Guidance provided to the analytical team on process, tools, resources, guiding principles, and ways of working. Drafting of the Isle of Man Government Climate Change Action Plan

1. EXECUTIVE SUMMARY

1.1 The Climate Change Analytical team, a group of officers from different Departments across the Isle of Man Government, was tasked with undertaking research and providing analysis and actions based on main emission sectors. Analytical Team members were provided with initial training on climate change science, and co-located to work collaboratively together for between 3 to 6 months.

1.2 Members of the Team were provided with guidance regarding principles, ways of working and the drafting of an action plan. They were required to identify two pathways to reduce carbon emissions within their research area to meet net zero by 2050. The first pathway was to identify the minimum necessary to achieve the end point, with a second, higher ambition pathway, to reduce emissions more rapidly in earlier years. This guidance and format was established by Professor Curran as a way informing team composition and ways of working.

1.3 The reports produced by the Analytical Team informed Professor Curran's report.

1.4 It should be noted that the guidance changed throughout as the project progressed and may not relate in its entirety to the final product, for example taking into account timeframes and information availability. However the overall philosophy remained the same.

2. THE PHILOSOPHY

2.1. Climate change is the greatest threat to humankind.

2.2. It threatens the planetary ecosystem and the functions that support our ways of life.

2.3. It is urgent to address its causes.

2.4. The Isle of Man must play its full part as a responsible global partner.

2.5. The Isle of Man will be ambitious and seek to be a demonstration of good practice.

2.6. Addressing climate change will create a more secure, resilient, healthy and successful future for the people of the Isle of Man.

3. BACKGROUND

3.1. The Climate Change Action Plan must be provided by 31 October 2019. A specification has been provided of its essential elements:

- *The report should provide a climate change action plan to include ambitious target options for achieving net zero emissions with interim targets and a climate impact assessment of proposals.*
- *The report should consider the impact on the environment, community and economy in order to propose an appropriate balance and clarify the impact of options identified.*
- *To inform any statutory target obligations included in the proposed Climate Change Bill being introduced in the next legislative year; and calls upon the Government to lay its Climate Change Action Plan before Tynwald by January 2020*

3.2. This is a demanding task which will need to be launched very quickly, and will require sufficient resource and close managing and monitoring in order to be successful.

4. PROPOSED WORKING METHOD

4.1. It is intended to adopt a "warp and weft" model. In this approach, the warp will be laid out, at a relatively high level, as a set of milestones for completion of numerous actions which, together and sequentially, will lead to the outcome of the Isle of Man being net-zero by 2050. Similar exercises will be conducted for a pathway which is the minimum necessary to achieve the end-point and for a pathway that is higher ambition, with emissions dropping more rapidly in earlier years. Experts drawn from appropriate Government Departments/Agencies will then create their weft which will be woven into the warp. Each weft will comprise expert analysis of the specific, sectoral, contributions required to meet the milestones. Once the wefts have been drafted, and sense-checked, by the individual Departments/Agencies, they will then be reconciled and the resulting completed fabric checked for consistency and the absence of holes. This is likely to require some iteration with Departments/Agencies (See Figures 1 and 2).

