

Workshop by ICOLDs ad hoc Committee on Gender Diversity & Inclusion

Sunday September 29th 2024, 14:00-16:00



Charging forward with Gender Diversity & Inclusion

Global outlook, survey findings & actions by ICOLD
National Committees



Ad hoc Committee on Gender Diversity & Inclusion 2023-2025



Overall purpose of the committee is to



- Explore how ICOLD can be inclusive to all genders
- Raise the awareness and educate on gender aspects within ICOLD
- Support and promote increasing participation of female professionals in the dam sector



Charging forward with GD&I in ICOLD

Workshop program



Time	Presentation	Presenter
14:00	Welcome & introduction	Maria Bartsch, Com. chair
14:10	Power with Full Force - Getting to gender equality in the hydropower sector	Guest speaker: Thomas Bryant, Senior Dams Specialist, World Bank
14:30	Report from the committee - Work so far & findings from survey	GD&I Committee representatives
14:40	Reports on initiatives in NCs to act for GD&I	Invited speakers from more than 10 National Committees
15:25	Moderated workshop – Next steps for ICOLD	All participants
15:55	Wrap-up and closure	Maria Bartsch, Com. chair



Interactive workshop



- a) Where do you come from?*
- b) Woman, man, other?*
- c) What would you like to know more about/discuss?*

From t.o.r: Co-operate with NCs to identify goals, action items and good examples





Power with Full Force

- Getting to gender equality in the hydropower sector

Thomas Bryant, Senior Dams Specialist, World Bank



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Power with Full Force:

Getting to Gender Equality in the Hydropower Sector

Presenter: Thomas Edward Bryant (Senior Dams Specialist , tbryant@worldbank.org)

Contents

I. Hydropower and Gender

- Why we are all here

II. Women's Employment in the Hydropower Sector

- Baseline and representation of women in the sector

III. Barriers to Gender Equality in the Hydropower Sector

- Overview of Barriers

IV. Recommendations

- How to close gender gaps
- Case Study

V. Conclusions

Power with Full Force: Getting to Gender Equality in the Hydropower Sector



Scan me!

<https://www.esmap.org/Gender-and-Hydropower>



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I. Hydropower and Gender

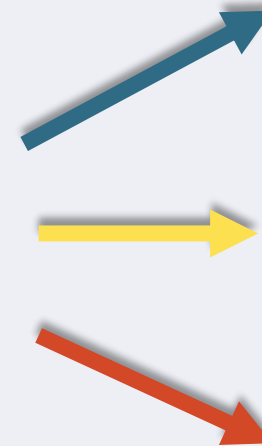
Why are we here?

3.7 M jobs are needed in the Hydropower sector by 2050

Also tackling climate change goals.



Including more men and women is needed. However...



Including more women in the sector will lead to:

- Poverty reduction
- Improved business results
- Better and efficient decision making
- Better work environment

Methology

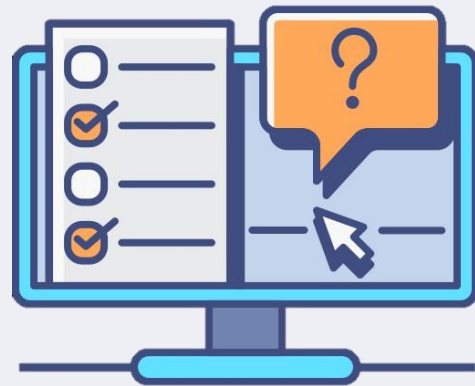
Power with Full Force: Getting to Gender Equality in the Hydropower Sector

1



Literature Review.

2



900 online survey responses.

3



60 in-depth interviews.

4



Development of case studies.



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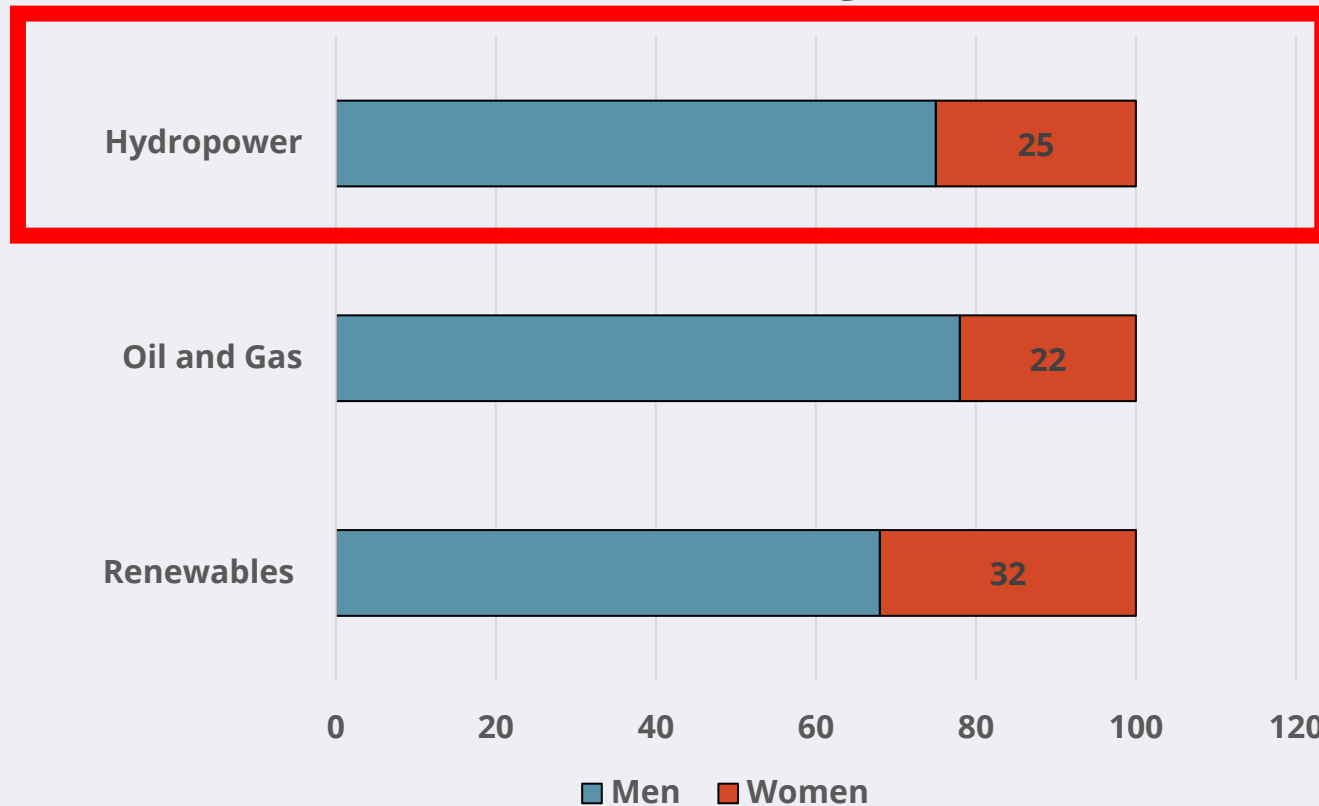
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II. Women's Employment in the Hydropower Sector

Women are Underrepresented in the Hydropower Sector

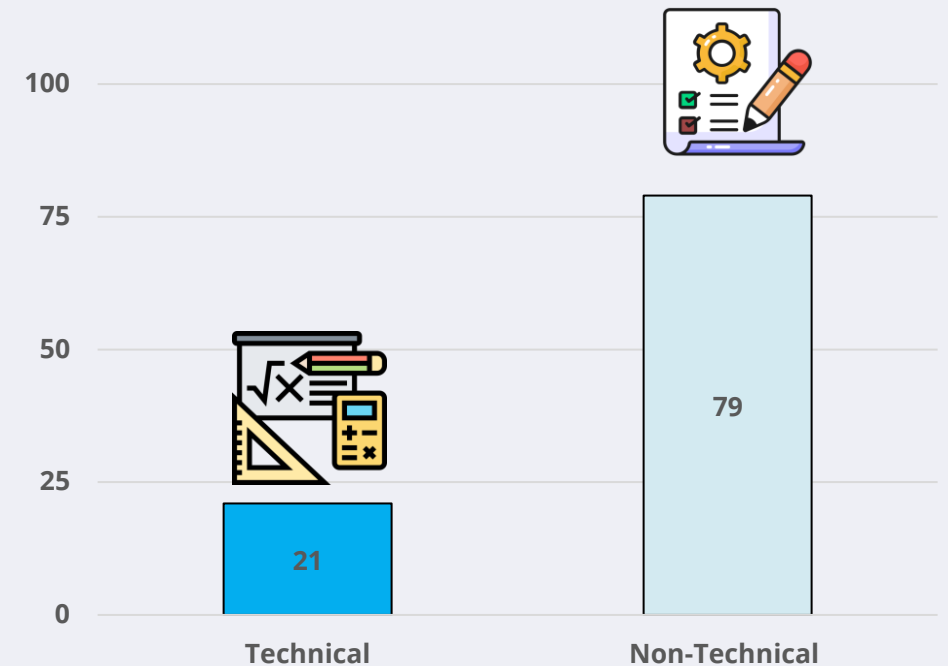
Power with Full Force: Getting to Gender Equality in the Hydropower Sector

Distribution of men and women in the energy sector (Percentages)



Source: The World Bank, 2023

Survey results: Distribution of Women by Type of Role (Percentages)



Source: The World Bank, 2023

Women are Underrepresented in the Hydropower Sector Management

Power with Full Force: Getting to Gender Equality in the Hydropower Sector

Mid-level management positions

29%

are women

Board of Directors

19%

are women

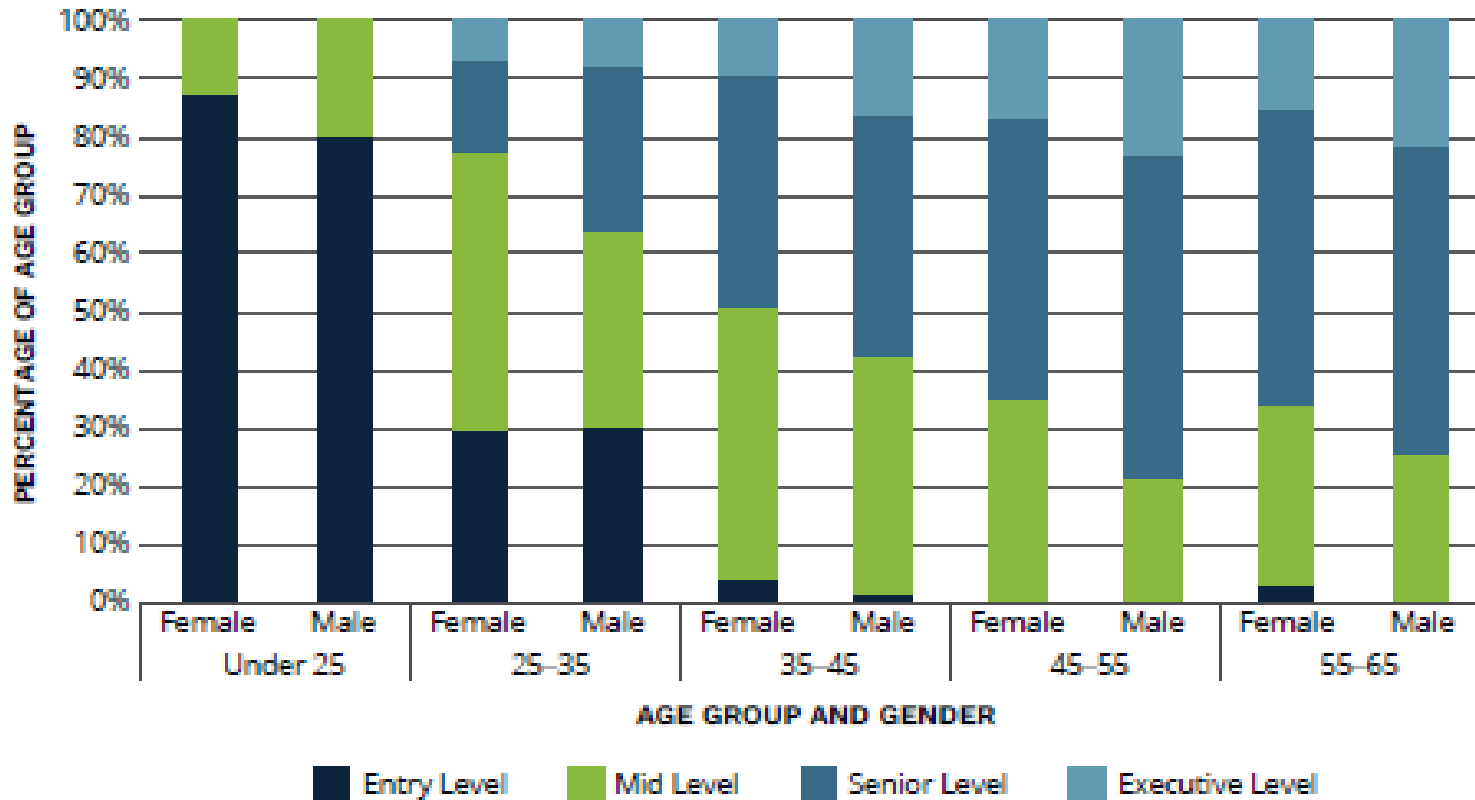
Sr. Executive Positions

24%

are women

Women progress less than men

Self-Reported Career Level of Survey Respondents, by Sex and Age Group



Source: World Bank data.



