

Operationalization of objective seasonal forecasts – Decision 9 of WMO Executive Council EC-72

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WORLD
METEOROLOGICAL
ORGANIZATION



Outline

1

Rationale

2

EC-72 Decision 9

3

Implementation
phase

4

Progress and
ongoing efforts

Towards GFCS Next Generation

Climate priorities

- NDC/NAP analysis – identifies country and sub-regional priorities
- Climate science basis – with GCF and partners, identifies science-based actions

Climate services gaps and needs assessment

- National/sub-regional capacity data collection and analysis
- Portfolio analysis – to id support already available

Implementation support – by WMO experts and Members

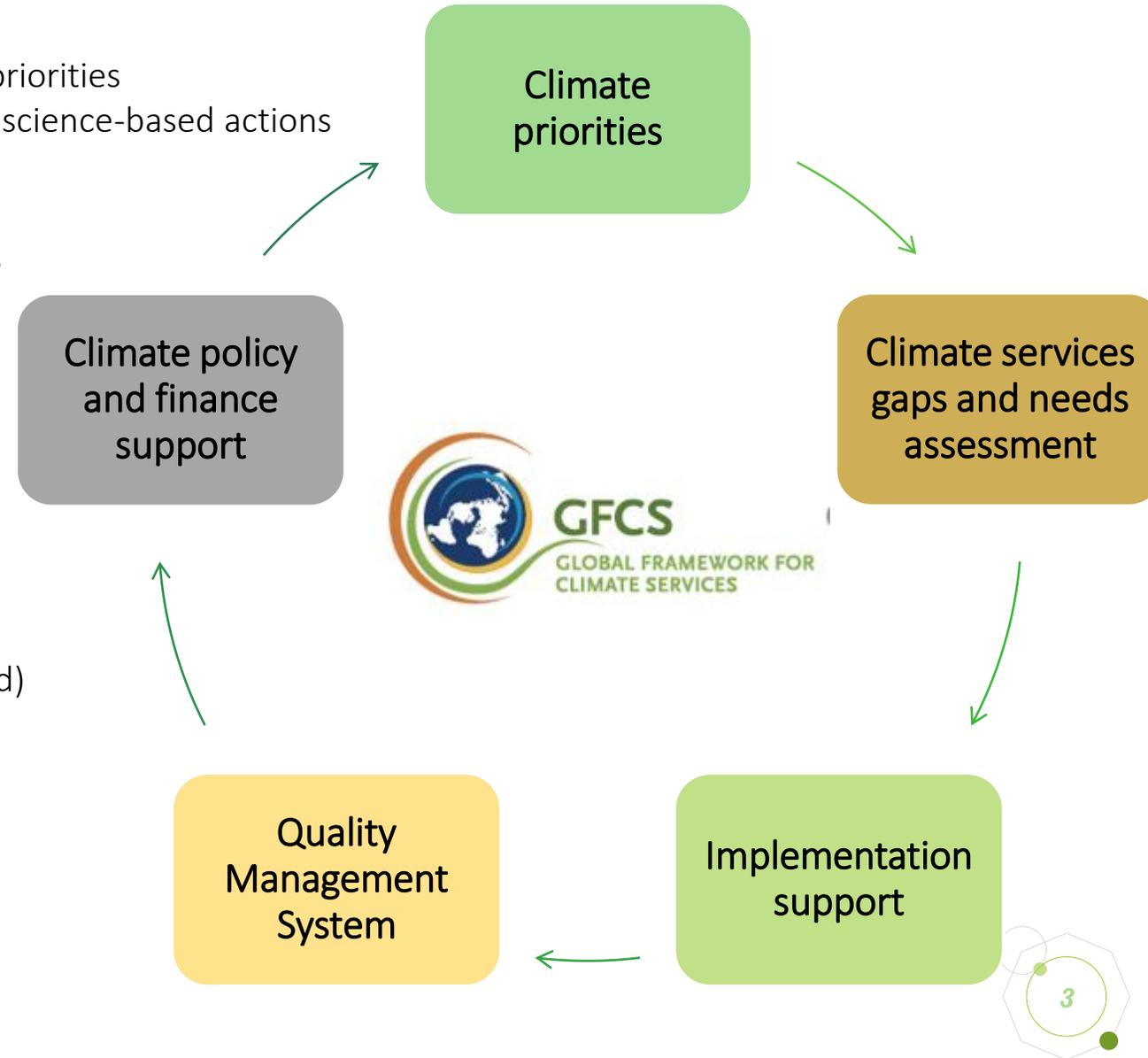
- Hydro-met project component design/implementation
- **Co-development of operationalized tailored products**
- Technical Advisory Services