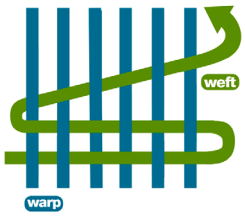
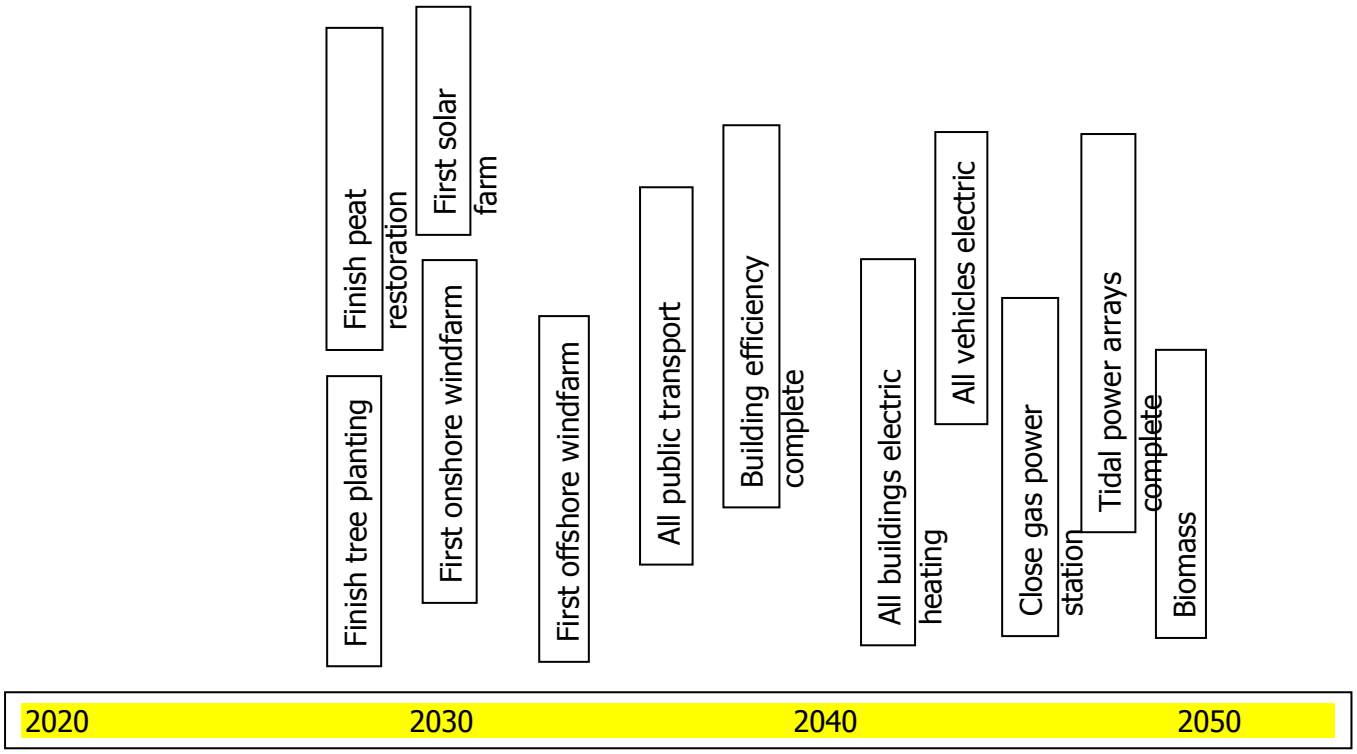
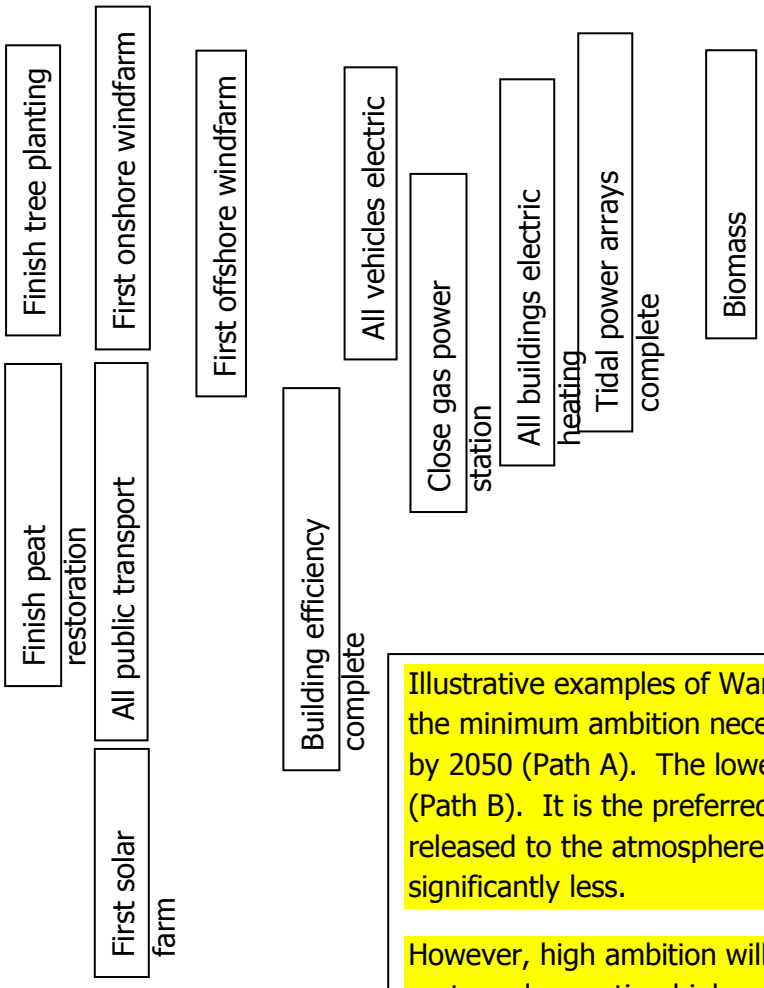


Figure 1: Warp and Weft Model.