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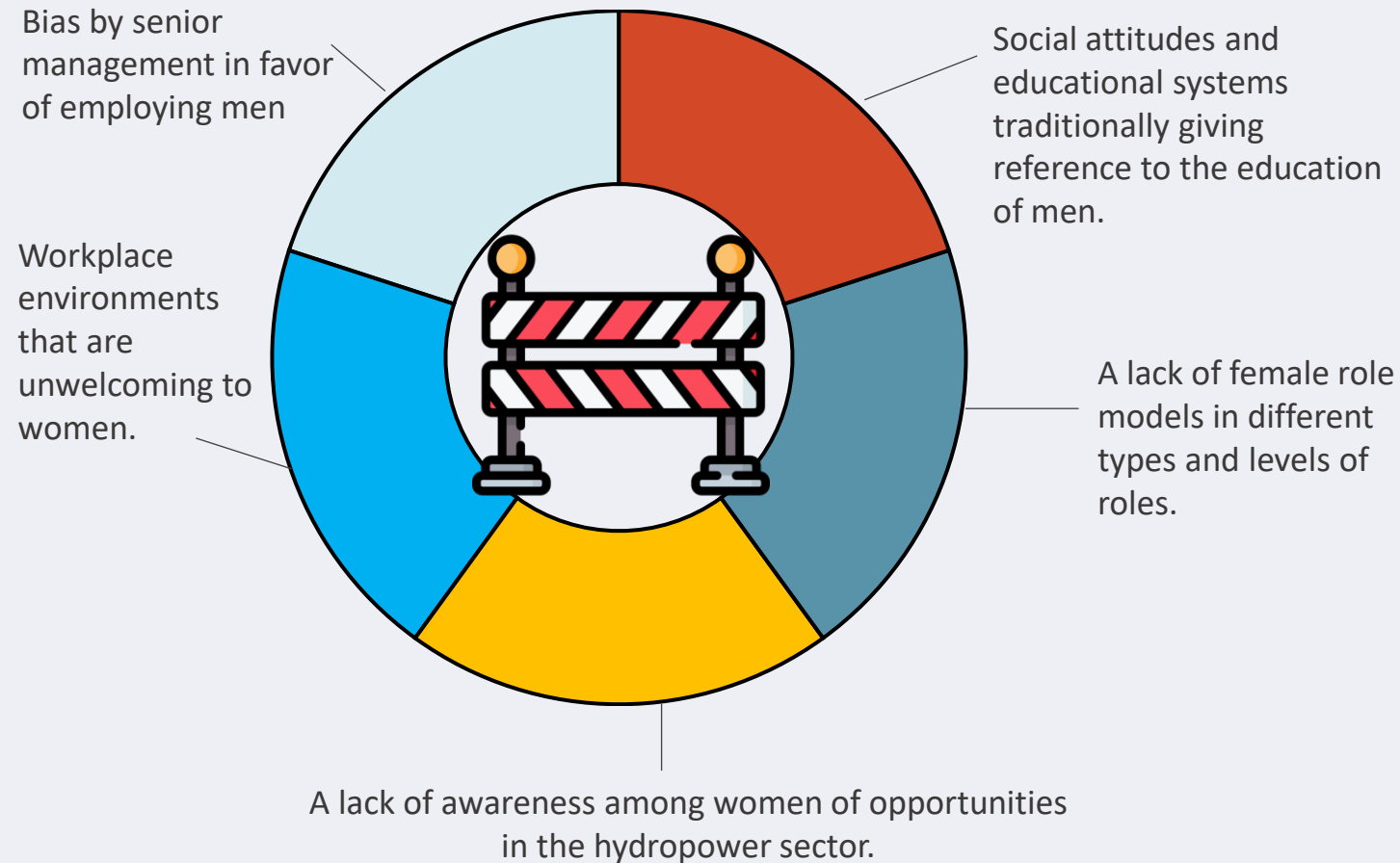
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II. Barriers to Gender Equality in the Hydropower Sector



Barriers that explain the gender gap

Most frequent barriers found in literature review, surveys responses, interviews and focus groups



Barriers that explain the gender gap mostly commonly selected by female and male respondents

1

Low proportion of women with relevant STEM skills

2

Lack of female role models

2

Lack of awareness of opportunities in the sector

3

Lack of awareness of opportunities in the sector

3

Lack of interest among women

4

Bias by senior management

4

Lack of female role models

5

Workplace environments that are unwelcoming to women



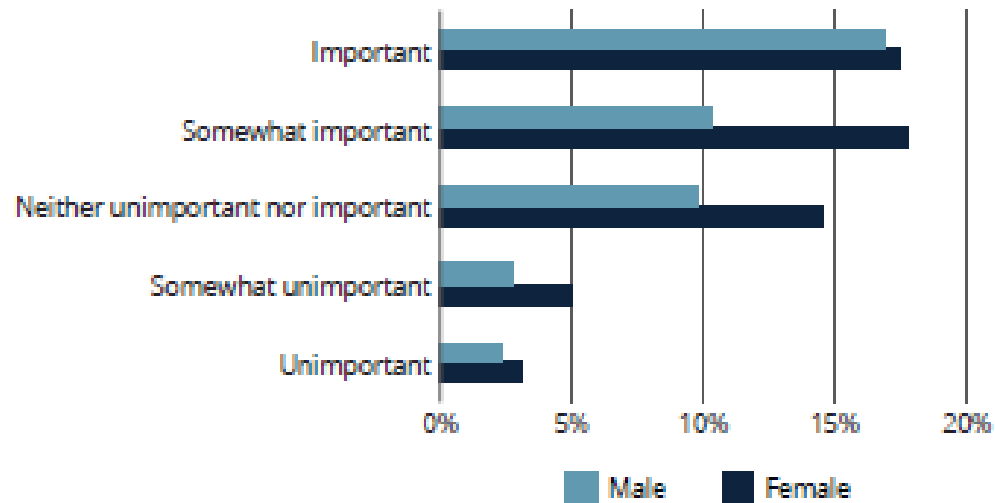
Male Participants

Female Participants

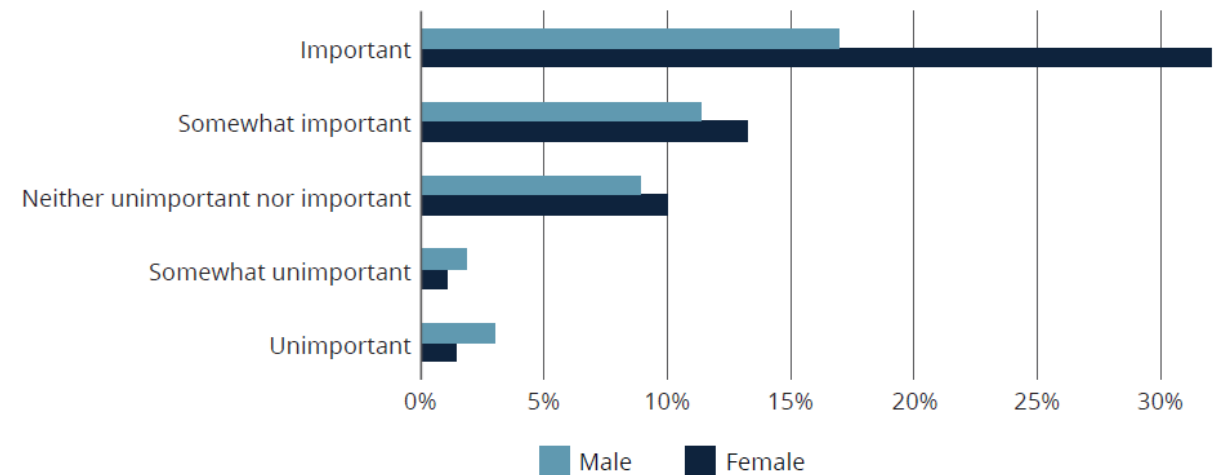
Women perceive gender diversity to be important for their workplace... men are less convinced

Perception of the Importance of Gender Diversity for the Company (and CEO), by Sex

Perception of the Importance of Gender Diversity (for Self), by Sex/How Important is Gender Diversity in the Workplace to Your Company, to You?



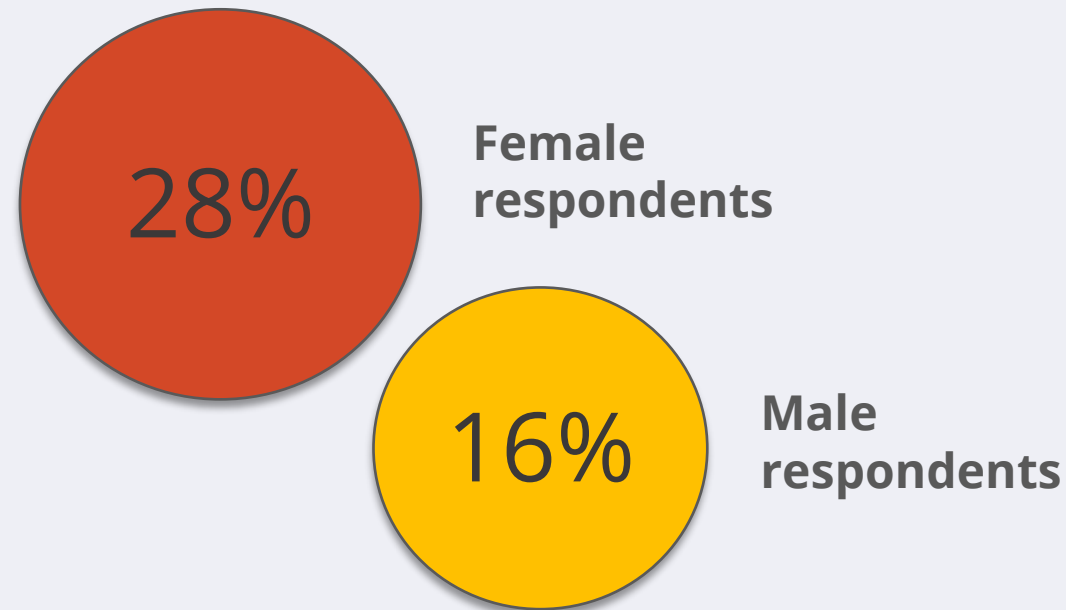
Source: World Bank data.



Source: World Bank data.

Perceptions of the Hydropower Sector and Workplace Environments

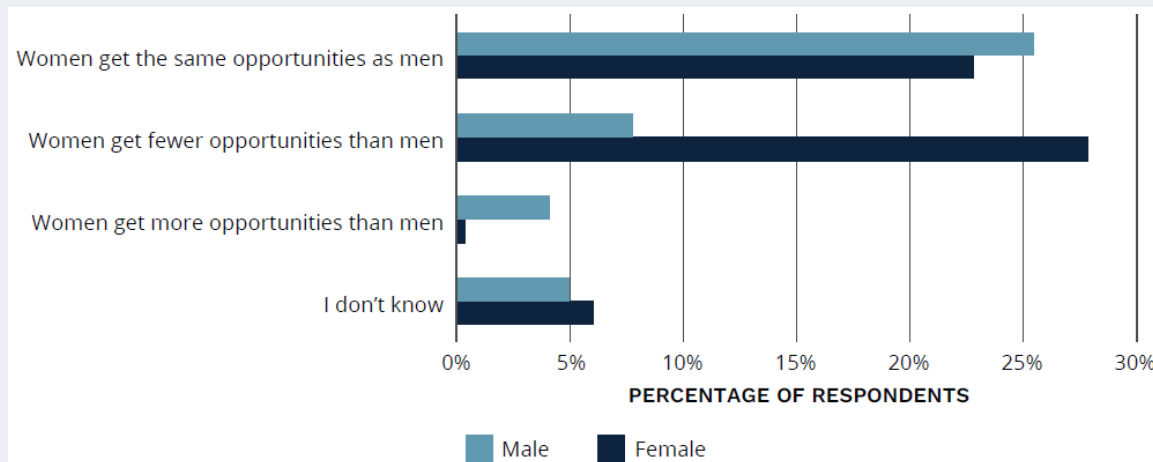
Is hydropower perceived as gender inclusive as other sectors? Not so much...



Think that the hydropower sector is **LESS** gender-inclusive than other renewables sectors

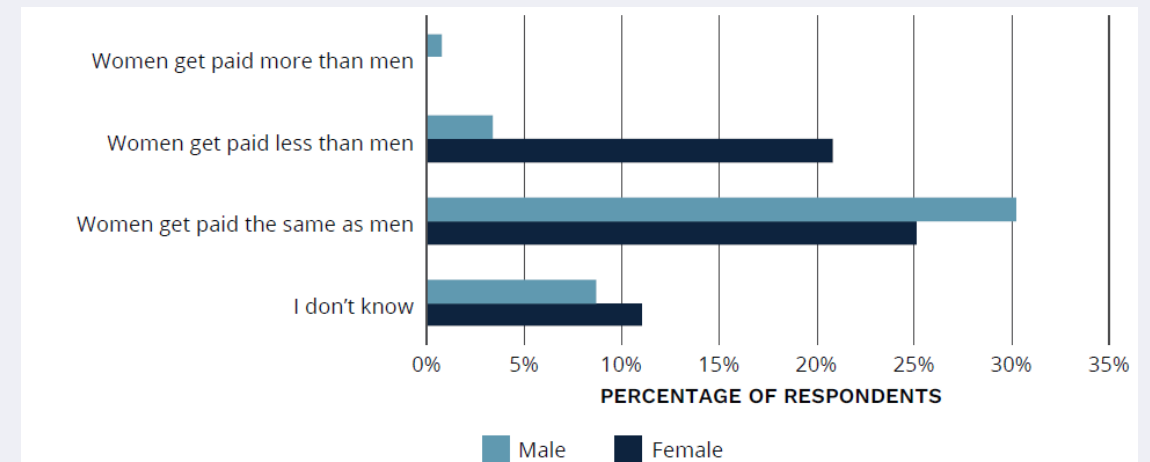
Perceptions of the Hydropower Sector and Workplace Environments

Perceptions of the Gender Opportunity Gap in Hydropower Companies



Source: World Bank data.