Quality Management System

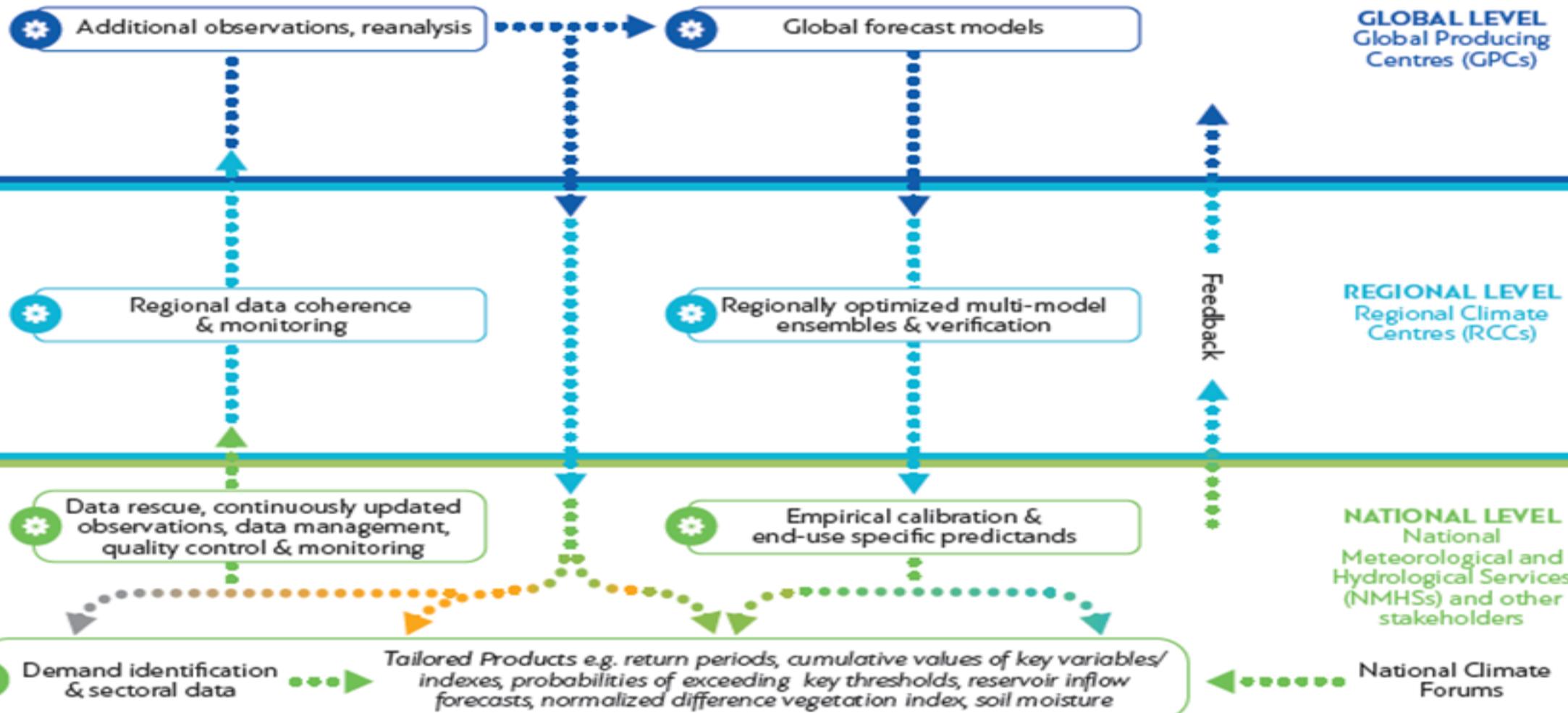
- Climate Services capacities (basic, essential, full, advanced)
- WMO guidance (e.g. standards and competencies)
- Member capacity data

