



WCRP Academy Lighthouse

44th Session of the WCRP Joint Scientific Committee

(Chris Lennard, Melissa Hart)

May 2022

Climate Center, Brussels, Belgium



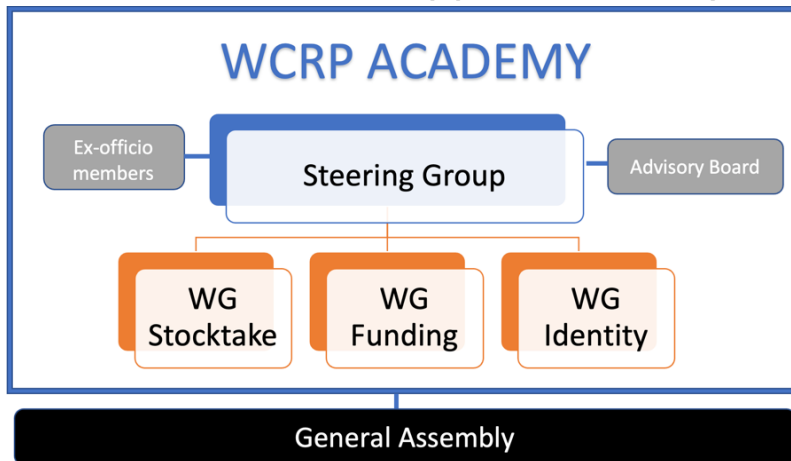
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Progress and achievements over the last year

Fairly challenging

1. Lost a Co-Chair
2. Transitioned from a Science Plan Development Team to Steering Group
3. Rotated off 4 SG members and brought in 4 new members
4. New Co-Chair appointed!! Yay!



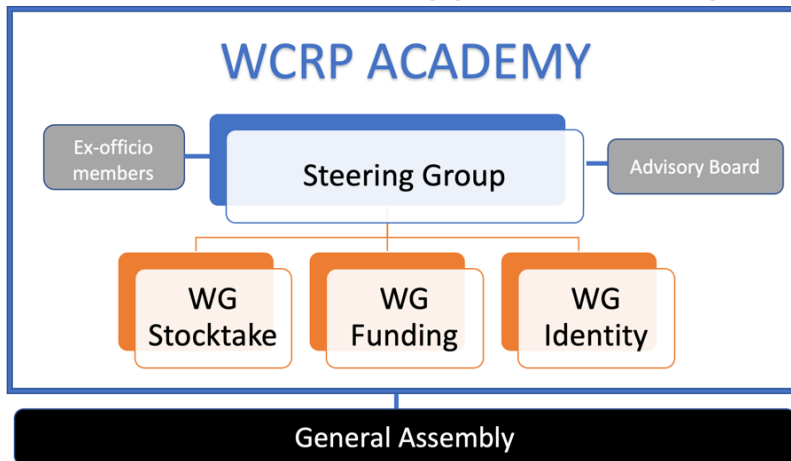
WCRP Academy Steering Group

Name	Organization	Country
Melissa Hart (co-chair)	University of New South Wales	Australia
Christopher Lennard (Chair)	University of Cape Town	South Africa
Ayman Batisha	International Sustainability Institute, Cairo University	Egypt
Pablo Borges de Amorim	University of Santa Catarina	Brazil/Germany
Clifford Darah Chuwah	Springer Nature	Netherlands/Cameroon
Qingyun Duan	Hohai University	China/USA
Feba Francis	University of Hyderabad	India
Dorcas Kalele	Cooperative University of Kenya	Kenya



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Progress and achievements over the last year