Perceptions of the Gender Salary Gap in Hydropower Companies



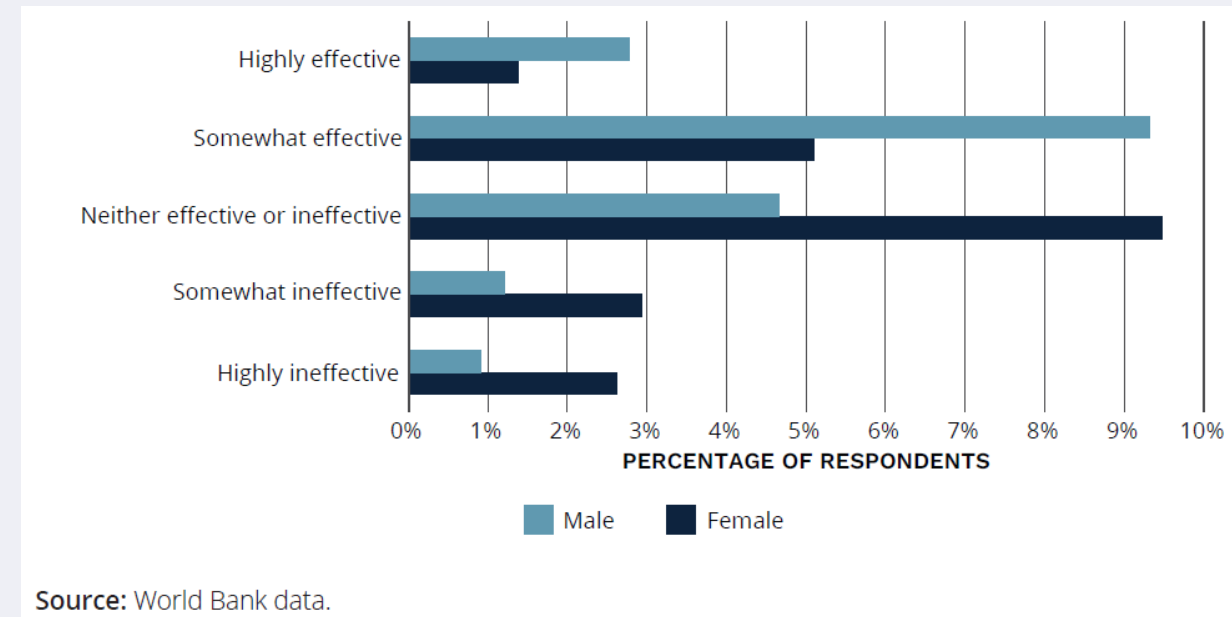
Source: World Bank data.

Timid Efforts to Improve Women's Participation: Gender Policy Implementation Limitations on Work-Life Balance Benefits

The percentage of companies with gender policies

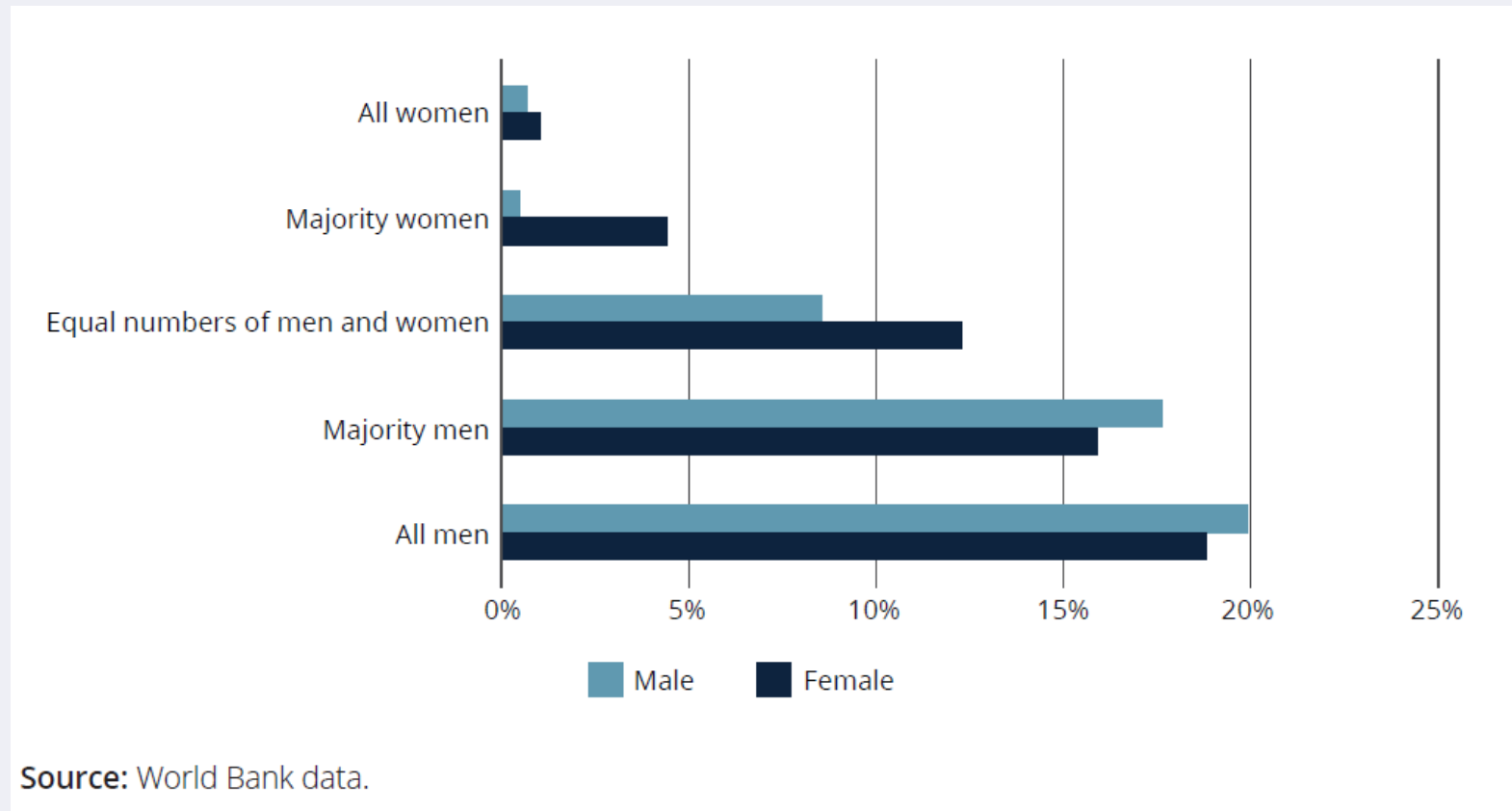
40%

Efficiency of Gender Policies at Workplace, by Sex



Lack of Female Role Models in the Sector

Career Progress: Survey Responses, by Sex, to the Question “What Was the Gender of the Senior Staff Members Who Supported Your Career Progress?”





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IV. Recommendations

Main recommendations to close the gender gaps

1



Start With Education and Implement Actions to Remove Constraints for More Women to Pursue Stem Degrees

2



Identify Gender Gaps in the Workplace and Enact Policies to Close Them

3



Raise Awareness to Promote Hydropower as an Appealing Career for Women

4



Provide Mentoring, Role Models, and Networking Opportunities for Women

5



Include More Men in the Gender Inequality Discussion and Encourage Them to be Proactive to Reduce the Gaps

Case Study: Public Enterprises of Medellin (Colombia)



Power with Full Force: Getting to Gender Equality in the Hydropower Sector

Silver Seal Award for Gender Equality



- In 2021, EPM was awarded a **Silver Seal** from **Equipares** for its commitment to gender equality.
- This recognition followed a two-year process of **identifying and addressing gender gaps**.
- An independent audit verified EPM's progress, granting a **score of over 98%**.

Inclusive Recruitment and Policies



- EPM attracted more women by renaming 235 job titles to be more inclusive.
- They created a **community of women engineers and technicians**.
- EPM **removed** photo, age, and gender requirements from resumes.
- They ensured **gender balance in high-level recruitment**.

Workplace Environment Improvements



- EPM launched campaigns to promote gender equality.
- They encouraged a **"new masculinity"** by supporting men in taking care leave.
- EPM raised awareness of the Committee for Labor Coexistence to **protect against workplace harassment and stress**.

Future Goals and Leadership Support



- EPM is **pursuing the Equipares Gold Seal** for further gender equality recognition.
- The company acknowledges the need for **continuous improvement** in gender equality.
- This effort is supported by the enthusiastic **backing of top management**.



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V. Conclusions

Conclusions after learning what we know now...

1



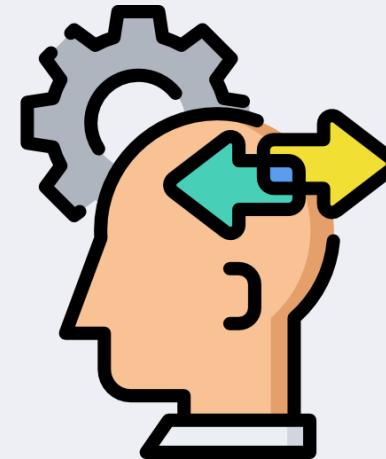
There are unique barriers women face in the hydropower sector.

2



More information is needed.

3



Gender Equality cannot be just left to HRD. It requires behavioral changes.

4



There is a lot to be done.

ESMAP Women's Employment in Energy Sector Utilities Toolkit

Power with Full Force: Getting to Gender Equality in the Hydropower Sector

A "one-stop shop" for advice and resources on how to bolster women's employment in energy utilities. It contains links to free, publicly available tools and resources aimed at addressing the barriers women face in the energy sector

<https://www.esmap.org/gender-and-energy-toolkit>



Scan me!

1

Making the Commitment and Setting Targets

It contains resources that will help a utility start its journey to reduce gender disparities in its workforce.

2

Recruiting Women to the Energy Utility Workforce

It provides resources on how to improve a utility's ability to recruit and hire women candidates.

3

Retaining Women in the Utility Workforce

It covers 4 main areas:

- Providing a Safe, Healthy Workplace;
- Promoting an Equitable Work Culture;
- Fostering Inclusivity; and
- Creating a Flexible Workplace.

4

Advancing Women Employees

It discusses ways in which utilities can reduce gender gaps in management and leadership positions..

ESMAP Resources

Power with Full Force: Getting to Gender Equality in the Hydropower Sector

- <https://www.esmap.org/>
- <https://energydata.info/>
- <https://mtfenergyaccess.esmap.org/>
- <https://rise.esmap.org/>



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THANK YOU.

Bente Burnes - bbrunes1@worldbank.org

Thomas Bryant - tbryant@worldbank.org



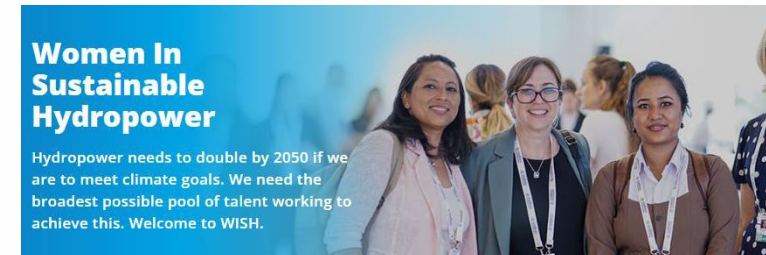
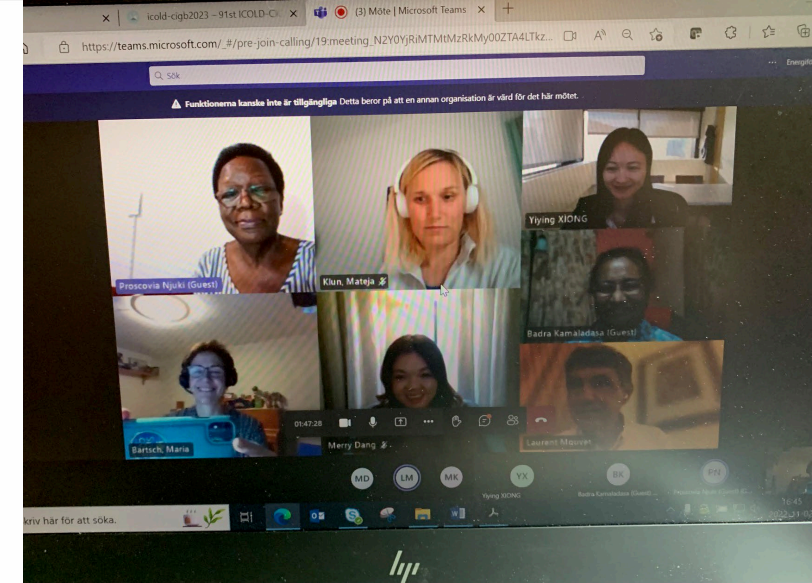
Report from the committee

- work so far & findings from our survey

Maria Bartsch, Sweden
& Mateja Klun, Slovenia

What have we been doing

- Informal kick-start at ICOLD 2023
- Identifying existing initiatives & potential partners
 - World Bank-ESMAP study on women in hydro
[Power with Full Force Getting to Gender Equality in the Hydropower Sector \(worldbank.org\)](https://www.worldbank.org/en/topic/women/energy)
 - Several independent initiatives
 - New network connecting existing groups created: WISH!
- Connecting with WISH [Women In Sustainable Hydropower](#)
 - Common website under iha, informal gathering place, links
 - Online meetings, ICOLD invited as guest
 - Share information, explore common actions, share best practices
 - Plan to soon launch common LinkedIn, logo...