4.2. In addition to the identification of the actions required of individual sectors, it will also be requested that estimates of costings be undertaken. This will be split into public funding and private funding, and will include likely returns on investment, or anticipated new income streams. Innovative funding approaches will be encouraged.

Figure 2: Climate Change Action Plan - Warps





Illustrative examples of Warps. The upper timeline represents the minimum ambition necessary to achieve net-zero emissions by 2050 (Path A). The lower timeline represents high ambition (Path B). It is the preferred trajectory since total emissions released to the atmosphere over the 30-year period will be significantly less.

However, high ambition will be achieved at additional financial costs and accepting higher risk of failing to meet the

Theory of Change

4.3. In preparing each weft, team members should bear in mind the concepts embodied in the Theory of Change (Thinknpc.org, 2019). This informs not the "what" we want to achieve, but the "how". But in doing so, it will help think through what might be achievable in the quickest possible time and what approaches to adopt that might help to reduce the risks of non-achievement of actions in the proposed timeframe.

4.4. The "Outcomes Chain" visualisation should be used wherever appropriate. Note that this methodology particularly highlights both evidence and assumptions. It is intended to raise challenge to (often unquestioned) assumptions. It also prompts thinking about how progress can be monitored and reported. Note that both pathways (Path A and Path B shown in Figure 3) will need metrics associated with them, if it is decided not to adopt CO_2-based targets and dates within the overall climate change plan. Members of the Analytical Team should also think of appropriate metrics (milestones) within each weft that are easily measured and reported to ensure that Path A or Path B is being followed.

Education and Reading Material

4.5. See downloadable document called - 'Moment of change' as opportunities for influencing behaviour (Thompson et al, 2011).

4.6. Ted Talk – The inside story of the Paris climate agreement (TED, 2016).

Person Specification

4.7. This is the specification that went to Chief Officers in advance of the team being formed:

- Members of the Analytical Team are sought from across the Departments and Agencies of the Isle of Man Government.
- Team members will be co-located and work collaboratively together for varying periods between 3 to 6 months.

4.8. The following characteristics are most suitable for team members:

- If a single team member is drawn from a contributing Department or Agency then the most appropriate seniority is likely to be Team Leader level, or Senior Executive Officer, or Senior Specialist. At this grade, the individual has excellent technical and analytical ability, will understand many elements of the contributing organisation, will also appreciate the bigger picture and cross-Government relationships, while additionally having relatively good access to senior management in the event of obstacles or difficulties arising. It is, of course, acknowledged that in some organisations a suitable person may currently be in an Higher Executive Officer (HEO) role and would be a valuable choice if demonstrably capable of delivering work at an Senior Executive Officer (SEO) level.
- If two members are requested from one organisation, then the second member may well be selected from Higher Executive Officer level, and preferably, bring a different range of experience to the Team.

- An ideal Team member will be respected and trusted in his/her own organisation, and will have a good network of contacts upon whom to draw for ideas, information and evidence.
- Individuals do not need to be expert on climate change, but a broad understanding and motivation to create a national solution to this urgent global problem is essential.
- Team members should be self-motivating and capable of defining and pursuing their own particular contributions, ensuring there is a strong evidence base, and that the scope is comprehensive. There will be supervision and also supportive challenge offered, as individual contributions are defined and elaborated.
- Team members will also be expected to challenge others' outputs and evidence. This is a key element of the developmental process and members must be comfortable with this way of working.
- Team members must be able to communicate well, and be enthusiastic about cross-boundary working, and collaboration. They should be creative and naturally able to think beyond traditional or routine solutions and approaches. Work intensity may be high.
- While certainly bringing to bear the detailed experience, knowledge, skills and policies of their own organisations, individuals are not necessarily on the Team to directly represent those organisations. Individuals are expected to contribute to the development of an ambitious, cross-cutting, innovative and coherent action plan to tackle climate change – while also considering many other potential co-benefits. Systems' thinking is essential.