Climate policy and finance support

- State of Climate Services report
- Regional and Global State of Climate reports
- Global climate finance portfolio analyses



A Regional Approach to Implementing the Climate Services Information System (CSIS-R)



Regional Climate Forums

HISTORICAL

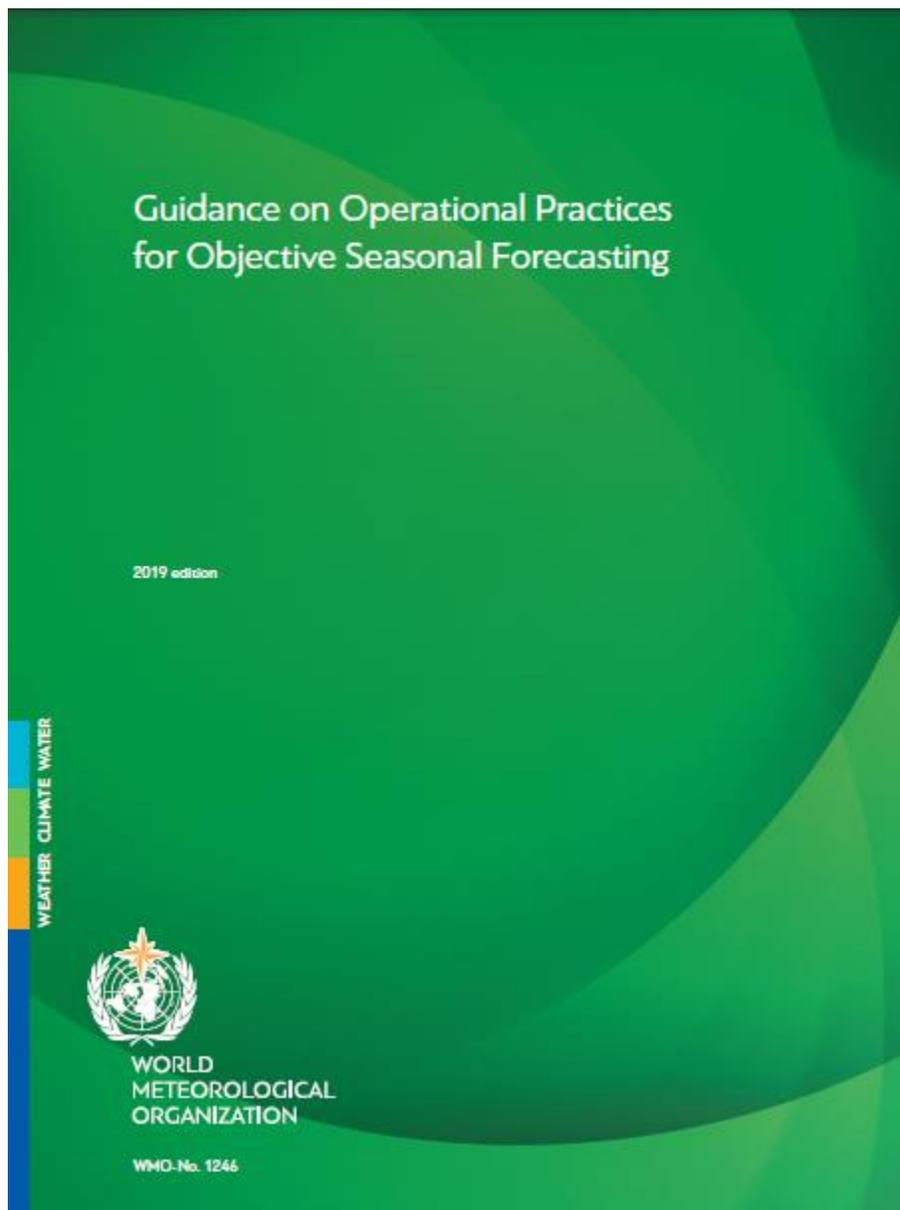
MONITORING

CLIMATE WATCH

PREDICTIONS (SUB-)SEASONAL/DECADAL

PROJECTIONS

Objective seasonal forecast – Definition



- Follow a **traceable, reproducible**, and well-documented procedure, amenable to verification.
- Use dynamical climate models, including **multi-model ensembles**
- Establish quality controlled **observational databases** for forecast verification
- Identify, assess and monitor **drivers of predictable climate variability**
- Follow forecast **verification standards**
- Provide forecast information together with historical performance
- Use non-technical language to **communicate uncertainty**
- Provide seasonal forecasts as well as **regular updates** on a fixed operational schedule
- Establish **user feedback** and product upgrade mechanisms