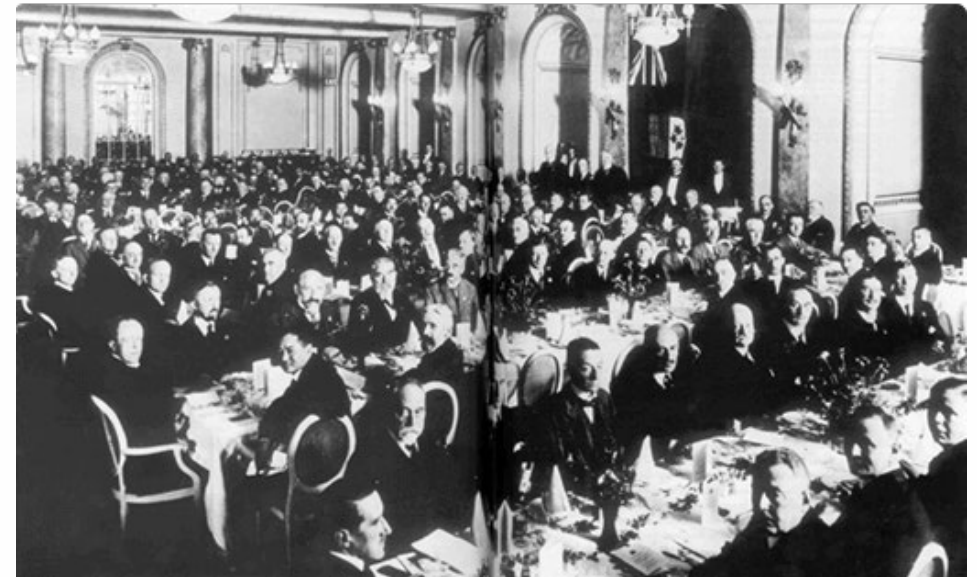


Assessing the current situation in ICOLD



Historically

- No considerations related to representation of female professionals
- Close to no women in leading positions or communications
 - Secretary general, president, vp's, TC chairs
 - Congress session officers
 - Newsletters, authors of articles
 - Award winners
- Gender distribution not monitored



Recent initiatives

- YPF (diversity in age), mentorship lunches
- Change to gender neutral language
- This ad hoc committee
- Annual meeting host considering & monitoring representation of women (ICOLD2023)



Survey to ICOLD NCs

– Establish baseline & map activities



Survey on gender diversity - to be answered by National Committees of ICOLD

This study is performed by the ICOLD Comitée on Gender Diversity and Inclusion. The purpose of the survey is to map the existing gender distribution within ICOLD National Committees and their activities, to establish a baseline.

Please respond before March 15, 2024. Send the questionnaire to committee chair maria.bartsch@svk.se with copy to icoldgdisurvey@gmail.com, or reply online via the web link provided in the email.

Please fill in light blue fields
- Leave blank if not applicable/available in you National Committee.

Q1 - Please provide contact information and general information about the national Committee.

Date	
County	
Name of National Committee	
Year when NC was established	
Name and position of respondent	
Contact info - email	
Name and position of contact for further more in depth exchange (if other than above)	-
Contact info - email (if other than above)	

Q2 - National Committee is organization, its main tasks and activities. Please give a short description. This question is not mandatory but can help us to understand

Describe NC organization including leadership, routines for renewal of committee and types of membership (companies and/or individuals)	
Describe NC main tasks	
Describe NC main activities	

Q3 - Leading positions in your NC and general membership. Please provide numbers on gender distribution.

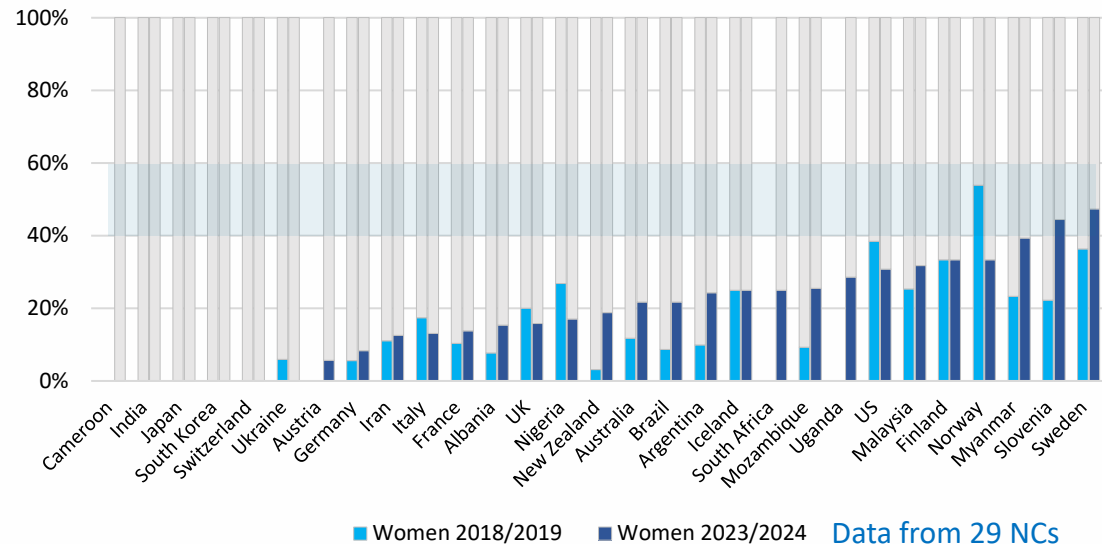
Today and some 5 years back	Current numbers 2023/2024			Previous numbers 2018/2019			Comments
Leading positions:	Women	Total	% women	Women	Total	% women	
a. Board members							
b. Presidium (Chair, vice-chair, secretary general)							
c. Steering group (voting members)							
d. National technical committee chairs							
e. Delegates in ICOLD technical committees							
f. Possibility to add another organization unit and its leading positions: xxx							
Overall comments:							
Membership:	Women	Total	% women	Women	Total	% women	Comments
g. Members in national organization							
h. Young professional members							
i. Possibility to add another type of organizational unit and its members: yyy							
Overall comments:							

- February-May 2024
- NC Organization & tasks
- Representation of women
 - Leading positions, members, events
 - Today and 5 years ago
- GDI-initiatives
- Response from 37 NCs
- "Data" from 29 NCs
- Be careful with interpretation!



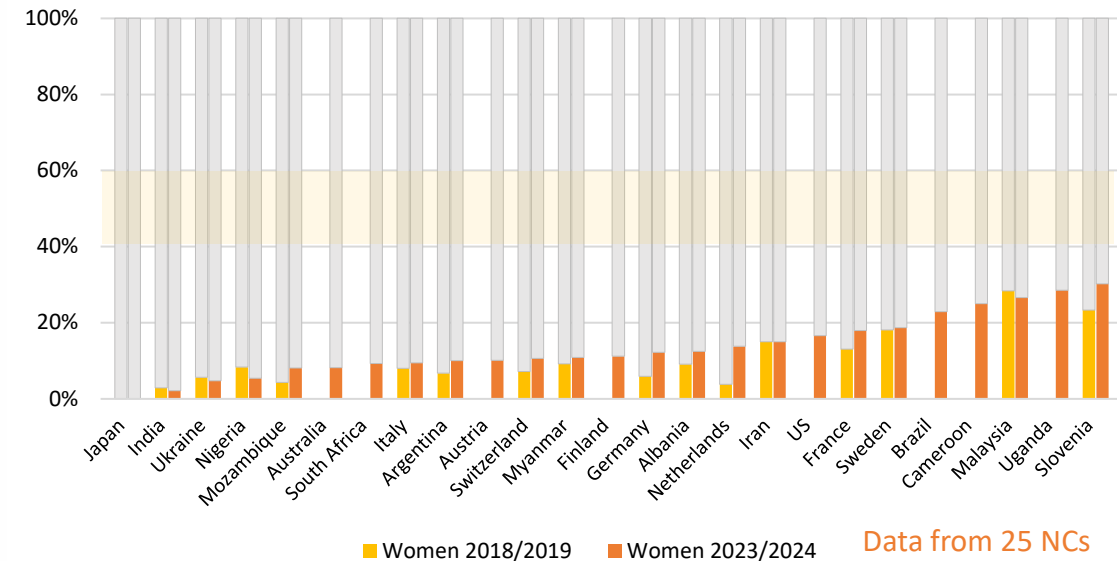
Board/Steering groups

Gender distribution*



Members

Gender distribution*

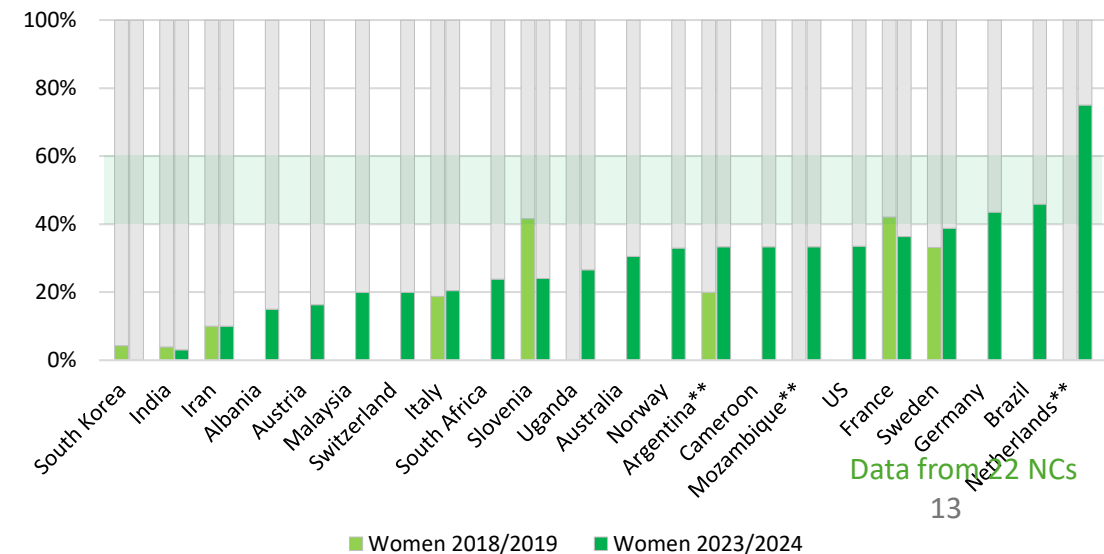


Representation of women

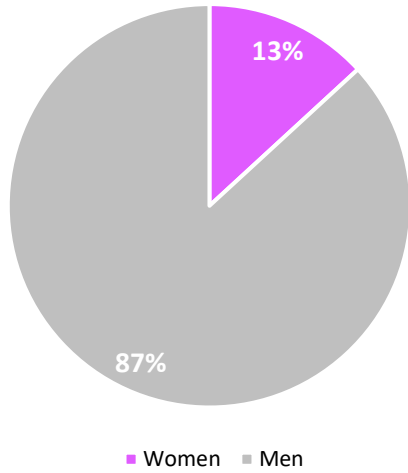
- Great differences between countries
- Half of responding NCs have:
 - 20 % women or more in NC-leading positions
 - 11 % women or more as NC-members
 - 30 % women or more as YP-members
- Slight increase with time