Guiding Principles and Ways of Working

4.9. Members of the Analytical Team will be undertaking the development of their own set of actions (the weft) within the overall structures and indicative timetabling set out for the entire Isle of Man action plan (the warp).

4.10. All Team members must follow a universal set of guiding principles and ways of working:

- Ask for help from colleagues in your own contributing organisation, but also ask for help from colleagues in the Team, and from any available consultancy support.
- Seek out debate and challenge, and also offer challenge, in a supportive way, to Team colleagues.
- Base your draft actions on sound evidence. For key evidence then make sure it is referenced with credible source material.
- If assumptions or estimates have to be made, as is very likely, then make that clear.
- Keep options open for as long as possible (no regrets) particularly where technology is developing, and/or costs are dropping.
- In your work, the principles of both Climate Justice and Just Transition should be embedded.

- Always seek to strengthen the IoM economy, and to generate a legacy of good and long-lasting local jobs. Wherever possible, local businesses should be helped to be prepared and to become more innovative and more competitive. Local markets should be encouraged.
- The costs of actions should be minimised.
- Private investment should be maximised wherever possible - in order to minimise public expenditure. Private funding can be much more substantial, can be flexible and sourced rapidly.
- Returns on investment, new revenue streams, as well costs saved should all be estimated.
- Risks of delivering actions should be minimised and mitigated. A common risk estimation (deliverability and costing) must be applied to every proposed action (see Table 1).
- Interdependencies of all proposed actions must be identified.
- Current public or private activities that must be reduced, or stopped, must be identified.
- The spirit of the UNESCO biosphere should be respected and enhanced.
- Ecosystem services should be strengthened.
- Improvements to human health should be encouraged.
- Climate change adaptation and resilience should be promoted.
- Stakeholders and the wider community must always be considered, and they will be informed and consulted at appropriate stages.

Confidentiality

4.11. The Analytical Team will be finding its way through some complex and closely inter-related material. It is very likely we'll all get some things wrong, particularly early on. We will quickly gather evidence and we'll learn. It is important also that we look at all options, that we are open-minded, creative and imaginative, but challenging, and certainly not just adopting previous ways of thinking and acting - that haven't delivered for climate change. We will be brain-storming. For this reason, it is expected that some of our material over the weeks will suggest options that will quite possibly never be pursued. It would be potentially damaging, to the project and to our reputations, if this material was exposed to critical external judgement until we're ready. So, this is a plea to be careful in looking after your written/electronic material, and be careful in how you discuss and debate with other external colleagues or sources. Everything is draft and subject to change/amendment until the very final report is submitted.

Project Management

4.12. The project to which you have been recruited is known as the "Climate Change Action Plan Report".

4.13. The independent chair, recruited by the Isle of Man Government, is James Curran and he has personal responsibility for what ends up in the report to the Council of Ministers. So, please be aware that he may, or may not, accept everything that is in

your draft contributions to the final climate change action report. His decision is final. He has a specific role in setting the strategic direction of the overall project.

4.14. The Project Sponsors are the Council of Ministers' Climate Emergency Consultative Transformation Team and also the Climate Change Sponsor Group (as per the approved Terms of Reference), which are both chaired by James Curran.

4.15. The purpose of the project is "To develop the Isle of Man climate change action plan and target options for achieving net zero carbon emissions and lay before Tynwald in January 2020 and inform the subsequent Climate Change Bill."

4.16. The programme of work falls under the managerial responsibility and accountability of the Department of Environment Food and Agriculture (DEFA), who has created a Head of Climate Change and is the designated Project Director. DEFA are delivering this project on behalf of the Isle of Man Government and provide the secretariat to support the project.

4.17. However, please note that members of the Analytical Team have not been formally seconded to the project, so your normal line-management reporting remains in place and unchanged.

4.18. If you have any particular problems or difficulties – please first discuss them with Head of Climate Change. However, you can always contact your own regular line manager for additional advice, support or guidance.

4.19. The project will be run under formal project management terms, using MS Project. This means that every individual will be expected to respond rapidly to any requests for information from any of the team. In particular, the Project Manager, who has responsibility for co-ordinating our combined efforts, will appropriately impose and expect adherence to specific timetables, delivery of work, cross-team interactions, reports and submissions of written material. Those who have worked within formal project management will understand how this operates. If you haven't - then please let the Project Manager know and get some induction. Just remember, the Project Manager is there to help us all deliver a great piece of high quality work, on specification, and on time.

