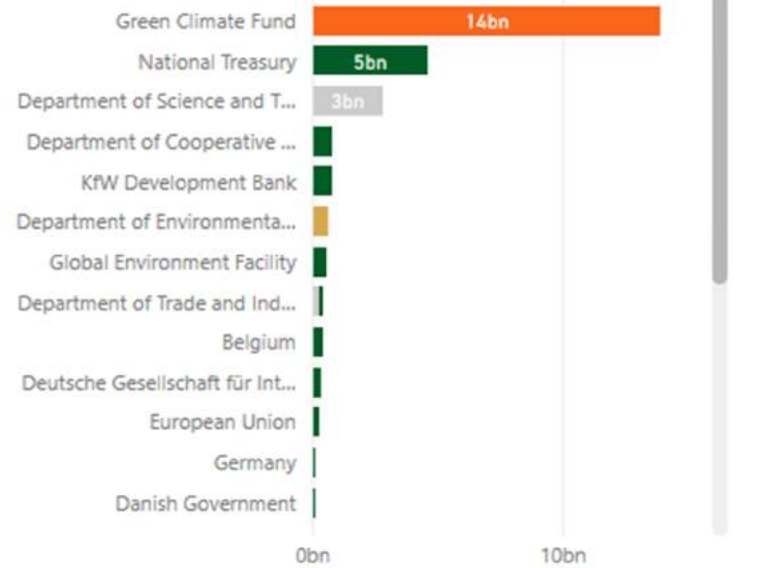
All

Support type



Support status

(Blank) Committed Needed Received Supplied



Actions ← Home → Indicators

Mozambique: MRV Portal (~ 100 actions)



Portal da Transparência da NDC de Moçambique

Share

+ New Send by email Promote Page details

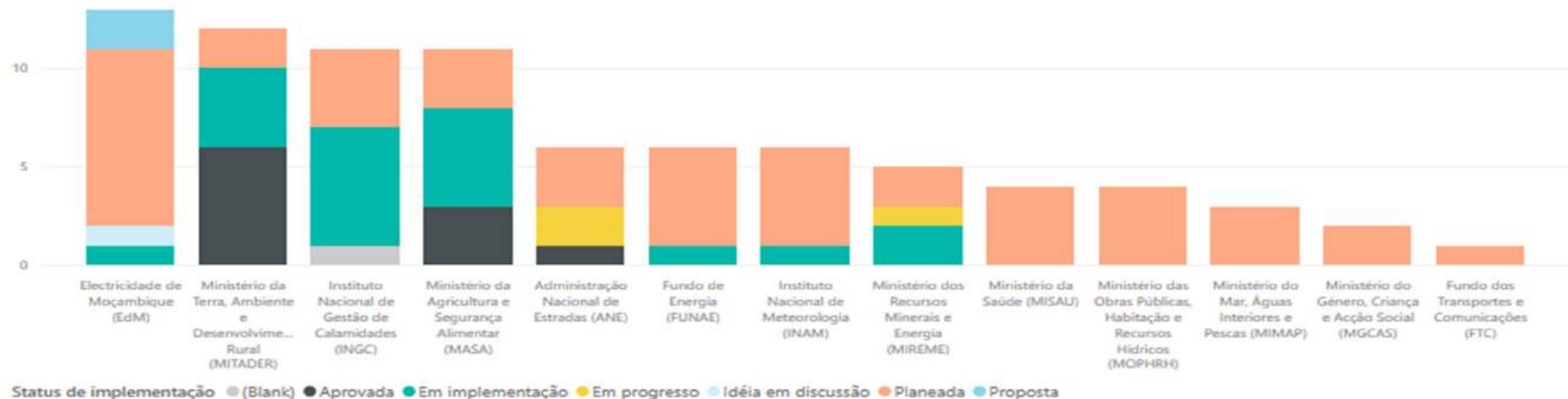
Ações e Medida

Esta é uma lista ao vivo das ações nacionais, regionais e locais de mitigação e adaptação climática.

[Clique aqui para ir para a lista](#)

Clique nos gráficos para filtrar a vista.
Passe o mouse sobre os gráficos para ver mais detalhes.