Young Professional members

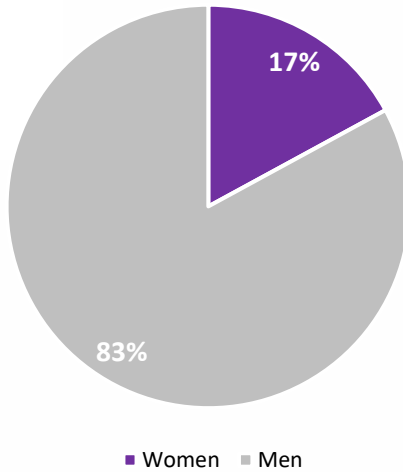
Gender distribution*



Delegates in TCs 2018/2019*



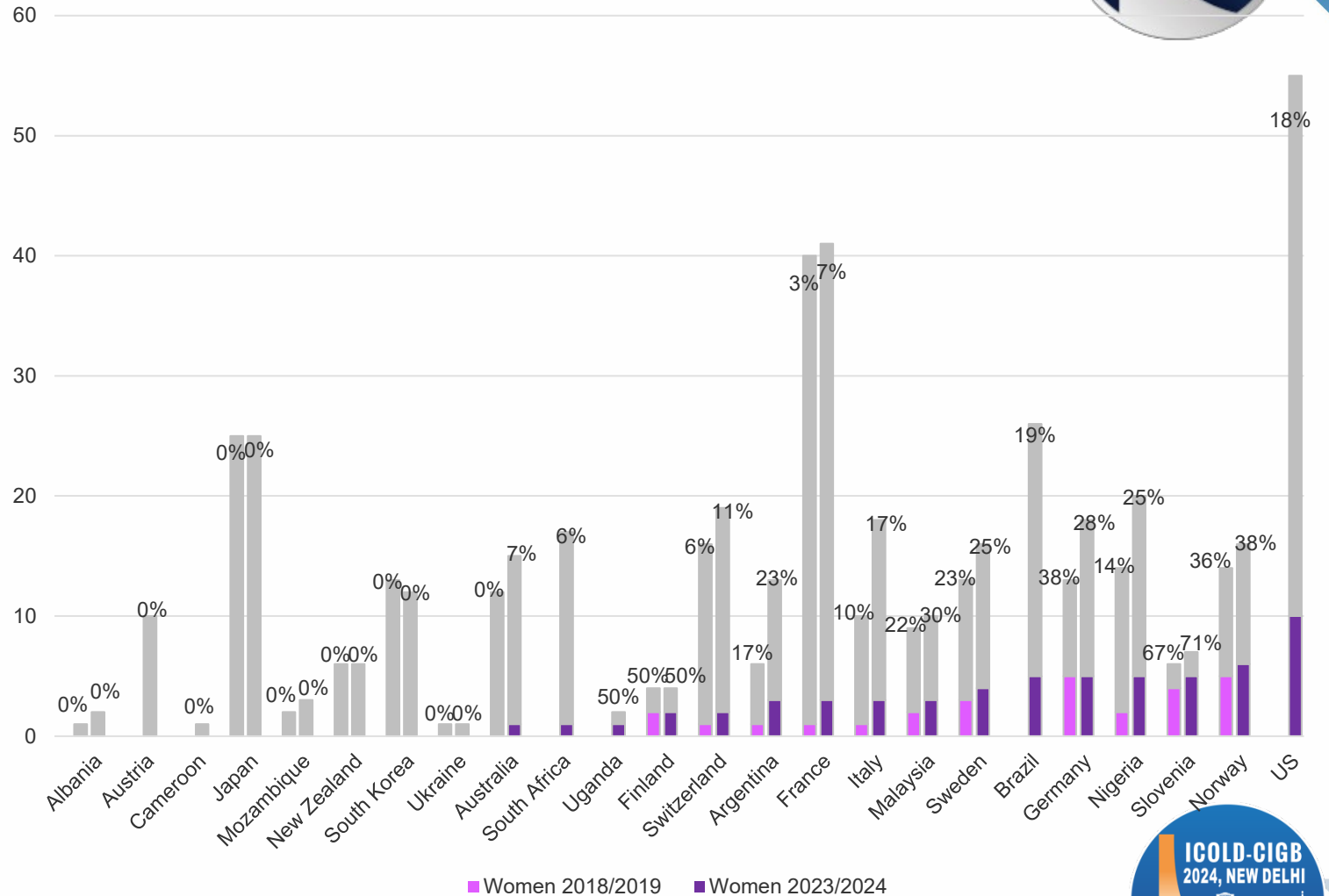
Delegates in TCs 2023/2024**



*Data from 18 countries,
27 women out of 178 in total

**Data from 24 countries,
42 women out of 204 in total

Delegates in ICOLD TCs per NC Women out of total*



- Slight increase with time

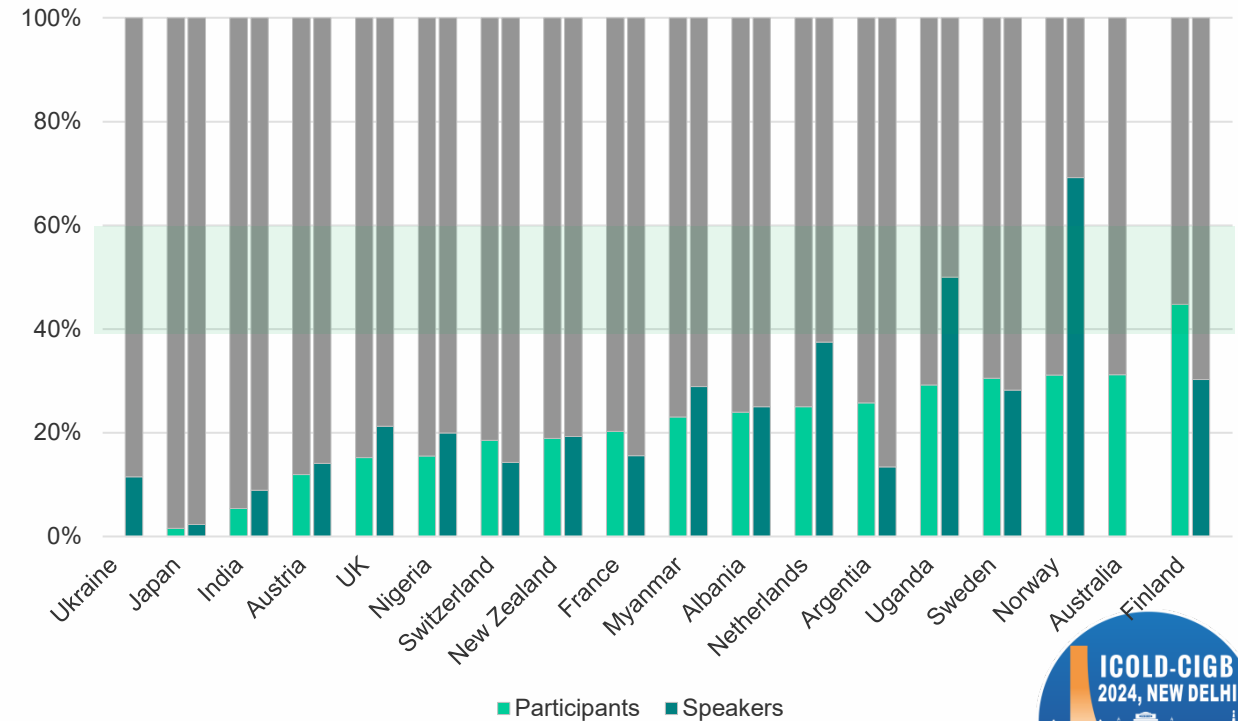




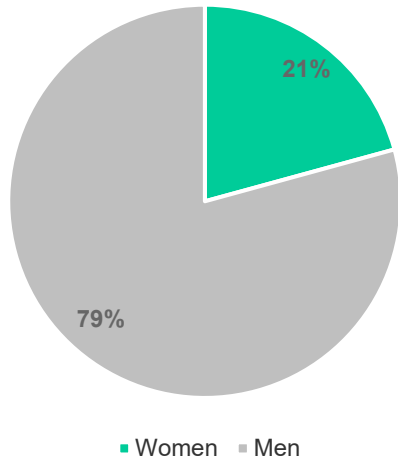
Recent conferences/major national events

In the last 5 years (% females out of total)

Gender distribution of participants and speakers for major national events*

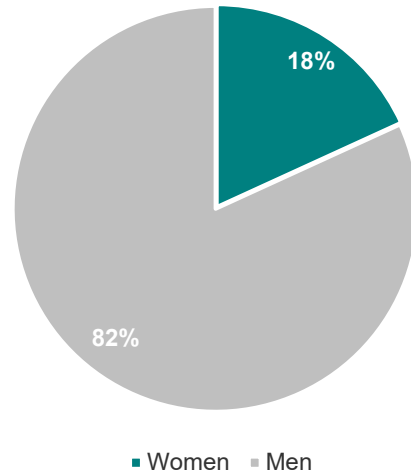


Gender distribution for participants on major national events**



*Data from 55 events in 18 countries

Gender distribution for speakers on major national events**



**Data from 71 events in 18 countries

- Speakers slightly less than participants



Gender related initiatives - 15 NCs

- DE&I-groups
- Mentorship programs/opportunities
- Actions to strive for gender balance
 - In governance, conference leadership, presenters
- Attempts to increase diversity
 - Age and gender, YP activities
- Actions to attract university students to enter the sector
 - Not specifically directed to female students



Time for the NCs to share their experiences!



Brief reports from NCs on current situation & initiatives to act for GD&I

From New Zealand to Canada



1. New Zealand
2. Australia
3. Malaysia
4. Uganda
5. Iran
6. Italy
7. Slovenia
8. France
9. UK
10. Finland
11. Sweden
12. Brazil
13. USA
14. Canada



Time for questions & reflections afterwards

Please note items for discussion





1. New Zealand

Diversity initiatives in the NZSOLD community

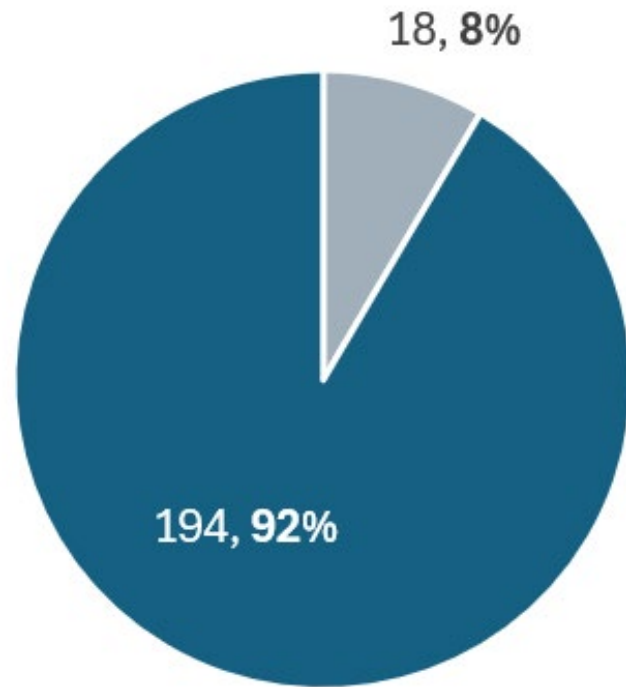


NEW ZEALAND
Society on Large Dams

Dr Kaley Crawford-Flett, NZSOLD Chair 2024

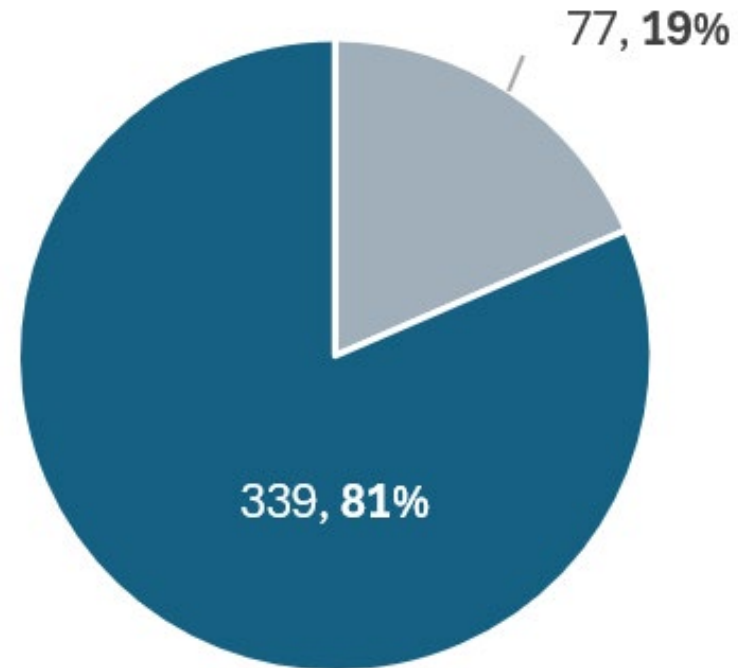
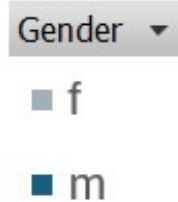


NZSOLD individual members: gender estimates



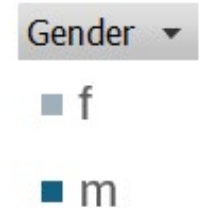
2018

Not including YP members



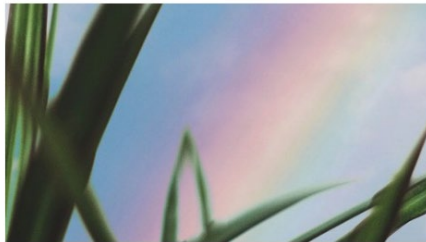
2024

Including YP members

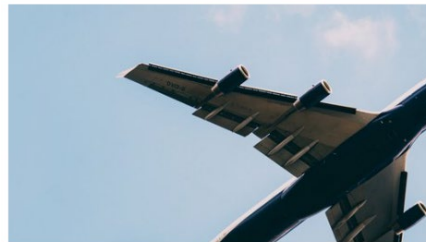


Engineering New Zealand: parent organisation initiatives

- Gender and sexual orientation
- Cultural and racial (immigrant support)
- Age and generation
- Disability and neurodiversity



Rainbow Special Interest Group



Special Interest Group for Immigrant Engineers



Māori (Indigenous) Strategy



Brain Badge
Neuro-inclusion Strategy

+ 36 Technical Groups and Collaborating Tech Societies (incl. NZSOLD)



NEW ZEALAND

Society on Large Dams



2. Australia

ANCOLD - Australia

Colleen Baker, Deputy Chair, ANCOLD

Andrew Reynolds, Convenor DE&I Working Group, ANCOLD



ANCOLD



Diversity, Equity and Inclusion Working Group

- Working Group formed September 2023
- Meets monthly
- Broad remit around diversity





