

# Report on the first phase of developing a Climate Change Adaptation Plan at NHS GG&C:

*Laying the groundwork and addressing gaps*

**BEAM Research Centre**

The Research Centre for the Built Environment Asset Management

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# THE PHASES AND STEPS FOR DEVELOPING SUB-NATIONAL HEALTH ADAPTATION PLANS

## Phases for developing Sub-National Health Adaptation Plans

After analysing the WHO Guidelines and Tools, other Adaptation Planning Guidelines from the UNFCCC and different countries, and existing Health Adaptation Plans, it was recognised that there are four phases and sixteen steps for developing Sub-National Health Adaptation Plans.

Fig 1. Phases for developing Sub-National Health Adaptation Plans

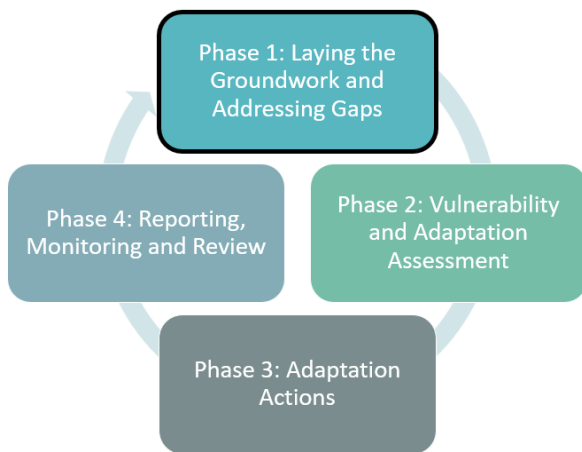


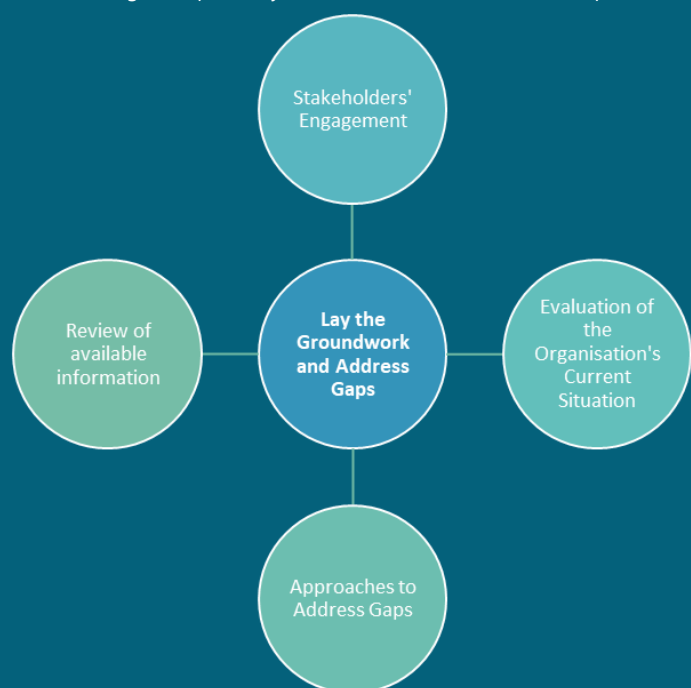
Fig 2. Phases and Steps for developing Sub-National Health Adaptation Plans

PHASES	STEPS
Laying the Groundwork and Addressing Gaps	<ol style="list-style-type: none"> <li>1. Review of available information</li> <li>2. Stakeholders Engagement.</li> <li>3. Evaluation of the Organisation's current situation</li> <li>4. Approaches to address gaps.</li> </ol>
Vulnerability and Adaptation Assessment	<ol style="list-style-type: none"> <li>1. Plan the Assessment</li> <li>2. Vulnerability Assessment</li> <li>3. Capacity Assessment</li> <li>4. Adaptation Assessment</li> <li>5. Future Risk Assessment</li> <li>6. Synthesis</li> </ol>
Adaptation Actions	<ol style="list-style-type: none"> <li>1. Identification of goals and objectives</li> <li>2. Identification of Strategies</li> <li>3. Prioritization of Adaptation Actions</li> <li>4. Resourcing</li> </ol>
Reporting, Monitoring and Review	<ol style="list-style-type: none"> <li>1. Monitor Performance Indicators</li> <li>2. Reporting on Progress</li> </ol>

## Steps to Lay the Groundwork and Address Gaps

This phase sets the foundations of the planning process since several aspects need to be defined at the beginning. It includes reviewing the available information from national and sub national organisations about climate change and health, such as adaptation policies and programmes and data about climate sensitive health risks, engaging stakeholders, evaluating the organisation's current situation (SWOT and gap analysis), and finding the suitable approaches to address gaps.