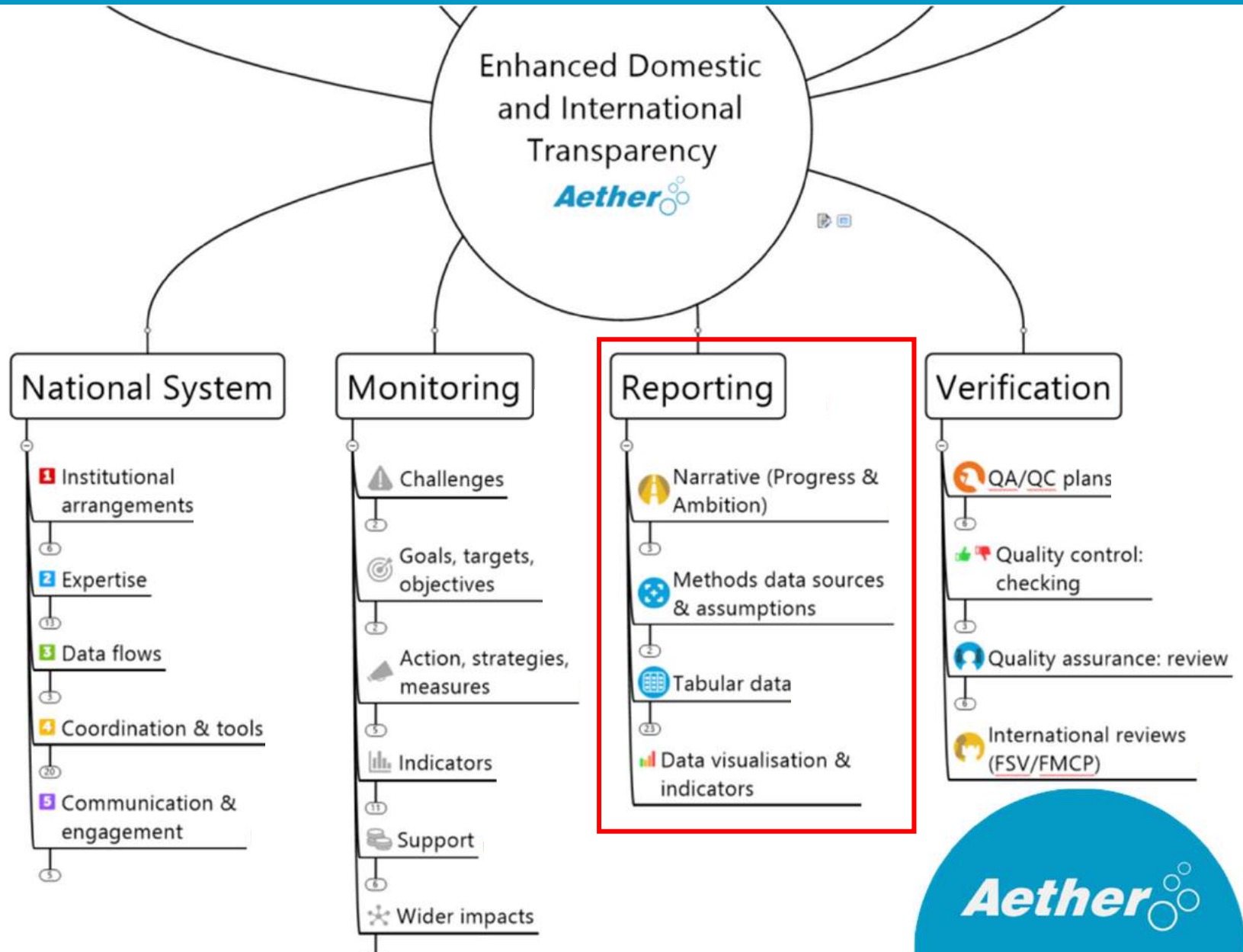
Número de ações by Organização and Status de implementação



Ações climáticas

- Adopção de Sistemas de Transporte Social e Ambientalmente Sustentável/ Expansão do Metrobus para as principais capitais do país
- Alimentação de 5000 geleiras de uso doméstico, através da tecnologia fotovoltaica ou com aerogeradores, em residências em áreas isoladas da re...
- Aplicação de práticas de gestão que aumentem a capacidade adaptativa dos ecossistemas
- Aumento da capacidade de armazenamento a toso os níveis

A “working framework for capacity building on transparency”



Working framework: “Reporting”



- **Narrative:** Progress, ambition, wider impacts, uncertainties.
- **Methods, data sources and assumptions:** “National systems”, compilation of data (evidence).
- **Tabular data & data visualisation:** Challenges, goals, objectives, targets, strategies, actions, indicators, support, wider impacts

Are your communications inspiring action?