Working Group – Terms of Reference

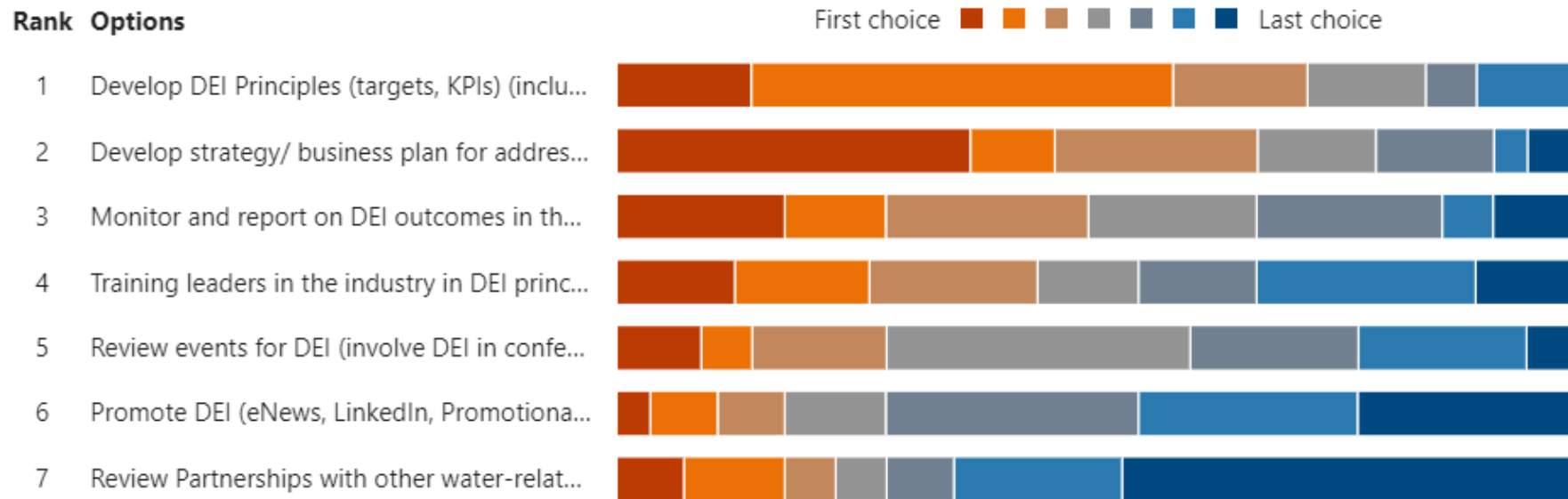
Core Objectives

- Develop a DE&I Policy
- Advocate, influence and raise awareness in the industry of the importance of DE&I
- Ensure direct activities of ANCOLD (Working Groups, Events, Committees) are carried out with adherence to DE&I principles
- Support the industry to implement change in regard to DE&I principles
- Monitor latest research on DE&I and ensure these practices are applied
- Monitor DE&I outcomes



Current activities

- Undertaken survey of members
 - DE&I perspectives of ANCOLD and Australian industry



- Panel session at upcoming annual conference on challenges for migrants entering the Australian dams industry



3. Malaysia

Malaysian National Committee On Large Dams (MYCOLD)

Speaker: Datin Prof. Ir. Dr. Lariyah Mohd Sidek, MYCOLD Co-President



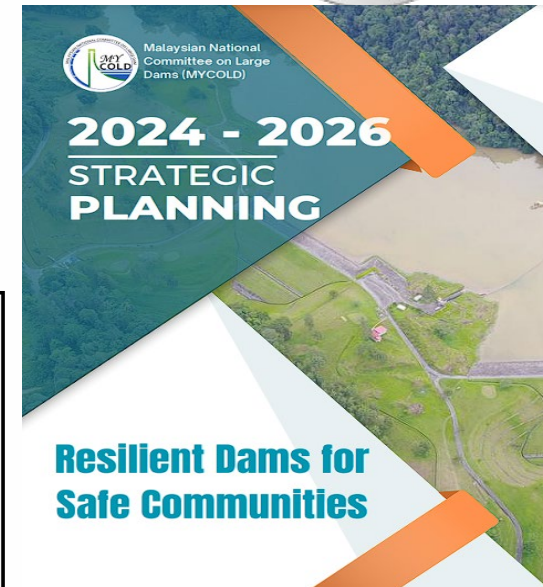
MYCOLD's journey: Where we are today?

VISION

To build a future in which all dams are safe, well-managed and benefit society.

MISSION

To encourage co-operation, advance technical knowledge, and build competency related to dams in Malaysia



MYCOLD RECENT ACTIVITIES 2023 - 2024

1. Current members: **465 individuals & 14 Corporate Members**
2. Malaysian representative in 9 ICOLD Technical Committee
3. **Professional Certification** of 300 Dam Engineers by 2025
4. **Training courses** prior to the certification process
5. Supporting **Special Committee on the Dam Safety Management for Dam Structure, PETRA**
6. **Bi-Annual Conference ICDSME2019 & ICDSME2023** with about 450 participants Nation wide
7. **Technical Bulletin** to support MyDAMS
8. Supporting the National Water Council (MAN)
9. Conducting **14 webinars, 7 Training courses, 4 Book Publications, 4 MOUs, Certified CDSI, 7 International Program Involvement, 6 CSR**

- Women played key roles in **revitalizing MYCOLD** in 2019, driving **strategic initiatives** that transformed MYCOLD from inactive to influential.
- Led by a female Co-President for the past 3 terms.
- Women in MYCOLD facilitated the **internal restructuring and developed long-term goals** that aligned MYCOLD with international standards.



Malaysian National Committee On Large Dams (MYCOLD)



COMMITTEE MEMBERS

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Y.BHG. MEHAR IKI DATO' IR. DR. HS. AHMAD ANJAB BIN OTHMAN
Department of Irrigation and Drainage (DID) Malaysia

CO - PRESIDENT
Y.BHG. DATIN PROF. DR. LARIYAH BINTI MOHD SIDEK
Universiti Tenaga Nasional (UNITEN) Malaysia

VICE PRESIDENT 1
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Universiti Tenaga Nasional (UNITEN)

ASSISTANT SECRETARY
Y.BGS. IR. H.H. SARAH BINTI ISMAIL
Department of Irrigation and Drainage (DID) Malaysia

TREASURER
Y.BGS. TUAN NOO ZAHRI BIN SONDOR ALS
Selangor Water Management Authority (SUWAM)

COMMITTEE MEMBER
Y.BGS. TUAN MOHD HAZRI BIN HOH KHAMBALI
Department of Irrigation and Drainage (DID) Malaysia

COMMITTEE MEMBER
Y.BGS. IR. TOM CHIN KOK
Angkasa Consulting Services Sdn. Bhd. (ACEC)

COMMITTEE MEMBER
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Sarawak Energy Berhad (SEB)

COMMITTEE MEMBER
Y.BGS. IR. SHEKH AHMAD FARHAN BIN KAMAL HAZARI
JHS Engineers Sdn. Bhd.

COMMITTEE MEMBER
Y.BGS. IR. TING TIEW WYONG
Sarawak Energy Berhad (SEB)

COMMITTEE MEMBER
Y.BGS. DR. ROSHINA BINTI AHMAD BUSTAM
Universiti Malaysia Sarawak (UNIMAS)

COMMITTEE MEMBER
Y.BGS. PUAN BOUHANA ALMA BINTI MOHD ALI
Kementerian Kesihatan, Tenaga dan Sukan

COMMITTEE MEMBER
Y.BGS. IR. NOO HALIM BIN ALYON
Water Supply Division

COMMITTEE MEMBER
Y.BGS. IR. TS. DR. AZWIN ZAIDI BINTI ABDUL HAZID
First Power Generation Sdn. Bhd.

COMMITTEE MEMBER
Y.BGS. TUAN ALAZIM BIN ABDULLAH
Bahagian Kemajuan Air (BBKA)

ICOLD TECHNICAL COMMITTEE

Datin Prof. Ir. Dr. Lariyah Mohd Sidek
Dam Safety

Ir. Steven Toh Chin Kok
Embankment Dams

Prof. Ir. Dr. Azlan Adnan
Seismic Aspects of Dam Design

Ts. Dr. Rahsidi Sabri Muda
Public Safety Around Dams

Ir. Dr. Jansen Luis
Sedimentation of Reservoirs

Jonny Wong
Integrated Operations of Hydropower Stations and Reservoirs

Dato' Ir. Mohd Azmi Ismail
Public Awareness And Education

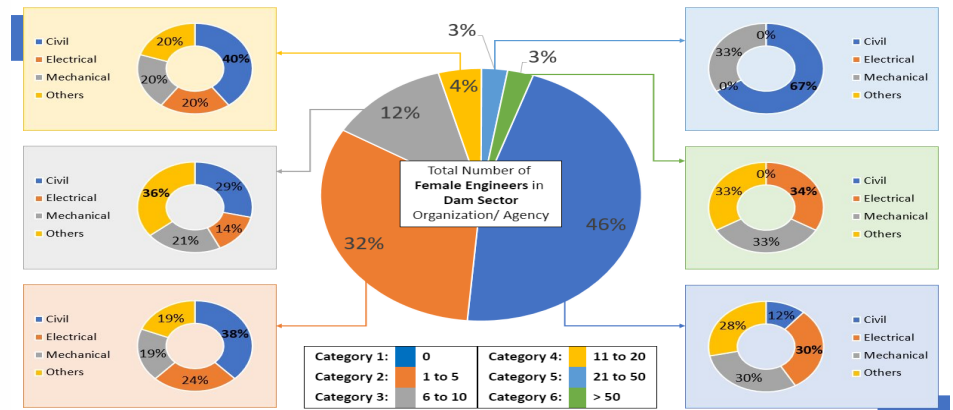
Ir. Dr. Hidayah Basri
Flood Evaluation and Dam Safety

Dato' Ir. Haji Rozman Mohamad
Flood Evaluation and Dam Safety

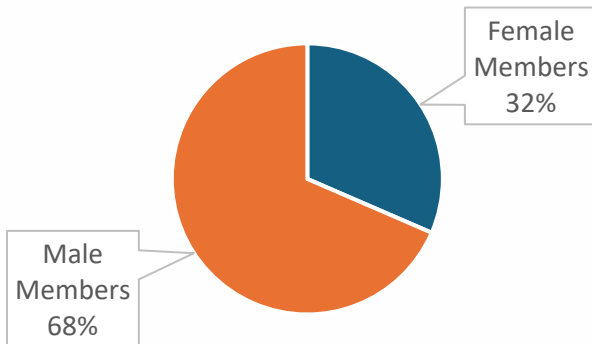
Ir. Ts. Zakiyah Muhammad
Dams and River Basin Management

Larger organizations and agencies have less than 50% female engineers and technicians, while smaller organizations and agencies typically have more than 50% female representation in these roles.

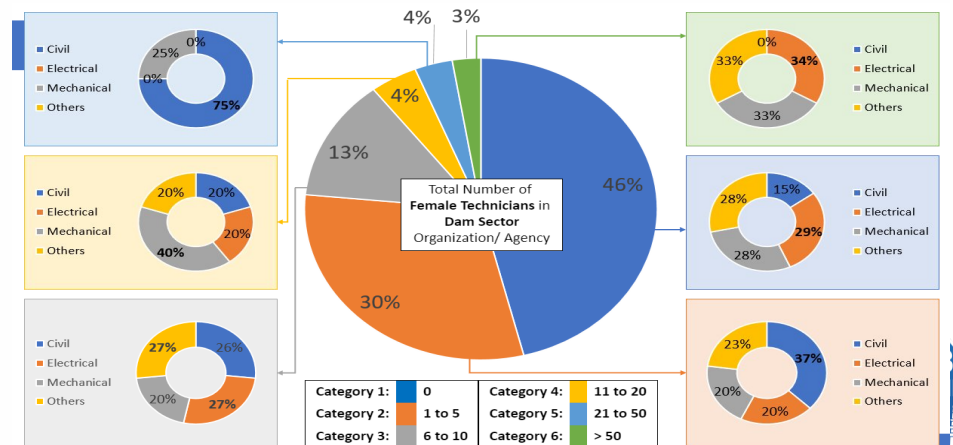
ORGANIZATION	WOMEN	TOTAL	% WOMEN
MYCOLD COMMITTEE MEMBERS	7	19	37%
ICOLD TECHNICAL COMMITTEE	3	10	30%



MYCOLD Members



TOTAL MYCOLD MEMBERS	419
TOTAL MALE MEMBERS	287
TOTAL FEMALE MEMBERS	132 (32%)



Malaysian National Committee On Large Dams (MYCOLD)

MYCOLD's Initiatives to Increase Women Involvement in the Dam Sector in Malaysia

1. Enhanced Representation: (Target 30% women by 2030)

- Increased representation of women in MYCOLD led to a more balanced approach to decision-making.
- MYCOLD has actively pursued grants at both national and international levels to fund programs that support women's involvement in the dam sector, including scholarships and training for women professionals in dam engineering related.

2. Capacity Building & Networking Opportunities: Target 30% women)

- MYCOLD has promoted women's active involvement in conferences, training programs and technical trips, including ICDSME 2019, ICDSME 2023, and ICOLD 2024 for professional growth.
- These platforms have provided women with invaluable networking opportunities with industry leaders and experts, fostering collaborations and mentoring relationships.

3. Pioneering Dam Safety Projects in Malaysia: (Target 30% women)

- MYCOLD has taken the lead in key dam safety projects across the country, with women playing significant roles in planning, execution, and monitoring.
- This has positioned women professionals as leaders in the critical area of dam safety, a field traditionally dominated by men.

4. Leading CSR Initiatives for Dam Safety Awareness: (Target 30% women)

- MYCOLD leads corporate social responsibility (CSR) initiatives aimed at spreading dam safety awareness across communities.
- These initiatives are designed to inspire young girls to pursue STEM careers, by showcasing the critical role of women in engineering and dam safety projects.