Fig 3. Steps to Lay the Groundwork and Address Gaps



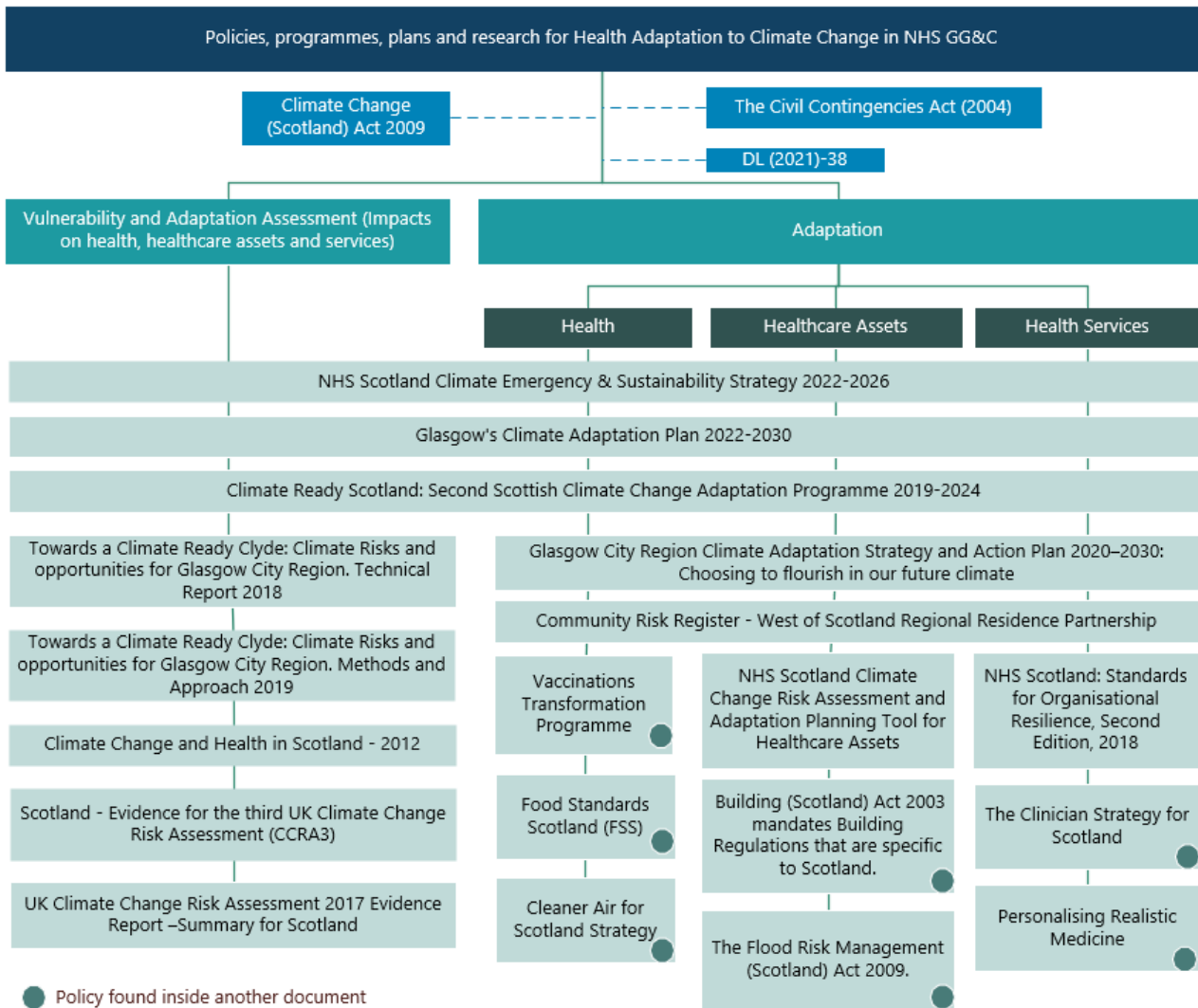
# Step 1: Review of Available Information

The step provides a review of the available information regarding adaptation policies, programmes, plans, climate change risk assessments, and other documents related to adaptation to climate change at national and regional levels.