Survey respondents

Global North	198
Global South	216
Total	414

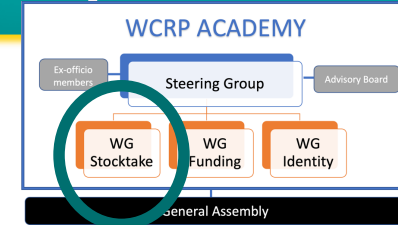
Gender

Man	222
Woman	180
Non-binary	6
Prefer not to say	6

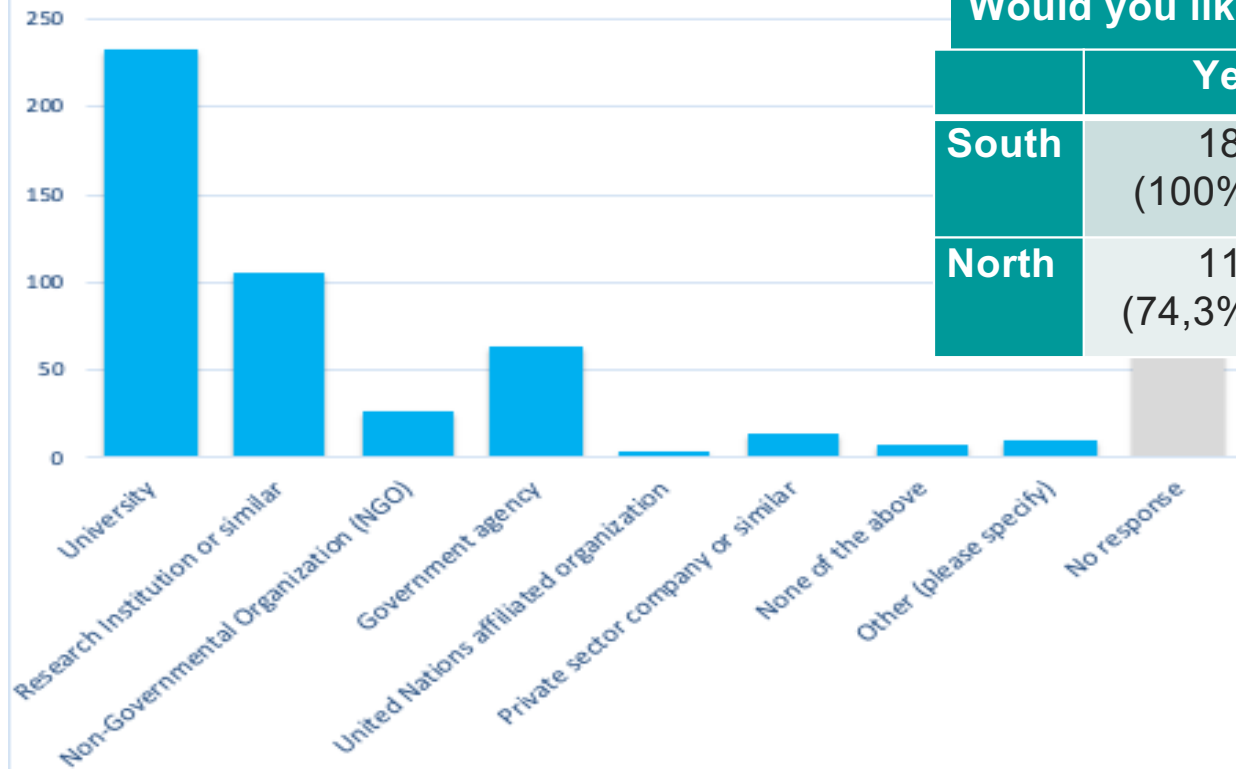
Top 10 respondent countries

Brazil	50
United States	35
United Kingdom	35
Australia	24
Germany	22
India	21
Nigeria	20
Peru	14
Argentina	14
Norway	11

2021 Survey



Affiliation of respondents



Would you like training?

	Yes	No
South	189 (100%)	0
North	113 (74,3%)	39 (25,7%)

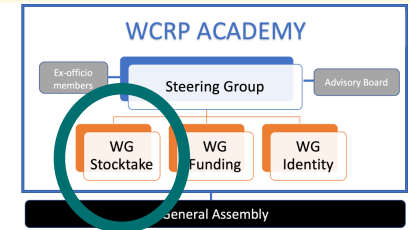
Progress and achievements over the last year

Survey 1b

Interviews of Survey 1 participants (2022)

Fourteen in-depth interviews with survey 1 participants in the Global South

- Climate training opportunities currently available are inadequate, particularly in the Global South
- Local experts, studies and datasets are also limited in the region
- Strong preference for short courses, seasonal schools, and expert webinars
- Interest in topics such as climate **impacts**, climate extremes, adaptation, risk and mitigation
- Call for **more inclusion of indigenous and local knowledge** in the training
- Lack of funding was stated as the important barrier to accessing climate training opportunities.
- Noted that there is much free online training – difficult to find & navigate