*National reports + International reports
(BUR, BTR, NDC Plans, NCs and whatever comes next)*

Antigua and Barbuda BUR

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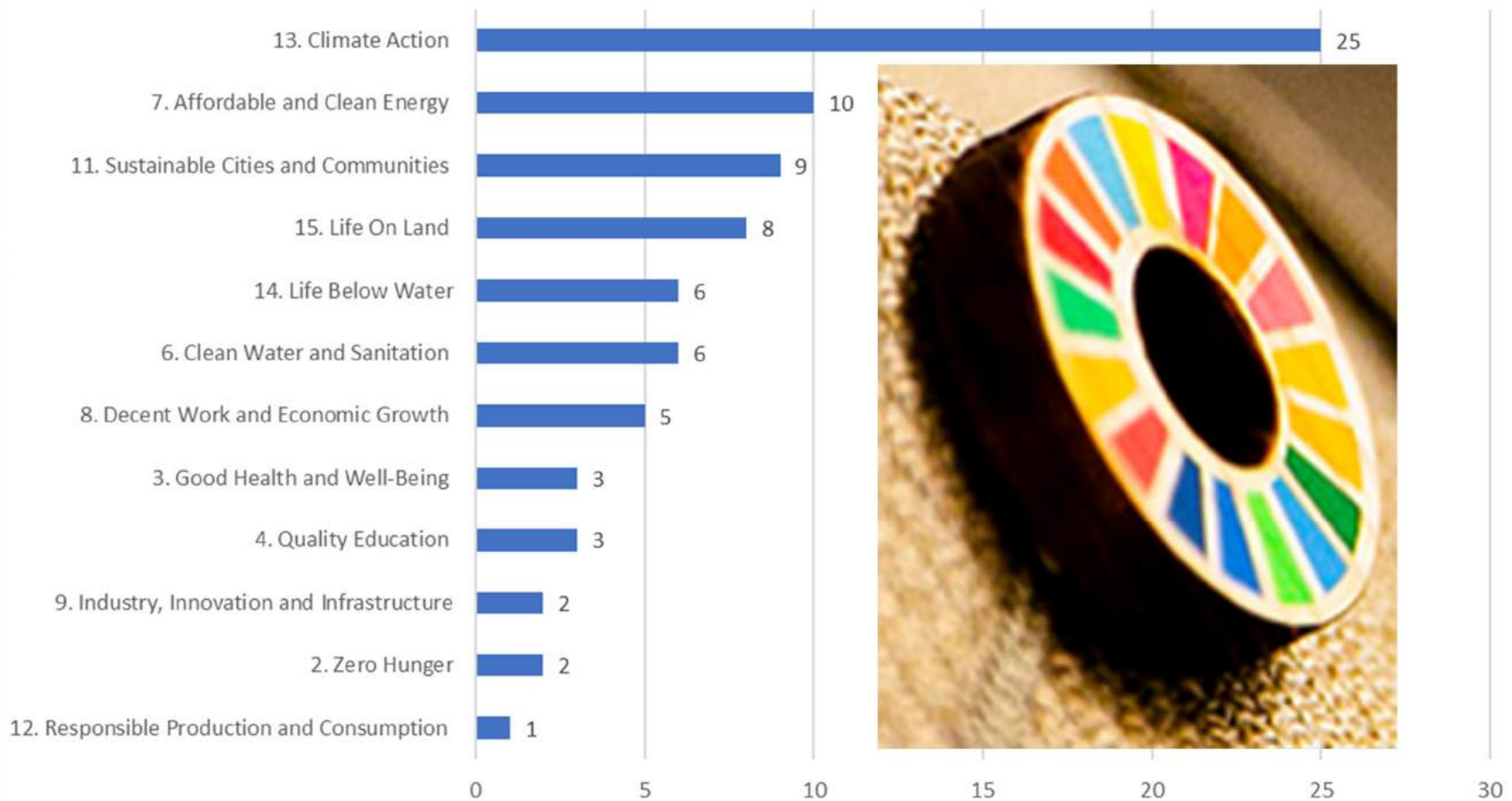
Tabular data