## Policies and Programmes:

Diverse policies and programmes that can boost and be helpful during the development of the adaptation plan were found. These documents include The Civil Contingencies Act (2004), Climate Change (Scotland) Act 2009, DL (2021)-38, and NHS Scotland Climate Emergency & Sustainability Strategy 2022-2026, among other documents.

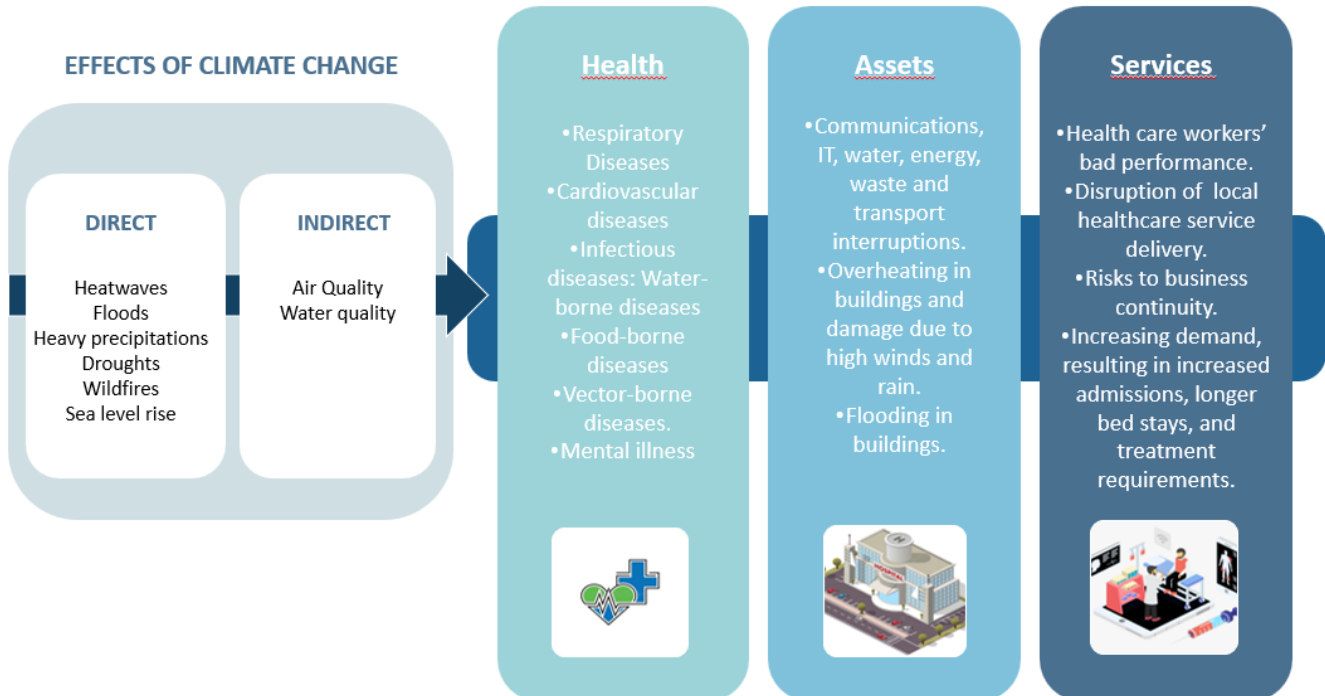
Fig 4. Policies, programmes, plans and research for Health Adaptation to Climate Change in NHS GG&C



## Climate Sensitive Health Risks:

Health risks have been recognised at regional and national levels. These risks include impacts on health (respiratory, cardiovascular and infectious diseases), assets (overheating and flooding in buildings) and services (risks to business continuity, health care workers' bad performance).

Fig 5. Climate-Sensitive Health Risks in Scotland



## Vulnerability

In Scotland, the vulnerable groups identified are young children and the elderly, who are more sensitive to traumatic experiences during disasters. Other vulnerable populations are the people with pre-existing illnesses (physical or mental) who have a lower capacity to react to adverse events.

## Adaptation Measures

Some adaptation measures are also presented in these documents. These measures go from community-related actions to an infrastructural adaptation of buildings.