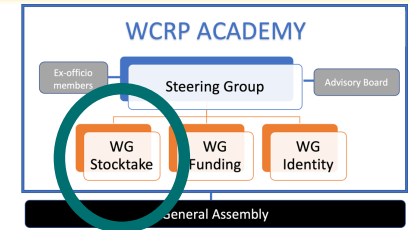


Progress and achievements over the last year

Survey II

2. Global Survey targeting *training providers* only (2023)

- 23 training providers (Research institutes, WMO centres and government)
- Global North (57%) - Global South (43%) ; **WCRP – only CLIVAR responded**
- Formats offered: Short courses, seasonal schools and expert webinars
- Target Audiences: practical users of climate science and information (practitioners, decision-makers)
- Themes include: climate prediction, interpreting weather information, climate projections, climate downscaling, remote sensing, ensembles, permafrost, marine heatwaves, risk assessments, data assimilation, climate finance, and tools and software
- Almost all organizations surveyed offered training in English, two in Spanish



Conclusion:

There is a good match between training recipients and providers in terms of the type of training that can be made available through the Academy, but there is a mismatch in terms of the number of opportunities available.



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World Climate Research Programme

Progress and achievements over the last year

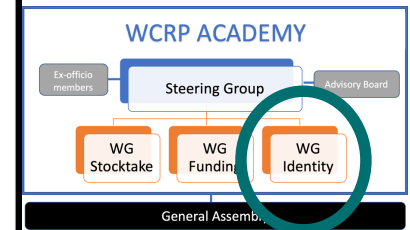
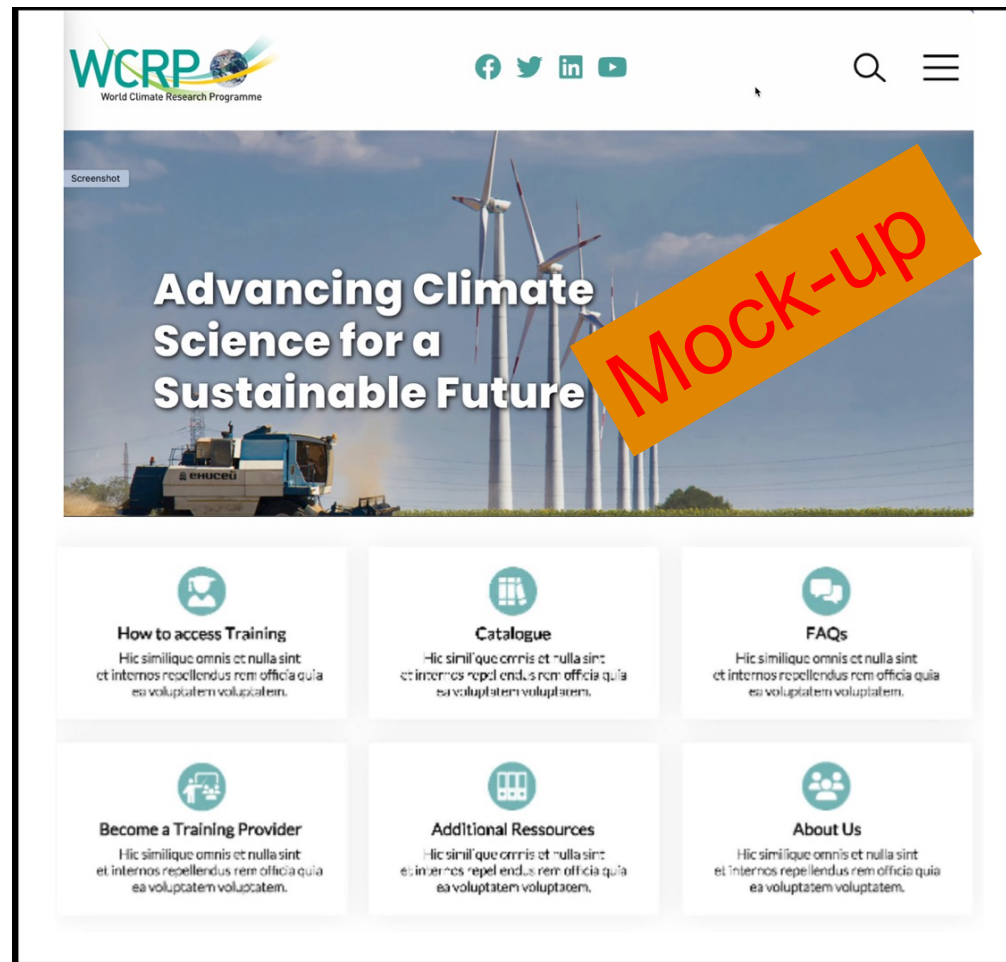
Website: World Climate Science Academy (WCSA)

Under construction...