Executive Council - Seventy-second Session – Decision 9 (EC-72)

1. Operationalization of **objective seasonal forecasts and tailored products** on sub-regional scales with country-level service delivery
 - a) Guide development of **climate services information system**
 - b) Development of normative and regulatory material

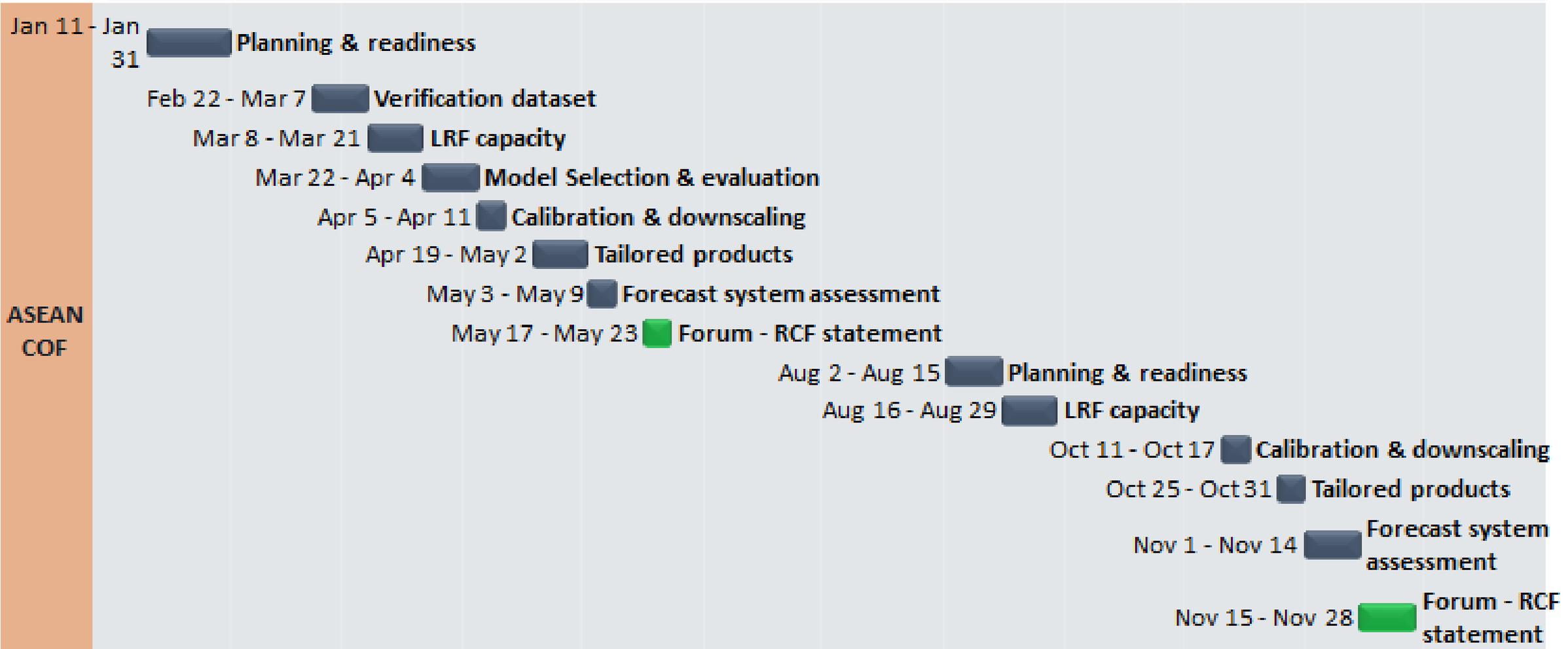
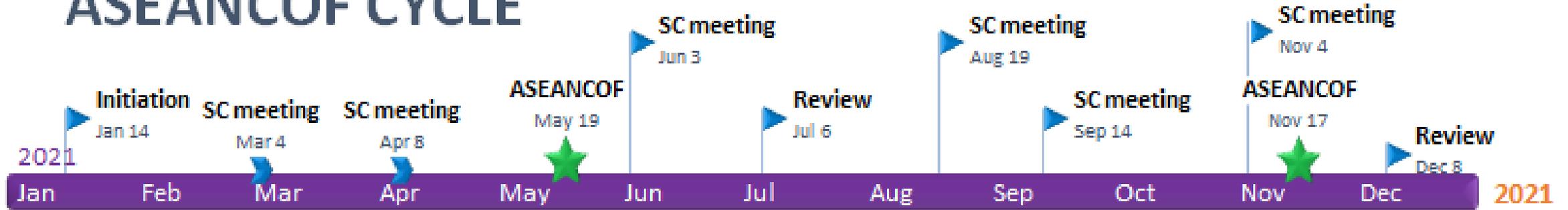
2. Requests:
 - a) **Technical Coordination Committee** to identify activities and coordination mechanism
 - b) **Regional Associations** to facilitate collection of users requirements and develop a roadmap resources mobilization
 - c) **Climate Coordination Panel** to oversee implementation, monitor and manage progress
 - d) **INFCOM** and **SERCOM** to provide technical coordination for implementation
 - e) **Research Board** to facilitate transition of research into operation incl. S2S
 - f) **WMO Secretary General** to facilitate assistance of RCCs, RCFs and NMHSs