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Antigua & Barbuda: Actions

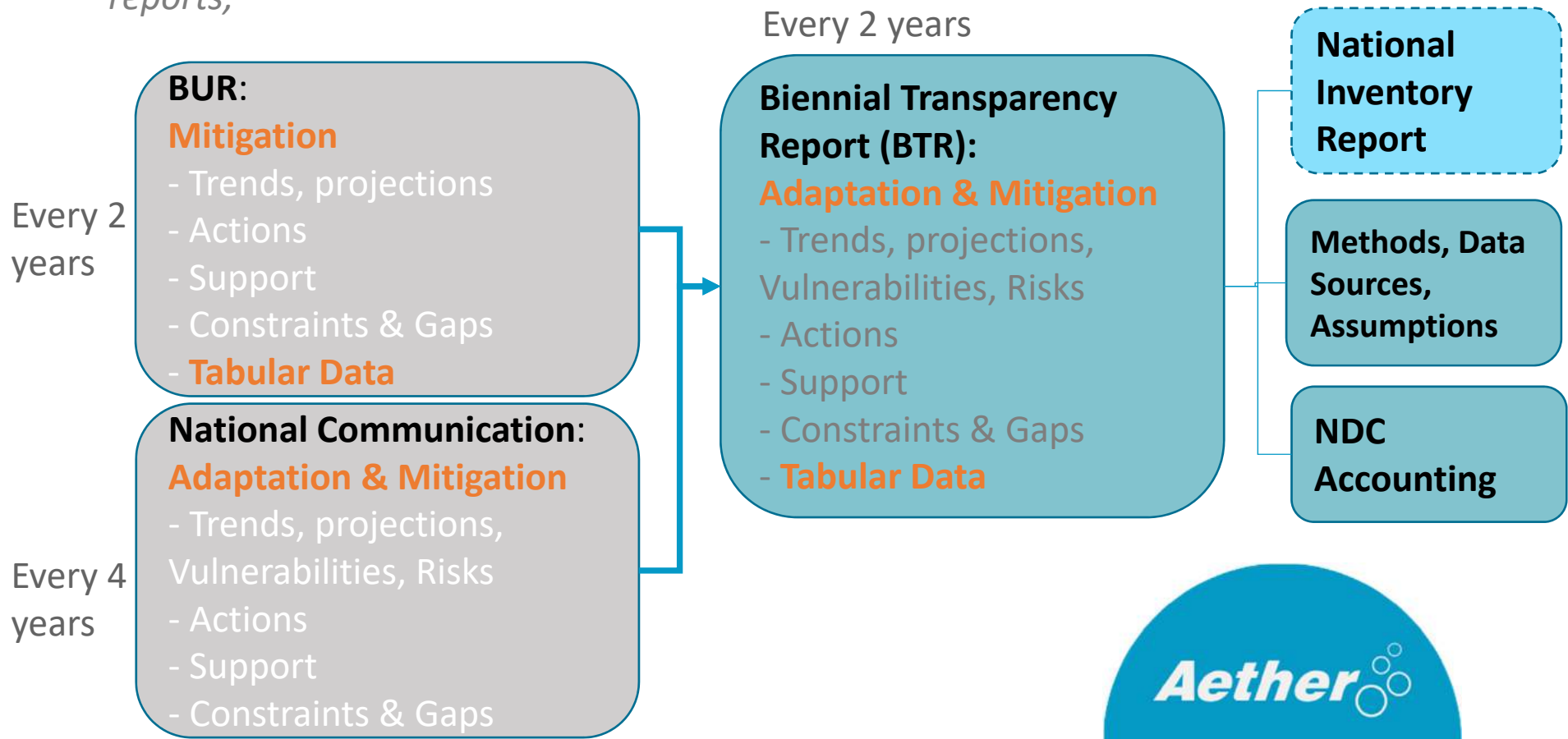
ID	Name	Status	indicator
----	------	--------	-----------