The major feature is the **catalogue**

- WCRP in-house training from CPs & LHAs
- Repository for CP and LHA materials (e.g. CORDEX materials; Tipping Points series)
- Training opportunities offered by WCRP sponsors, partners and other organisations. (“Become a training provider” by directly registering activities in the catalogue following a vetting and endorsing process)

World Climate Science Academy website



Future plans

- **Populate** website catalogue upon consultations with CPs and LHAs
 - *Map and incorporate formal climate science programmes within WCRP's network (CLIVAR, GEWEX, MCR webinars, CORDEX...)*
- Academy website **launch** at side event WCRP OSC 2023
- **Present** survey results at OSC 2023 and publish the results in e.g., BAMS
- Perhaps publish our “science plan” in an appropriate journal as others have done
- Explore external Partnerships and Associations
- Assess organizational/structural options and **long-term business model** for the Academy with JSC input
- **Secure funding** sources commensurate with activities and structure (more later on this)

Linkages with Core Projects, Lighthouse Activities etc.

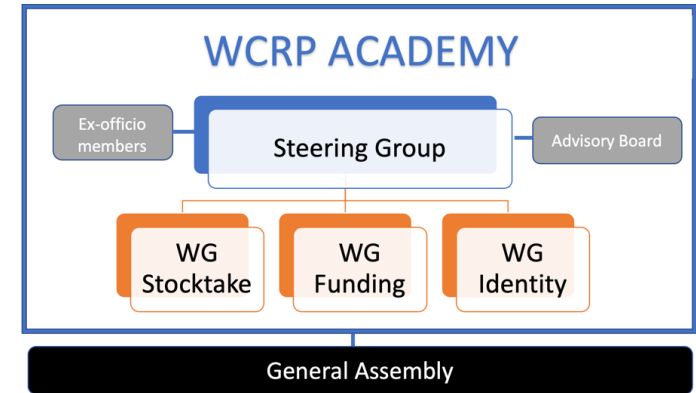
- The chairs will liaise with the leaders of Core Projects and Lighthouse Activities to explore avenues of collaboration with the Academy for the promotion, curation and long-term repository of their training activities
- Work from information provided by all CPs and LHA requests of the Academy received during this JSC meeting

Partnerships with entities outside of WCRP

- The Academy has renewed its contract with consultants at the Manila Observatory in the Philippines, who continue to support the work of the Academy in the Stocktake and Identity Working Groups.
- Opportunity for partnership with the ***International Universities Climate Alliance***
 - IUAC- 47 member universities across 25 countries
 - Strategic goal- a focus on the role of Universities in climate education and literacy, with global initiatives including professional development for researchers and professionals. Climate Alliance is looking to collaborate with strategic partners to enable such initiatives.

Emerging issues

- *Background:* Academy was born from the idea of an LHA to meet the education and training needs of WCRP activities and climate science researchers globally
- *Structure:* Started with a Science Plan Development Team and later under a Steering Group (Classic WCRP....)
- However, the **Academy does not fit the Lighthouse Activity concept:**
 - neither conducts research nor has a time-limited duration
 - inherently overarching activity reaching all aspects of the WCRP



Emerging issue: long-term plan for Academy

Objectives

- Collate and promote in-house **WCRP training activities** and educational material
- Systematically review the **global climate education landscape**, to identify gaps in training and development opportunities.
- Develop a **subscriber base** of training providers and users
- Be an acknowledged **broker** between training providers and users of training, both within and outside of the WCRP

Outcomes

- Web-based platform that allows users to access training opportunities within and outside WCRP
- Online repository of in-house WCRP training activities and materials (curation)
- Regular stocktake surveys to map the global climate science training landscape
- Disseminate information about upcoming training events
- Partnerships with other research programmes



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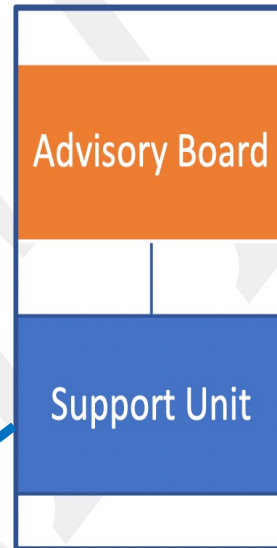
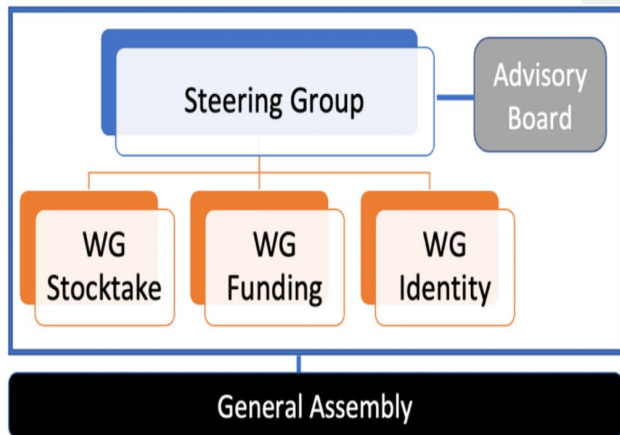