Implementation phase – 8 components

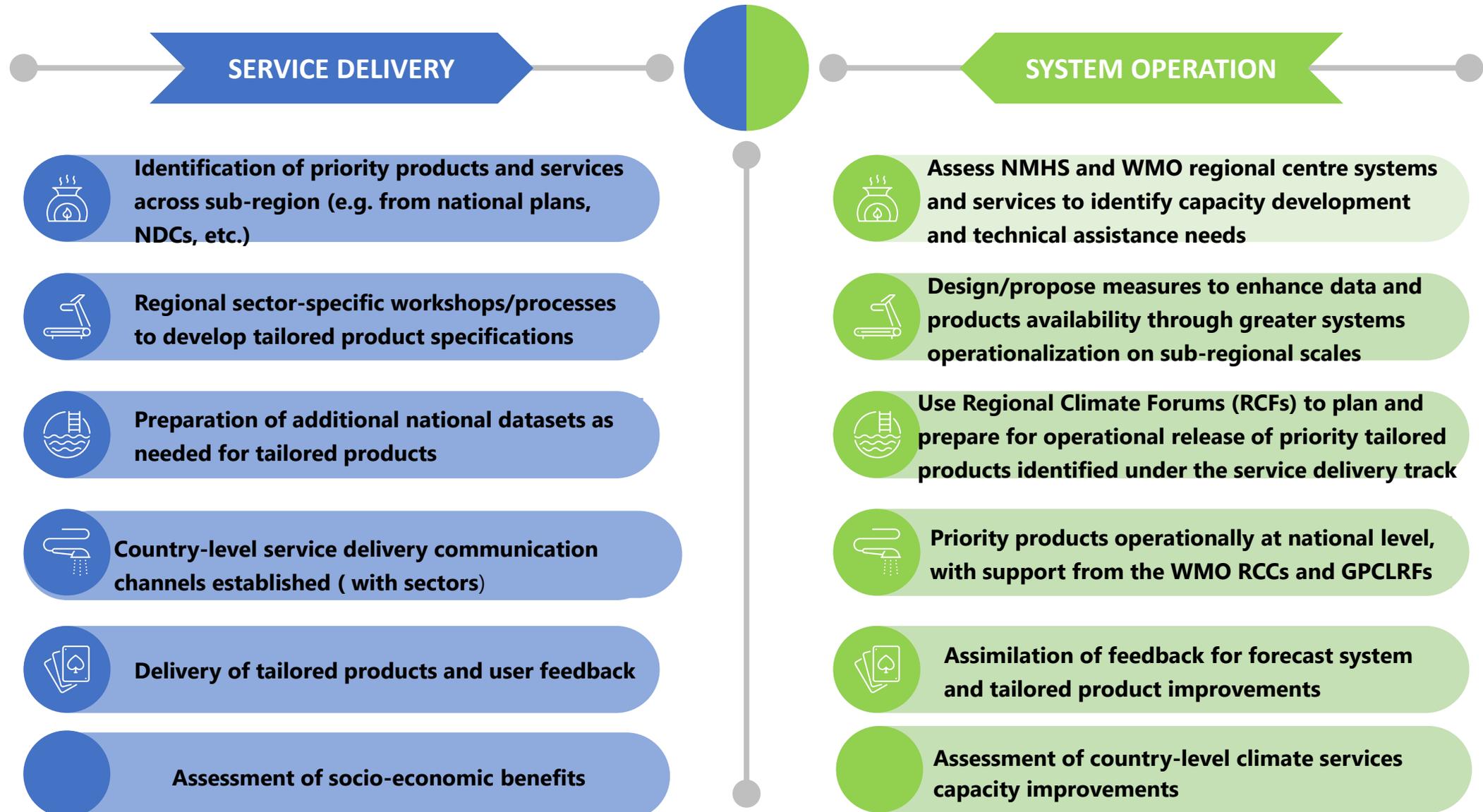
COMPONENTS		COMPONENTS	
1	<p>Regional standard observational dataset for routine verification</p> <p>Data rescue & digitization, data exchange (WIS), data management system (CDMS), reference observational databases</p>	<p>Regional climate outlook statement standardized</p> <p>Co-design of communication and outreach material</p>	5
2	<p>Enhanced RCCs and NMHSs capacity on objective LRF</p> <p>Long Range Forecasts, climate drivers, model performance, reliability, calibration, probability forecast, verification, downscaling</p>	<p>High priority tailored products routinely delivered at country level</p> <p>NMHS capacity to generate and interpret tailored seasonal prediction products, National Climate Forums (NCFs); Co-production</p>	6
3	<p>Subset of models established for use in ensemble seasonal predictions at regional and national levels</p> <p>Refinement of models ensemble, predictability, seasonal forecasts, global-regional-national data exchanges</p>	<p>Climate outlook updated monthly at regional and national levels</p> <p>Monthly prediction updates tailored to the decision-support context, digital data access through WIS and GDPFS</p>	7
4	<p>Calibration and downscaling approaches identified for use in regional seasonal predictions</p> <p>Bias correction, calibration and downscaling</p>	<p>Verification and upgrading mechanism established</p> <p>Standard Operating Procedures at the regional and national levels, and a system of annual status reports to facilitate monitoring and evaluation</p>	8