4.20. DEFA's project manager is currently working on the project and additional project management resources are being organised. This will include the close involvement of a professional project manager, the provision on timelines and milestones, identification of critical paths, and monitoring and review of progress.

4.21. There will be identification of interdependencies of key tasks and actions, and a risk log will be maintained with appropriate mitigation of risks.

4.22. There will be regular reporting to various levels of control and oversight including the Climate Emergency Transition Team, the Sponsor Group and the Chief Secretary and the Council of Ministers.

4.23. Members of the Analytical Team must expect to be asked for regular updates by the Project Manager. The Project Manager is there to ensure the overall delivery – even if he/she does nag in the most supportive way possible!

The Task

4.24. Staff in the Analytical Team will co-locate and will be guided and overseen by the Climate Change Team in DEFA. Training in climate change will be provided: the science, and the mitigation and adaptation tools.

4.25. Each staff member will develop a weft for his/her Department/Agency, but in close consultation and collaboration with other representatives. It is expected that staff members will bring their own knowledge and skills and also utilise their professional networks in their employing Department/Agency. However, they will work across organisational and disciplinary boundaries to facilitate the creation of a comprehensive, coherent and integrated plan.

4.26. The preparation of the sectoral wefts will need to be completed quickly, probably within 4 weeks (from the start date of 12 August – please note estimated dates throughout). Each representative will then seek sense-checking from his/her Department/Agency for the submission.

4.27. The Climate Change Team will then collate all submissions and seek to reconcile them into one master action plan, with individual contributions available as appendices. Estimated costs and returns will also be compiled. Estimated risks will also be profiled. There will undoubtedly be a requirement for further iteration with Departments/Agencies at this stage. This may take 2 weeks (from 9 September).

4.28. Funding of the action plans is crucial and it is expected, particularly, that this component would very much benefit from external scrutiny by appropriate consultants. This may take a further 3 weeks (from 23 September). The output may, again, require some iteration with Departments/Agencies.

4.29. It is clearly important that each contribution must follow certain formats and structures – both to make compilation and reconciliation possible for the final cover report, but also so that the individual appendices look similar. The cover report will be prepared, summarising the actions, costs and benefits, and risks of two possible pathways to net-zero by 2050. Recommendations will be provided.

4.30. Various governance mechanisms for the delivery of the resulting action plan will also be assessed, and a recommendation given.

4.31. This last stage may take up to 2 weeks from 14 October, including circulation of the final draft to Departments/Agencies.

4.32. A live Gantt chart is provided.

Structure of Analysis

4.33. The terms of reference for the project require "*a climate change action plan to include ambitious target options for achieving net zero emissions with interim targets and a climate impact assessment of proposals*". A political commitment has already been given on the Isle of Man achieving net-zero emissions by 2050 – a figure founded on robust science as the global requirement to have a 50:50 chance on keeping planetary temperature rise close to +1.5degC, the aspiration set in the Paris Agreement.

4.34. It is intended that this report avoids suggesting an alternative, or a series of alternative target dates for net-zero. This often distracts from the necessary political debate on mitigation actions and how to deliver them.

4.35. It is proposed that a more useful and informative set of recommendations in the final report might relate to the level of ambition in delivering the various actions that will be required to reach net-zero by 2050.