For example, some of the actions proposed are engaging communities by building a better understanding of climate impacts on their health and well-being and where the health sector plays a vital role, or local health boards in Scotland guiding the citizens on self-protection during heatwaves. Other actions involve protecting NHS assets against overheating and flooding and assessing the overheating risk across the estate.

## Opportunities

From the increase of temperatures in the following years due to climate change, opportunities appear in Scotland. Some of these opportunities are the potential health benefits from diminished extreme cold, including the reduction of cold-related deaths. Another benefit is the reduction in the number of people with obesity or overweight, thanks to increased physical activity in outdoor spaces.

BOX 1. The use of existing information regarding adaptation, such as local, regional and national adaptation plans and CCRA of Glasgow City Region and Scotland, can facilitate the development of the plan and avoids duplication of efforts.



## Step 2: Stakeholder Engagement

Coordination with health-determining sectors is crucial to boost health co-benefits and recognise synergies. Therefore, stakeholders were identified and assessed in this step to select the best method to engage them during the whole health adaptation planning process.

### Assessing the Stakeholders

According to the WHO, a stakeholder mapping tool helps assess relevant stakeholders to "inform an engagement strategy and plan".

One of the several ways to analyse the list of stakeholders and map them is by using the influence-interest matrix.

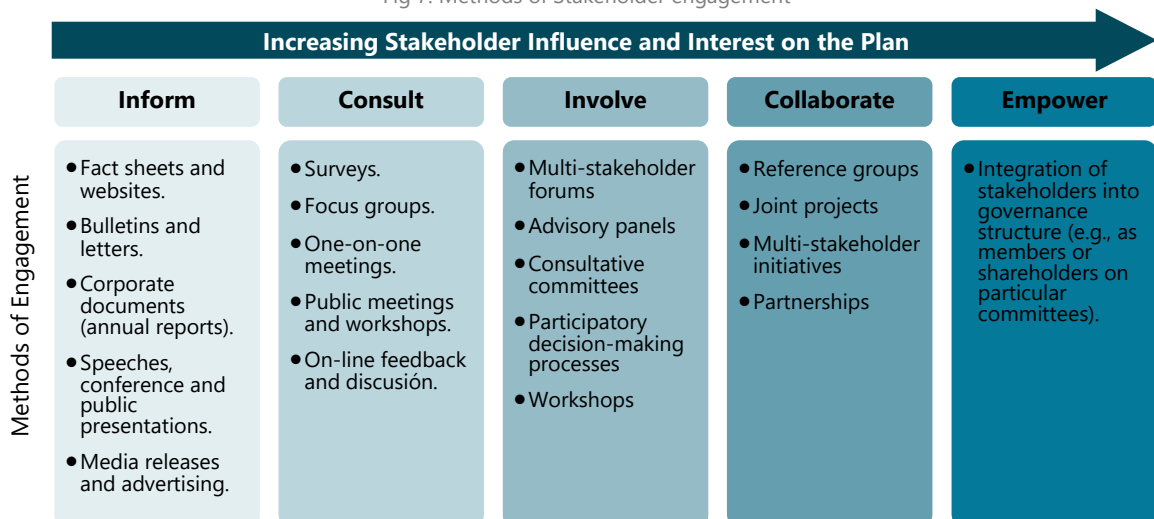
**BOX 2.** The cross-sectoral synergy and coordination are also critical for the plan's success. If the plan is developed but does not involve health-determining sectors, their support would be limited, and the information could not become common knowledge, constraining the good result of the plan's application.

Fig 6. Stakeholder Influence-Interest Matrix for NHS GG&C Health Adaptation Planning