4. Uganda

- Joined ICOLD 5 years ago but progress affected by COVID -19
- Officially inaugurated in 2022
- Committee activities are still low and geared towards promotion and awareness of UCOLD to boost membership enrollment and participation
- Current Membership :
 - Ministry of Water and Environment
 - Uganda Electricity Generation Company Limited
 - Academia
 - Bujagali Energy

Gender Distribution

Leading Positions			
		Women	Total
Secretariat group		2	6
Delegates to ICOLD committee		1	2

Membership			
		Women	Total
Members in National committee		10	35
Young Professional Members		7	20

Female Involvement

- UCOLD has not yet targeted gender diversity and inclusion
- However over the last 5 years we have noted 30% female participation in UCOLD activities from members
- UCOLD Young professionals(UYP) organised two webinars in collaboration with Canadian Dam Association (CDA) and also with South African National Committee on Large Dams (SANCOLD) and female participation was around 36%

Gender Involvement and Distribution



UYP Participation Africa Hydropower Conference



UCOLD delegate at CDA conference



UCOLD delegate at ICOLD Sweden



Panel Discussion Mentorship Sweden – ICOLD Sweden



5. Iran



Iranian Committee On Large Dams

Patricia Eskandari Sena

Senior Geotechnical Engineer, Water and Power Engineer, Secretary of Iranian Earth Dam Committee IRCOLD (International ICOLD) Representative of Gender Diversity Survey from Iran (NC)

Speaker: Mr AMIR FARID MOJTAHEDI

Head of Study Dep. In IWPCO. IRAN



The history of Iranian women's management and their role in water, resources and economy

- Women in Iran have played a special role in different ways throughout history. The peak of their power was revealed in the Achaemenid period. They had equal rights with men and made a great contribution to society.
- Today, if we can't use the power of 50 percentage of women alongside men, we cannot plan and make decisions in the management of water & power resources. Rest assured, we will fail. Women have always played a very valuable role in the management of water resources from an economic, social, political and cultural point of view have and will have, they have been the teachers and educators of generations and women and mothers have more than any other chapter. They are responsible for us and they are effective on it that if we do not pay attention to it and pass it simply, its losses and damages It is irreparable. It is necessary to be aware of the importance.
- Even today by following legacy, our past women are specialists and great engineers by our side and big investments in the water & power sector.
- They are attributed to the country that many problems should be overcome by using their knowledge and to better understand the presence of these valuable experts.



Challenges and Problems of Advancing Women Engineers and Experts and Women's Successful Solutions to Deal with these Problems



- Accept that it is Difficult to be a Woman, to maintain femininity and at the same time fight alongside men to take your place in male environments. In an all-male environment, until a woman comes along who tries harder than them, men don't see the need to try for more promotion. So, in fact, in a patriarchal society, competition has become serious as women enter exclusively male environments, and this is definitely not to everyone's taste.
- Professional women should always have a proof of their sufficiency and the process of double trusting others in the workplace, and this has gradually become a habit, and it seems that alongside the main project, the project of proving sufficiency and building trust has always been important. It has become a part of women's work process.
- But it goes without saying that the difficulties of this path do not make women withdraw from the path of their dreams. They know that their presence gives other women the courage and security to enter the profession.
- In the following, I will introduce a list of expert women who are the leaders of organizations and companies, which are only a few women who were selected from a large number of active women in Iranian society.
- Regarding the activities and initiatives carried out in gender diversity, we joined associations and organizations such as women and environment, women and water, as well as women and hydraulics and started our cooperation.



Active Iranian Women in Engineering Knowledge in Dam Construction , Water , Environment and Related Trainings



Patricia Eskandari Sena

Master's Degree in Geotechnical

Senior Geotechnical Engineer, Water and Power Engineer, Secretary of Iran Earth Dam Committee IRCOLD (International ICOLD) Representative of Gender Diversity Survey from Iran (NC)



Shohreh Sadri Khanloo

PH.D in Environment

Senior expert and participation in environmental impact assessment studies for numerous construction projects



Mahboobeh Azghadi Toosi

Master's Degree in Mining

Engineering Geotechnical expert in the office of development of technical systems, operation and dispatching of electricity of Iran Water Resources Management Company



Mona Masoudi Ashtiani

PH.D candidate in Water

Iran's Water and Power Public Relations



Farnoosh Nazari

Master of Project Management

The founder of the Water Museum affiliated with the Golestan Regional Water Company and a Master's Degree in Project Management



Shima Kabiri

PH.D Water Resources Engineer

Head of the National Water Treasure of Qazvin Province.& Head of the water, environment and agriculture think tank of the elite foundation of Qazvin province

THANK YOU FOR YOUR ATTENTION
IF YOU ARE NOW SUCCESSFUL, IT IS BECAUSE SOMEONE,

SOMEDAY A PLACE GAVE YOU HOPE OR AN IDEA THAT SET YOU ON THE RIGHT PATH.

SO REMEMBER THAT YOU OWE IT TO PEOPLE WHO DON'T HAVE A CHANCE TO SUCCEED YET!

AS YOU HAVE HELPED YOURSELF TO SUCCEED! MELINDA GATES



6. Italy



Italian National Committee on Large Dams



Speakers: Guido Mazza, ITCOLD President

Antonella Frigerio, ITCOLD Board Member

ITCOLD organization: main tasks and activities

Bodies of the Italian National Committee: a) Members' Assembly; b) Presidential Council; c) President; d) Vice-Presidents; e) Treasurer; f) Board of Auditors; g) Scientific Committee.

ITCOLD is a non-profit organization with a cultural and scientific character which aim is to carry out, promote and disseminate the study of technical problems concerning design, construction, operation and rehabilitation of dams. Main activities refer to: (i) Set up of Working Groups, Observatories, issue of Bulletins; (ii) organization of Seminars, Technical Training, Open Days on dams in collaboration with universities, Technical visits to dams and plants, Workshops to facilitate dialogue between Dams and Territories, Degree and Photographic prize competitions.

ITCOLD actively participates in the activities of ICOLD Technical Committees, in the EurCOLD initiatives, promotes the participation to the YPF, involving in particular female proactive participation.



Leading positions in ITCOLD and general membership



- Numbers on gender distribution

Leading positions:	Women	Total	% women
a. Board members	3	23	13%
b. Chair, Vice-chair, Secretary general	2	4	50%
c. Steering group (voting members)	3	23	13%
d. National technical committee chairs	3	14	21%
e. Delegates in ICOLD technical committees	3	18	17%
Membership:	Women	Total	% women
g. Members in national organization	11	116	9%
h. Young professional members	18	88	20%



ITCOLD initiatives to increase female participation



ITCOLD does not promote activities specifically aimed at strengthening gender diversity, but has motivated female technicians to take an active part in all initiatives promoted by the NC.

ITCOLD organizes five to ten events every year: in recent times female participation is around 40%.

The Young Professionals (YP) organize 1-2 events per year with female participation around 50%.

In the last five years ITCOLD published 9 Bulletins that concluded the activities of the ITCOLD specific working groups (Bulletins can be downloaded from ITCOLD website: www.itcold.it). The participation of female technicians is strongly promoted and duly recognized.





7. Slovenia



Slovenian National Committee on Large Dams (SLOCOLD), Slovenia



Nataša Smolar-Zvanut, Ph.D., Slovenian Water Agency

Mateja Klun, Ph.D, University of Ljubljana, Faculty of Civil and Geodetic Engineering

- Professional organization, dedicated to science of dam engineering, since 1993
- Members are experts in different professions
- General meeting and excursions – yearly, organization of thematic conferences
- The journal »Velike Pregrade« (Large Dams) is created by the members of the SLOCOLD with articles on current issues/problems of dam engineering in Slovenia
- The members of SLOCOLD are regularly present in the international arena with original articles, which are published at the ICOLD international symposiums and congresses



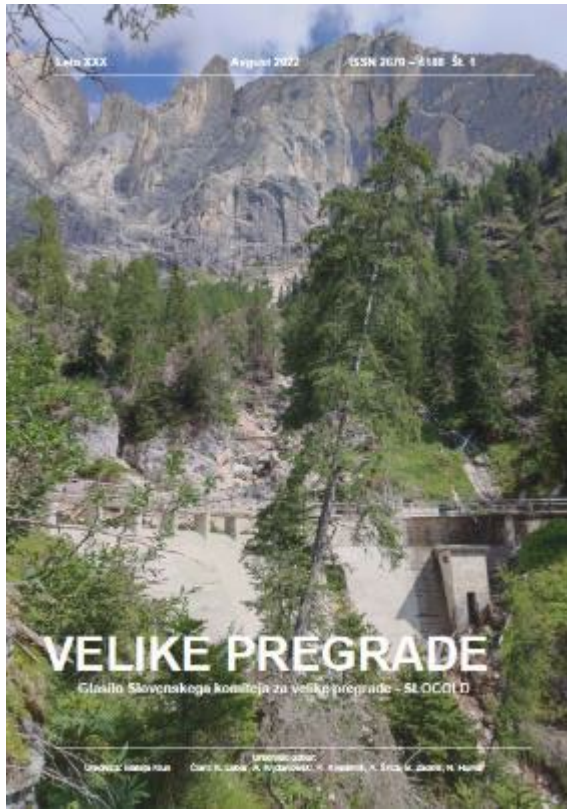


Slovenian National Committee on Large Dams (SLOCOLD), Slovenia



- SLOCOLD: 50-60 members (30 % women)
- President of SLOCOLD
- Board Members of SLOCOLD (44 % women)
- ICOLD: Chair of Young Professional Forum
- Delegates in ICOLD Technical Committees (71 % women)
- Ad hoc Committee on gender diversity and inclusion
- Organization of national and international events
2019-2024: 3 national and 3 international events
2019 – 2024: 3 Technical Publications







8. France

French Committee “CFBR” - France

Anne Clutier, Engineer, Electricity of France (EDF) and General Secretary of CFBR



Main tasks and activities :

- Mission :
 - Promoting progress in the design, construction, maintenance and operation of dams, power plant and levees
- Activities :
 - Managing Working Groups that prepare recommendations
 - Taking part to Technical Committees of ICOLD
 - Organizing conferences and symposiums to exchange information among its members

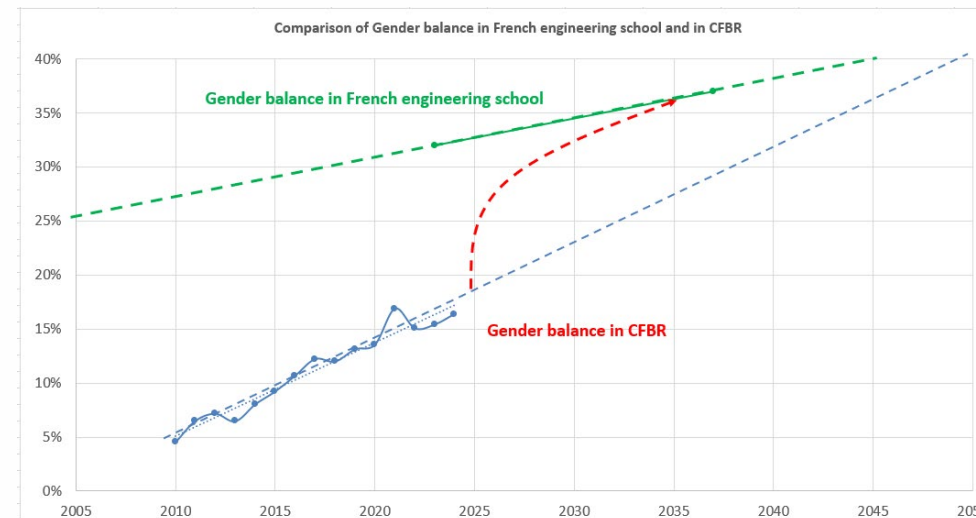
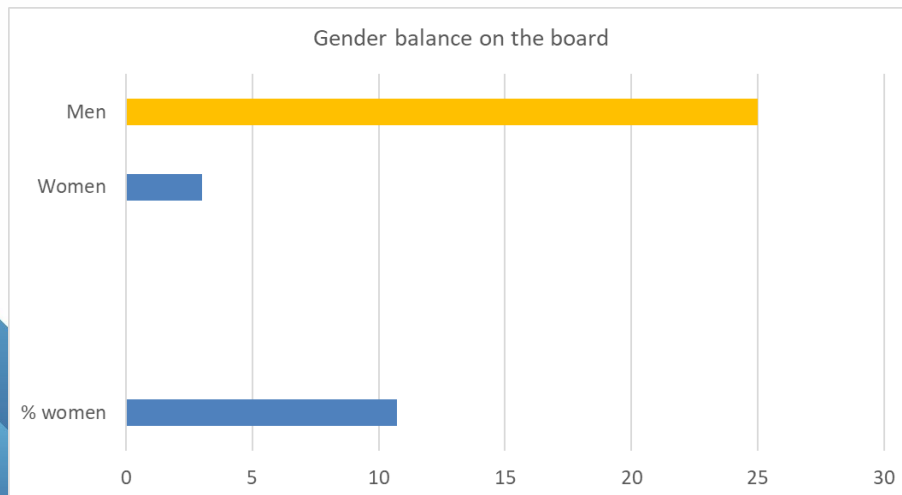
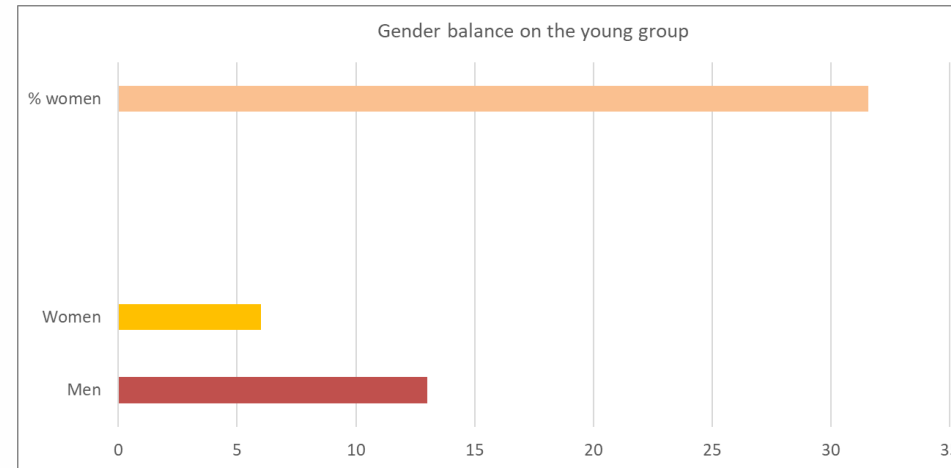
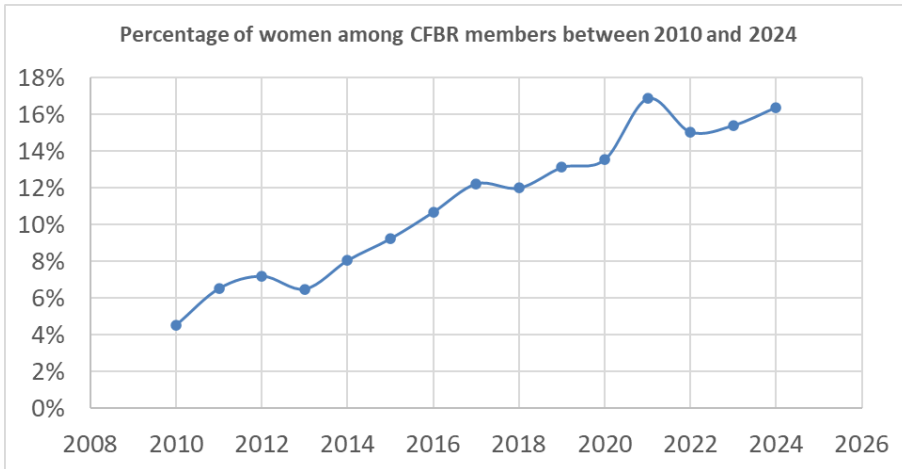