Proposal for a new, long-term business model for the Academy

New, long-term business model for the Academy

Proposed new Academy structure

Present Academy structure



- WCRP CP & LHA reps; providers and users of the Academy services (trainers and trainees, funding agencies and ECRs);
- Provide direction, feedback, to an Academy Manager who will report to the WCRP JSC
- ????

- *Manager* with skills beyond research, e.g., education and training, educational technologies, philanthropy, marketing.
- Assisted by a *Web and Graphics Designer* (database and web platform software skills).
- If funding allows, a *Liaison and Communications Officer*

(i) LOW-FUNDING SCENARIO

A basic Support Unit with a Manager (full position) and a Web Designer (a consultant, on demand). Funding for administrative expenses will be additional.

Duties of the Manager:

- Population and maintenance of the catalogue of training opportunities
- Liaison with the climate science community within and outside the WCRP

Duties web designer:

- Development of the catalogue and web platform functionalities

Outcomes of a low funding scenario

The Academy will be able to provide service to the WCRP community and maintain a catalogue of a limited number of training opportunities from partners and organisations outside WCRP

Advisory
Board

Support Unit:
Manager
&
Web designer



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World Climate Research Programme

(ii) HIGH-FUNDING SCENARIO

A full-fledged Support Unit with a Manager (full position), a liaison and communications officer (full position), and web designer (consultant, on demand). Administrative expenses in addition.

Duties of the Manager

- Development and implementation of the Academy's long-term strategy with Advisory board input
- Coordinate in-house training opportunities among CP and LHAs
- Pursue relationship with relevant partners and potential funding organisations
- Develop "best practices" documentation for training activities
- Regular surveys to identify gaps in climate science training

Duties of the Liaison & Communication Officer

- Liaison with the climate science community; Populate Academy catalogue
- Promote Academy; Maintain Academy social network profile
- Develop metrics for use and function of the website; develop measures of success of the Academy

Duties Web and Graphic Designer

- Curation, maintenance and development of the web platform and optimization of its functionality.
- Secure the long-term repository of WCRP training opportunities.

Advisory Board

Support Unit:
Manager,
Liaison & Communication Officer
&
Web designer



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(ii) HIGH-FUNDING SCENARIO

Outcomes under a high-funding scenario:

- The Academy will provide a robust service to the WCRP community (coordination, repository, best practices) and promote in-house training activities and expertise, enhancing the visibility of WCRP (can the communications officer be spread across the WCRP?)
- By partnering with training providers outside WCRP, the Academy can become the **go-to resource for access to climate science training and development**

Conclusion

With adequate funding, the Academy has the potential to become a flagship activity for WCRP's mission: **“to develop, share, and apply climate knowledge that contributes to societal well-being”**

What did we learn from this meeting?

Most understand the important role the Academy should play but unsure how to engage

Training and development

- There are **many** capacity development opportunities across CPs and LHAs but these are uncoordinated in the larger WCRP context
- CLIVAR is very active in capacity development; CORDEX historically
- How/what can the CPs and LHAs contribute to the work of the Academy to develop capacity in training and researcher development?

Early career researchers

- Hearing excellent examples of ECR engagement but do not see it in leadership –the Academy can help nurture this leadership development
 - The Academy could help entrain southern ECRs
 - CMIP “Fresh eyes on...” & CLIVAR “skills-development-awareness-application” models could become WCRP-wide initiatives the Academy could help facilitate
-

What else did we learn from this meeting?

- Funding and communication is a common theme (e.g. AGU, others)
- Synthesis/assessment paper of WCRP training and development over the last 30(?) years
- Many resources from past training programmes out there
 - These need to be captured, collated, made accessible
- How are training opportunities currently advertised?
 - We need WCRP-wide comms strategy for advertising our opportunities- the Academy could provide this
- What kind of training activities can be developed across projects and programmes?
 - At the moment opportunities are single CP/LHA focused