### Engaging Stakeholders

Fig 7. Methods of Stakeholder engagement



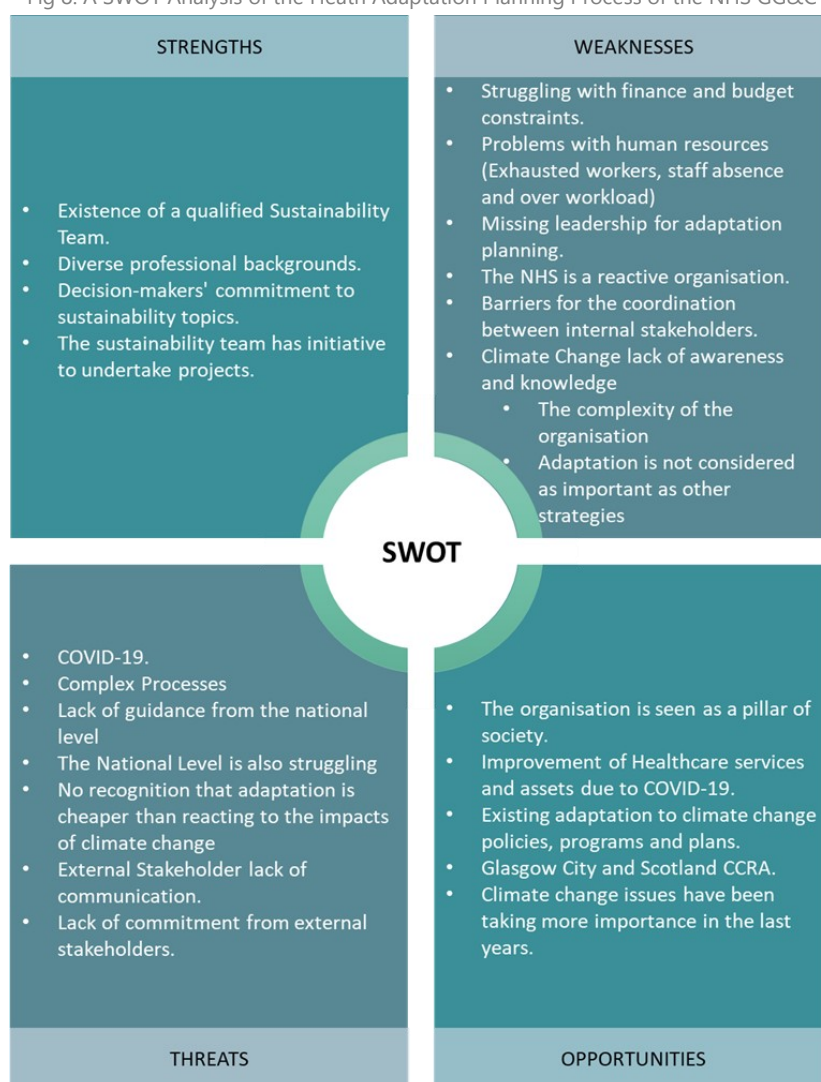
## Step 3: Evaluation of the Organisation's Current Situation

### SWOT Analysis

This step evaluates the organisation's current situation that could benefit or hinder the health adaptation planning process. A SWOT analysis was performed, and gaps in implementing the organisation's plan were identified.

**BOX 3.** Leaders helping the organisation recognise that climate change is a threat to public health and boosting the prioritization of adaptation is fundamental for developing and implementing the plan. Therefore, the creation of a working group responsible of the plan is an important first step for the NHS GG&C.

Fig 8. A SWOT Analysis of the Health Adaptation Planning Process of the NHS GG&C



### Identifying Gaps

Fig 9. Identification of Gaps in undertaking the climate change adaptation planning