Figure 4 Number of climate actions which contribute to the fulfilment of the Sustainable Development Goals

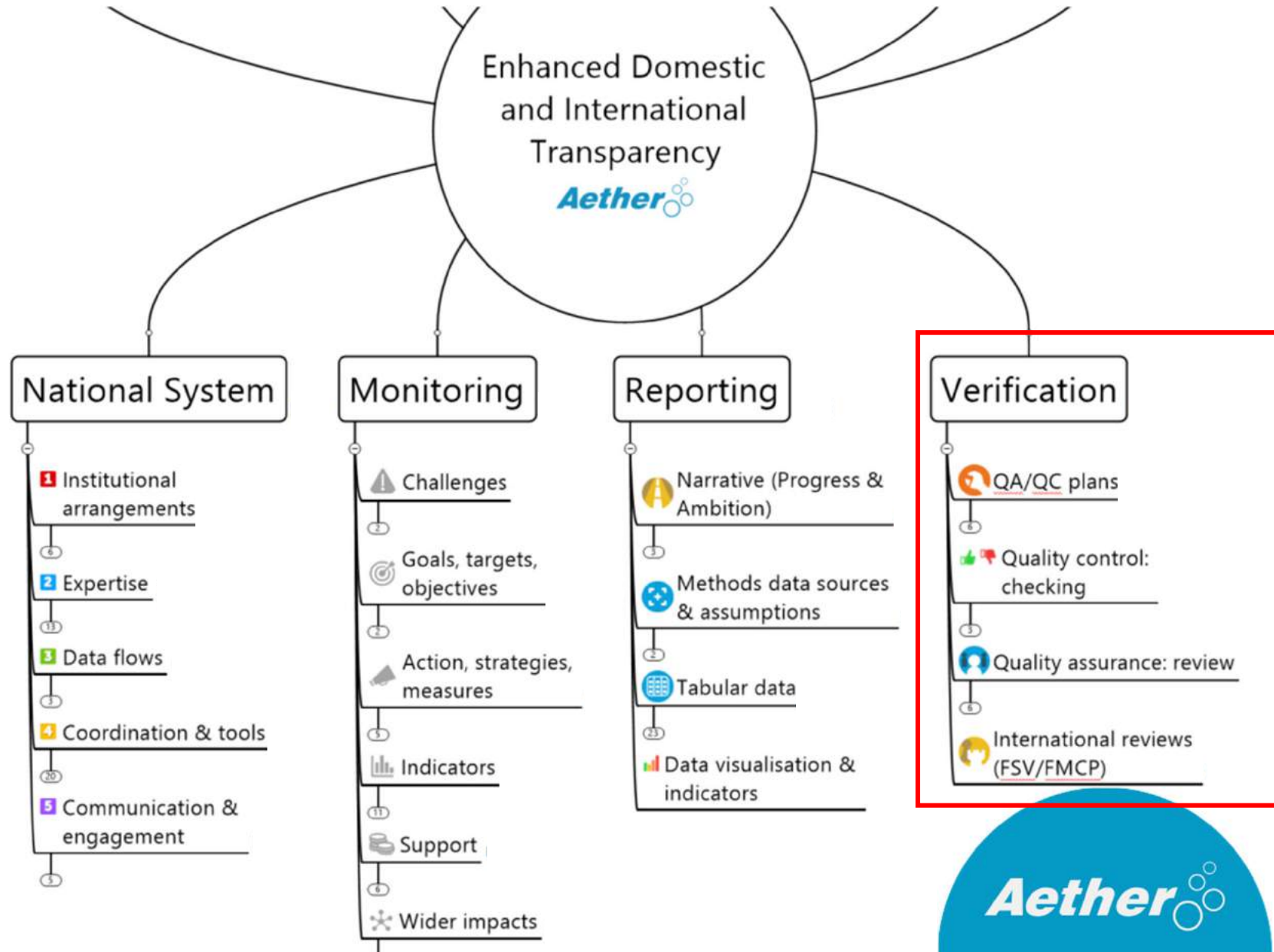


BURs and NCs vis-à-vis BTRs;