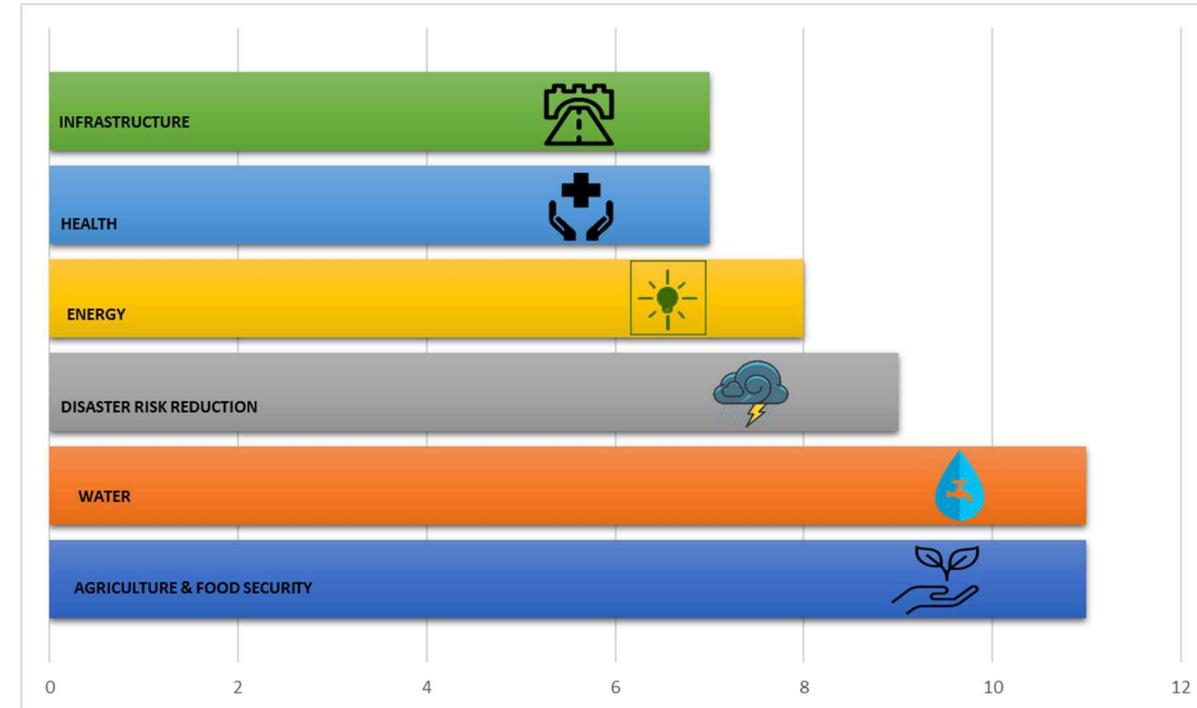