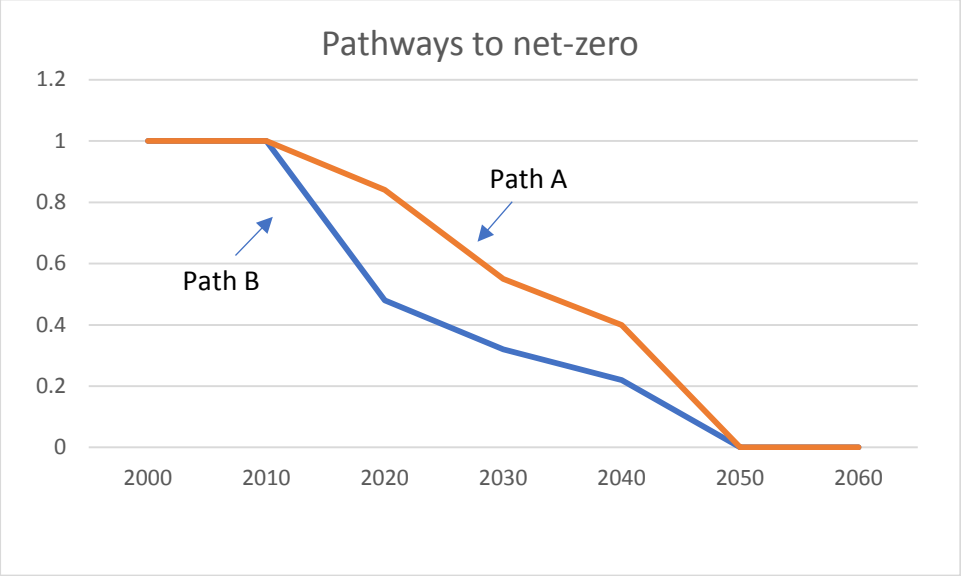


Figure 3: Pathways to net-zero

4.36. Science tells us that Path B is much preferable to Path A, although both achieve net-zero in 2050, since a substantial mass of carbon is not emitted into the atmosphere by taking the more ambitious route.

4.37. Path A may very well be based on adopting the approach on "Change Moments" which argues that behaviour changes are much more easily adopted at times in life when other changes occur (typically, marriage, moving house, retiring). For the IoM this pathway may be dictated by opportunities such as the gas turbine power station

paying off its public debt in 2035, meaning it may be a good time to consider closure, or as another example, individuals change their cars roughly every 12 years, so it may be easier, whenever those changes occur, to persuade them to take an electric vehicle next time. This would be in contrast to Path B where individuals may all be forced to change their vehicles to electric over, say, a three-year period, through a combination of regulatory restrictions, tax incentives or subsidies. It becomes clear that some actions, and therefore the different pathways, will have different levels of risk of achievability and different levels of cost, both public and private.

4.38. The Analytical Team will be asked to offer these two alternatives for each of the actions they work on: a minimum-required pathway (Path A), and a high-ambition pathway (Path B).

Analysis Results Table

Table 1: Analysis Results Table

Analysis Results Table								
	2017	2020	2025	2030	2035	2040	2045	2050
Emissions inventory (annual total for the year)								
CO_2e Emissions								
CO_2e Captured								
Net CO_2e								
Investment								
Public Investment in the preceding 5 years (£)								
- Return on Investment								
- Cost benefit ratio								
- Cost per tonne of CO_2e								
- Savings per tonne of CO_2e								
Private Investment in the preceding 5 years (£)								
- Return on Investment								
- Cost benefit ratio								
- Cost per tonne of CO_2e								
- Savings per tonne of CO_2e								
Risks								
Notes - The cost benefit ratio is the number of times an investment pays back over its lifetime								

Data

4.39. The Climate Change Action Plan must be based as much as possible on quantitative analysis. It is important to establish the emissions baseline, using data submitted by the Isle of Man as a component of the UK's submission to the United Nations Framework Convention on Climate Change (UNFCCC). If data do not exist then emission factors, taken from UK studies, can be used to estimate baseline and also future emissions.

4.40. In forecasting future emissions by sector, it should be made clear what trends are assumed for, say, population, energy efficiency of equipment, future lifestyles (e.g. private driving habits). Any assumptions should be discussed across the Analytical Team so that different wefts do not assume different trends.

4.41. If a particular weft is struggling due to lack of good, sound and reliable data, then the relevant report should make clear what additional monitoring needs to be established, and how and by when it should be inaugurated.

Common Formats of Reporting

- Your report needs to be clearly written, as succinct as possible, clearly referenced (see details below) and checked for spelling, grammar etc.
- All acronyms should be given in full for first use.
- Harvard referencing is the common referencing scheme to be used (see document in resources) – it is really important that your report is fully referenced.
- Use the table above (available in Excel in the shared folder) to present the quantitative work that you've done
- Refer to the Theory of Change approach as you write and use the visual representation of this approach for your work if appropriate
- Additional workings, background information and other relevant material should be made available as appendices.

The Common Format of the Weft Report

4.42. The following structure will be required for most weft reports (there may be exceptions for some of the wider/overarching issues)

1. **Title**
2. **Lead author(s) and additional contributors (if required)**
3. **The Challenge**
4. **The Opportunity**
5. **The Actions** **(a) Necessary Ambition plus tabulation**
   (b) High Ambition plus tabulation
6. **The impacts and mitigations for them**
7. **The costs and returns**
8. **The risks (including position on the risk matrix)**
9. **The co-benefits (the positive benefits associated with the climate action)**
10. **Conclusion**
11. **References (using Harvard referencing)**
12. **Appendix with important additional information**

Saving your work

4.43. Please save all your work pertaining to this project in your personal folder within the shared area, but please work in a way that allows this work to be easily accessed and shared by the team. If you want to have a private/work in progress folder within your personal folder please set that up and make it clear to other users.