- **Paris Agreement: Paragraph 99:** Also decides that the modalities, procedures and guidelines of this transparency framework shall build upon and eventually supersede the measurement, reporting and verification system established by decision 1/CP.16, paragraphs 40 to 47 and 60 to 64, and decision 2/CP.17, paragraphs 12 to 62, immediately following the submission of the final biennial reports and biennial update reports;



A “working framework for capacity building on transparency”



Working framework: Verification



- **QA/QC Plans:** Objectives, activities, records of QA/QC
- **Quality Control:** Input checks, Routine compilation checks, output checks
- **Quality Assurance:** Bilateral/trilateral reviews, independent reviews & Public Consultation
- **International reviews (FSV/FMCP):** international peer review and consideration of progress

Is your information credible and useful for decision making?

South Africa GHG Inventory Quality System



Search this site + New Send by email Promote Page details

QA/QC Plan

Welcome to the QA/QC Plan. This highlights the QA/QC objectives, checks and a log of what has been done. These are orientated around agreed quality objectives and will include a number of specific activities. The QA/QC manager should indicate when these have been completed and provide a link to the evidence of completion.

QA/QC Objectives: This is where you list your high level Quality objectives and how they will be met. You review these when you produce a new set of estimates to see how they were achieved. You link to them the activities that are listed in the library of QA/QC Checks.

QA/QC Checks: This is your library of checks. List here any checks you intend to do. Use it as a reference library when setting up QA/QC in your individual calculation files and QA/QC briefs for review of reports. When you implement the checks in your calculation files or with review of reports etc use the IDs to show which checks you implemented.

QA/QC Log: use this list to itemise specific QA/QC activities undertaken by who and when. Attach evidence of the QA/QC (e.g. review reports) if needed or reference "emails" or filenames of the which you should archive.

QA/QC evaluation and improvements

- Review all QA comments and prepare National Inventory Improvement Plan. (NIC, Month 14)

Quality planning

- Inventory kick off meeting. Meet with GHG Inventory team and data providers. (NIC, First two weeks)
- Update QA/QC plan and have it approved. Communicate plan to GHG inventory team. (QA/QC coordinator, First month)

Finalise

- Finalise inventory draft and KCA. Prepare archives. (Document & KCA coordinator; Data archive manager, Month 13)
- Sign off on all QA/QC logs. (QA/QC coordinator, Month 13)

Quality control

Challenges for domestic MRV systems

- **Institutional arrangements, expertise and resources**
 - Sustaining institutional memory, capacity and expertise
- **Data flows**
 - Getting regular, better data (e.g. detailed activity, country specific research/conversion factors)
- **Management and coordination**
 - Efficient data structuring, analysis, use and re-use
 - QA/QC performing, documenting
- **Communication and engagement**
 - Efficient, easy to produce reports.
 - Re-usable credible data
 - Inspiring and tracking action



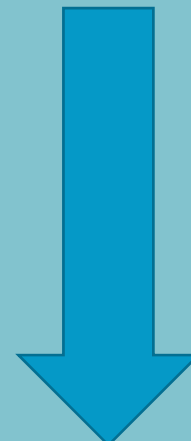
Domestic MRV: Turn aspirations to reality for your country

- **Give technical people** the chance to become valued long term teams of expert, analysts, advisors and negotiators
- **Develop outputs** that accelerate action and positive change

Thank you

If there is time, show the tree..

Justin.goodwin@aether-uk.com



Investor
briefs

Policy
briefs

Company
commitment

Public
Engagement

Community
action

Ministerial
updates

Data flow

International analysis &
Research (e.g. IPCC)

Transport & Energy &
Economic Policy

Economic development

Energy Statistics

*Population
growth/decline*

Industry &
commerce

Transport
Statistics

Country specific analysis
& research

Air Pollution
Policy

NDC

BUR/BR 1,2,3,....

Good
technical
People
capacity

NAMA

National Climate
Policy & Action

Waste and Environmental
Statistics

Climate trends & impacts

*Energy availability &
price*

Waste Policy

Remote Sensing

Climate prediction!!

Agriculture & Land Statistics

Land, Forest and Agriculture Policy