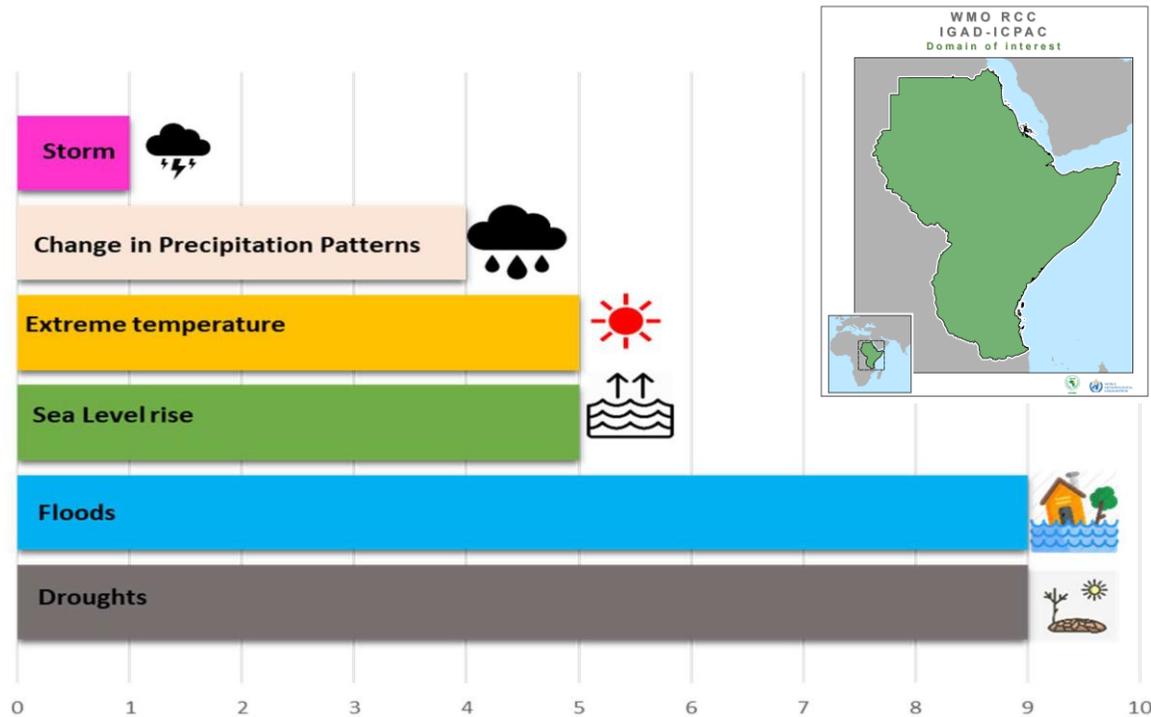
ASEANCOF CYCLE