4.44. Please include your spreadsheets of calculations and make them as user-friendly as possible, bearing in mind that you will need to share them with the other members

of the Analytical Team and Secretariat now, and others may need to pick them up again at a much later date.

4.45. Please keep a clear record of the key people you speak to (particularly external stakeholders) and meetings you attend as part of this work and make this accessible in your folder.

4.46. If you download resources or people email you reports or other information, please save all of this in your shared area for future reference for others, with appropriate regard for the requirements of GDPR.

Declaration of conflict of interests

4.47 Members of Analytical Team to populate conflicts of interest register.

General points

- Assistance from external consultants and other experts is an important part of this project to support you in your work. As soon as you have identified the need for expert assistance on a major piece of work or something more minor, please contact Project Lead or another member of the DEFA secretariat to discuss what you require and we will help put the appropriate support in place.
- If you have any concerns please contact Project Lead or another member of the DEFA secretariat as soon as possible and we will work with you to find a solution.
- Keep in touch on progress – don't wait for formal reporting times to raise issues. If you are stuck on something talk to the Secretariat team and your colleagues in the Analytical Team as soon as possible.
- Don't be afraid to ask for help – we are all learning rapidly on this task and we will need to support each other to make it work effectively.
- There is Chief Officer Group support for this project and your colleagues back in your departments also need to make time to support you in this work. If this isn't happening and you don't get the information you need within a reasonable time frame, let us know as soon as possible.

REFERENCES

TED, (2016). The inside story of the Paris climate change agreement. [video] Directed by C. Figueres.

Thinknpc.org. (2019). [online] Available at: https://www.thinknpc.org/wp-content/uploads/2018/07/Creating-your-theory-of-change1.pdf [Accessed 17 Dec. 2019].

Thompson, S., Michaelson, J., Abdallah, S., Johnson, V., Morris, D., Riley, K., & Simms, A. (2011). „Moments of change" as opportunities for influencing behaviour: A report to the Department for Environment, Food and Rural Affairs. nef (the new economics foundation). Defra, London

Annex 1

Resources requested

1.1. Representatives will be required from the following Departments/Agencies:

- DEFA will provide the central co-ordinating team and project management, arrange accommodation, offer guidance, training, advice, managerial and administrative support, including reports to Committees. The team must also be able to access support from the Government Communications Division.
- DEFA: 2 staff full-time for 6 months (forestry, agriculture, land management, planning, blue carbon)
- Infrastructure: 2 staff full-time for 5 months (housing, transport, local authorities)
- Treasury: 1 staff full time for 5 months (funding mechanisms)
- MUA: 1 staff full time for 5 months (electricity, gas, energy efficiency, water)
- Enterprise: 1 staff full time for 5 months (business, circular economy, jobs, private financing)
- Cabinet Office: 1 staff part-time for 5 months (policy advice, governance, comms, organisational change)
- Education, Sport & Culture: 1 staff, part-time for 3 months (role of education, culture, arts)
- Health & Social Care: 1 staff full-time for 3 months (operations, health co-benefits)
- Home Affairs: 1 staff full-time for 3 months (operations, emergency response)
- MNH: 1 staff full-time for 3 months (land management, heritage, engagement)

1.2. Staff will, of course, be released back to their employing organisations as tasks are completed.

Annex 2

The Analytical Team (Officers representing each Government Department - there are still additional officers to add to this)

1.1. From DEFA:

- 5 staff members – ranging from 1 day per week to full time

1.2. From DoI:

- 2 staff members – ranging from up to 3 days per week to full time

1.3. From Treasury:

- 3 staff members – ranging from 1 day per week up to 3 days per week

1.4. From MUA:

- 2 staff members – ranging from part time to full times

1.5. From DfE:

- 1 staff member - full time

1.6. From Cabinet Office:

- 2 staff members - 2 days per week

1.7. From DESC:

- 1 staff member – up to 3 days per week

1.8. From DHA

- 2 staff members - part time – tbc