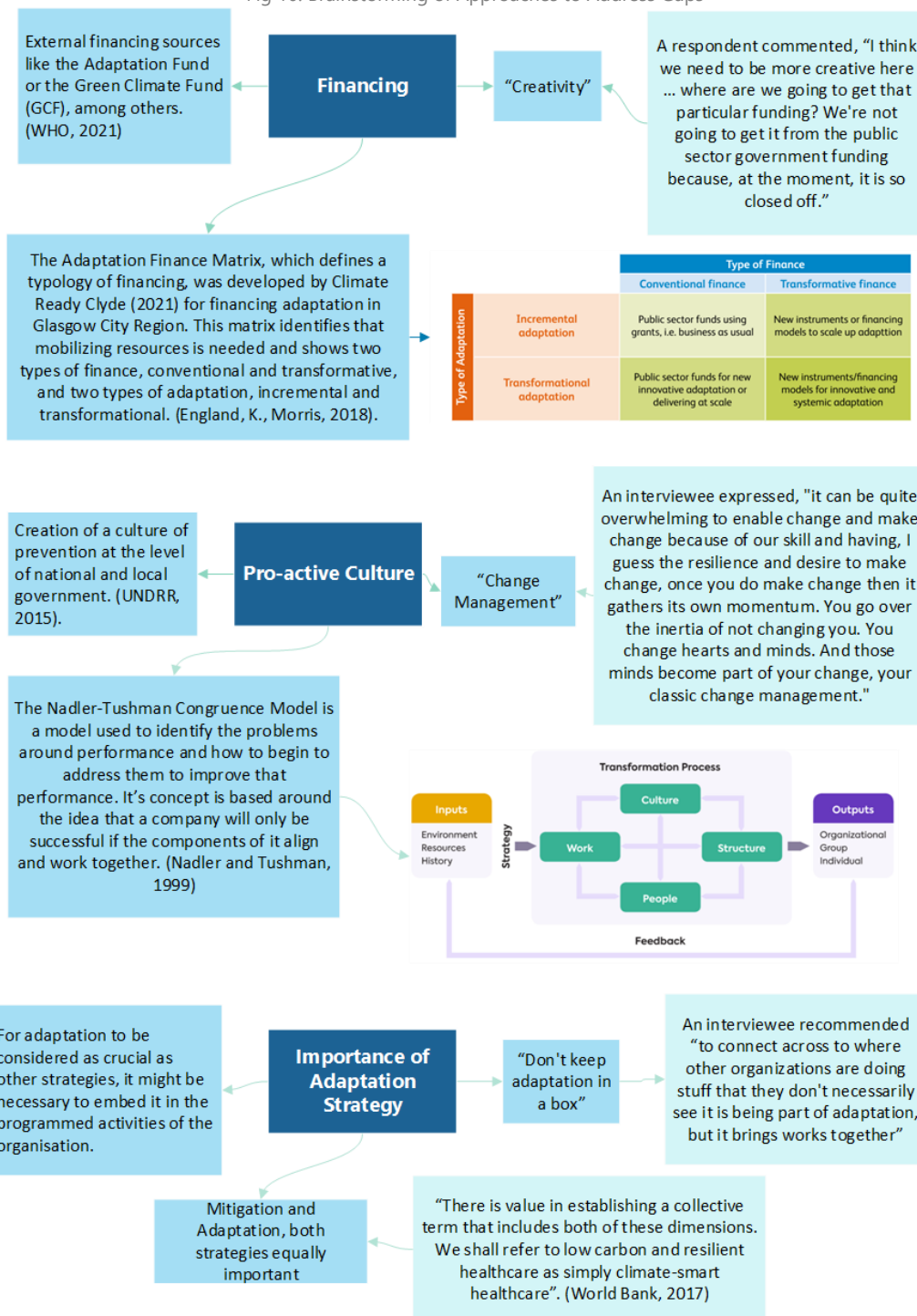
Current State	Desired Future State	Gap
Struggling with finance and budget constraints	Finance capability and accessible budget	Financing
Problems with human resources (Exhausted workers, staff absence and over workload)	Motivated employees	Employees motivation
Missing leadership for adaptation planning	NHS GG&C takes the initiative to elaborate its adaptation plan under a designated leader team	Leadership
The NHS is a reactive organisation	The NHS GG&C is proactive and reac-	Pro-active culture
Barriers between internal stakeholders	Fluent coordination between internal stakeholders	Coordination with internal stakeholders
Climate Change lack of awareness and knowledge	Existence of Climate change awareness and knowledge in the organisation	Climate change impacts awareness and knowledge
The complexity of the organisation	An organisation with simple processes	Simple processes
Adaptation is not considered as important as other strategies	Adaptation is considered an important strategy of the NHS GG&C	Importance of Adaptation Strategy
Lack of communication with external stakeholders	The external stakeholders are engaged in the health adaptation planning process	Stakeholder engagement
Inexistence of a vulnerability and adaptation assessment for NHS GG&C	Existence of a Vulnerability and Adaptation Assessment or similar evaluation in the NHS GG&C	Vulnerability and Adaptation Assessment for the NHS GG&C

## Step 4: Approaches to Address Gaps

After the SWOT analysis and identifying the main gaps, it is vital to recognise the approaches to deal with them. This step is helpful to guarantee that the organisation's decision-makers have the tools to carry out the health adaptation planning process effectively (WHO, 2014).

Different strategies can be used to address the identified gaps. These include organising workshops that involve the participation of different departments from the NHS GG&C and applying different approaches to engaging stakeholders according to the level of influence and interest. Besides, brainstorming could be a good start to developing strategies to tackle gaps, using information from stakeholders and documentary analysis.