Two-tracks implementation strategy



Developing tailored products for sectors – NDC analysis + workshops

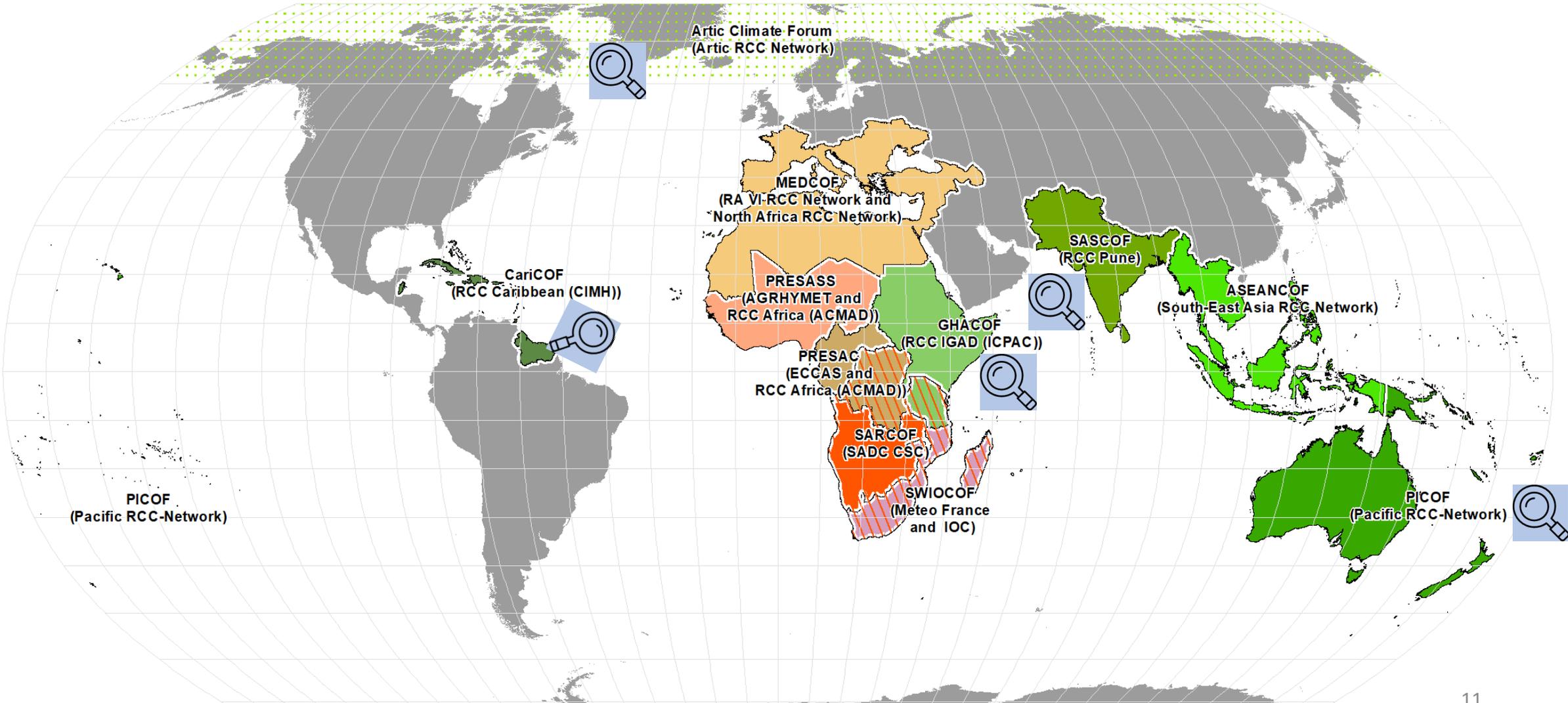


- Co-planned **stakeholder Workshops** on Developing Tailored Products with partners (e.g. FAO).
- Identification of **national priorities** across each subregion
- **Review NDCs** of the countries covered in a specific subregion to identify the most common hazard and sector priorities
- **Specifications** for tailored products
- Approved Decision 6.1/2 by RA II-17(II) - Facilitate **collection of users' requirements**

PROGRESS AND ONGOING EFFORTS



WMO RCOF domains





WMO OMM

World Meteorological Organization
Organisation météorologique mondiale

Thank you