Fig 10. Brainstorming of Approaches to Address Gaps



**BOX 4.** By identifying gaps that might constrain the start of the health adaptation plan and addressing them at the beginning can guarantee an uninterrupted ongoing planning process. The essential aspect is to choose an approach that is easy to perform by the organisation and boosts adaptation instead of delaying its start.

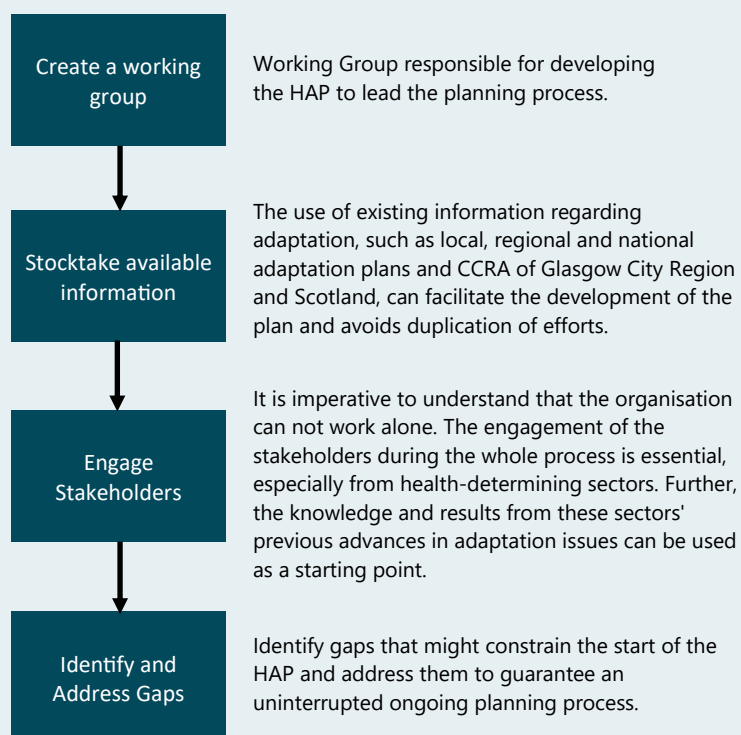


## WHAT IS NEXT?

Applying the first phase for developing a climate change adaptation plan in the NHS GG&C allowed seeing the importance of gathering existing information that can feed the plan, engaging stakeholders from the very beginning, recognising the current situation of the organisation regarding adaptation and identifying how to address the gaps found to undertake the development of the plan. Indeed, it is shown that by "laying the groundwork and addressing gaps", the organisation could have a good plan start.

The boxes presented in this report show critical information to be considered during each step of developing the plan. From the results of this report, in summary, the first steps for the NHS GG&C to develop a climate change adaptation plan are:

Fig 11. First steps to follow by the NHS GG&C for developing its Health Adaptation Plan



## RECOMMENDATIONS

- It is suggested that the organisation carries out the three following phases for developing health adaptation plans, using the information in this report as a starting point.
- The adaptation planning process is iterative; therefore, it is advised to assess and update the results of the application of the first phase presented in this report every year or in a timelapse that the organisation considers convenient.
- It is recommended to take advantage of previous efforts of joining stakeholders in working groups (such as Climate Ready Clyde) and involve them in the health adaptation planning process.
- The V&A should be conducted with other experts or academics. Its development might be complex, but this should not discourage the organisation from developing its plan. Other alternative options to identify climate related health risks can be considered, such as using and expanding the health component from the CCRA of the Glasgow City Region to get a comprehensive assessment.
- Since the NHS GG&C is working with Turner & Townsend (T&T) to develop the MFT Implementation Strategy, it would be beneficial for the organisation to take this opportunity and incorporate adaptation to climate change in this strategy.
- COVID 19 demonstrated how unprepared is the health sector to respond to big scale adverse events and was a wake up call to the health authorities that led to the improvement of the health system to keep operating during the pandemic. This moment can be an opportunity for the NHS GG&C to continue building resilience with a climate smart healthcare system and develop its Health Adaptation Plan.
- The previous recommendation shows other benefits to adapting to climate change, like being prepared for adverse events like pandemics and others. These benefits can be used as motivation for the organisation to start its plan's development.