French Committee "CFBR" - France

Anne Clutier, Engineer, Electricity of France (EDF) and General Secretary of CFBR



• Gender distribution



French Committee “CFBR” - France

Anne Clutier, Engineer, Electricity of France (EDF) and General Secretary of CFBR



- Initiatives to strengthen Gender diversity

- To improve the access to information for young people
 - Communication campaigns
- To help young engineers to become CFBR member
- To better inform young engineers of CFBR activities to improve their participation
- To encourage companies to propose women for working groups
- Raising the profiles of women at conferences
- Increasing the number of women on board
- To propose women’s testimonies in high schools





9. United Kingdom

British Dam Society, United Kingdom

Rachel Davies, Delivery Director & BDS Chair, Binnies
Amy Carter, Senior Engineer & BDS EDI Champion, Arcadis



Introduction to the UK NC

- **The British Dam Society (BDS):**
 - Associated Society of the Institution of Civil Engineers (ICE).
 - Main committee of 21 elected and nominated members.
 - 778 individual members, of which 227 (30%) are YPs (under 35).
- **Key activities:**
 - Quarterly journal 'Dams and Reservoirs' and BDS yearbook.
 - Regular events, including a 3-day biennial conference and inaugural 2024 Young Professional Forum.
 - Awards and competitions.



The British Dam Society



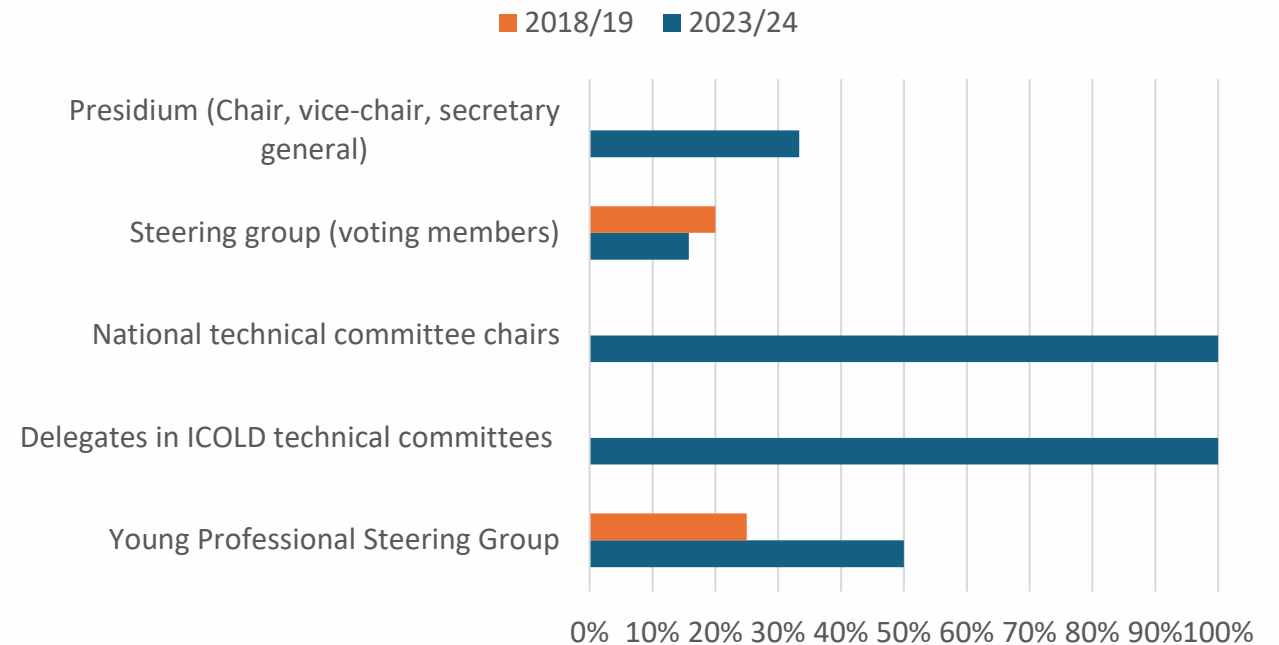


Gender distribution in the BDS

Recent BDS events	% women	
	Speakers	Attendees
BDS 22nd Biennial Conference	27%	20%
BDS 16th Supervising Engineers' Forum	31%	15%
BDS 21st Biennial Conference	25%	16%

Recent publications	% women	
	Editorial board	Authors
British Dam Society Yearbook	0%	60%
Dams & Reservoirs Journal #4	30%	20%
Dams & Reservoirs Journal #3	30%	0%

Change in gender diversity in the BDS



The British Dam Society



Building diversity & inclusion in the BDS

- Actions to date:
 - Equity, Diversity & Inclusion (EDI) committee role.
 - Initial assessment against UK Science Council *Diversity & Inclusion Progression Framework* (DIPF).
 - Gathering of membership feedback.
 - Set up of EDI working group.
- Next steps:
 - Monitoring of progress against DIPF.
 - Regular meetings and action planning with working group.
 - Further engagement with ad-hoc GDI committee.
 - Input into BDS 2025-2028 strategy.



The British Dam Society





10. Finland

Finnish Committee on Large Dams

Eija Isomäki, FINCOLD Secretary



SUURPADOT - SUOMEN OSASTO ry
FINNISH COMMITTEE ON LARGE DAMS

FINCOLD



FINCOLD is a co-operation forum for dam owners, authorities, designers, constructors as well as people functioning in research, development and teaching.

- FINCOLD parties: Board, Company members (B), Privat members (A)
- Gender distribution:

	Women	Total	% of women
Leading positions			
Board members	2	6	33
Chair, Vice-chair, Secretary	2	3	66
Delegates in ICOLD technical committees	2	4	50
Membership			
Members in national organization	17	152	11





11. Sweden



SwedCOLD – Swedish commission on large dams

Finn Midböe, secretary of SwedCOLD since 2021



SwedCOLD is working consciously with GDI since several years

- Actively seek improved gender balance for public events
- Zero tolerance for sexism and discriminatory behavior
- Set example with balance in ex.committee, at ICOLD 2023 in Gothenburg – gender balance was sought for opening, session officers etc. and the work was lead by a 50-50 OC
- Following statistics on gender balance



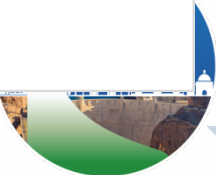
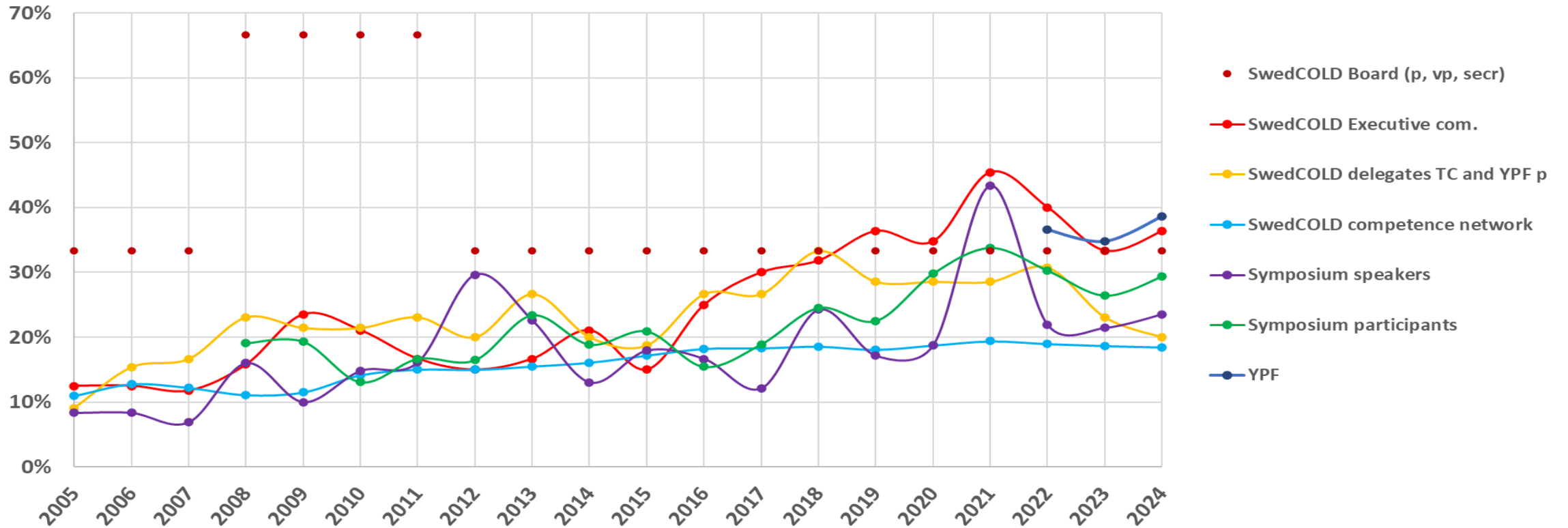


SwedCOLD – Swedish commission on large dams



How are we doing? Some statistics...

SwedCOLD - Percentage of women in management and activities





SwedCOLD – Swedish commission on large dams



Some progress long term – ~10 % to ~25 % in 20 years – but:

- Progress is slow
- Tendency of plateauing might be visible, how do we avoid this?

SwedCOLD needs more tools and ways of working...

- Looking forward to hear ideas and best practices





12. Brazil

Brazilian Committee on Dams, Brazil

- The fourth edition of Damsweek - **Damsweek 2024**, organized by the Brazilian Committee on Dams (CBDB) and the largest dam engineering event in Brazil, took place from 18-23 August, in Belo Horizonte (MG).
- To stimulate gender diversity, Damsweek 2024 included the panel **"Women and Dams"**. In this panel, Adriana Verchai, Brazilian representative at ICOLD Gender and Diversity and Inclusion Committee, presented the results of the survey carried out by this Committee in more than 38 countries. She also coordinated the debates about the theme; Civil engineer Adriana Verchai de Lima was cited as a prominent engineer in the sector during the opening of the Young Engineers Forum (YEF) with others,
- During Damsweek, there were meetings of the 20 National Technical Committees, 4 of which have women as coordinators. Technical Committee 18 - Project, Operation, Maintenance of Sanitation Works, where guidelines for the projects, works and maintenance of sanitation structures are discussed, is conducted by Adriana Verchai;
- The Extraordinary Meeting of CBDB's Deliberative Council took place on Tuesday (20), and had the participation of 5 women: Adriana Verchai de Lima (member of the Fiscal Commission), Regina Moretti, Josiele Patias and Patricia Neves (members of the Deliberative Council) and Teresa Cristina Fusaro (CBDB's vice-president);
- On Thursday (22) civil engineer Adriana Verchai de Lima met with the CT12 Technical Commission (CT12) Multiple Use Reservoirs. She holds the position of deputy coordinator of the group, together with coordinator Miguel Zydan Soria, or who also holds the position of CBDB's President;

About the event - Damsweek is organized annually by the Brazilian Committee on Dams (CBDB), to promote discussion on topics related to dam safety, such as new technologies for safer tailings dams, dam instrumentation, flood control and coping with droughts. During the event, technological advances and additional technical information are presented through forums, seminars and workshops.



Brazilian Committee on Dams, Brazil

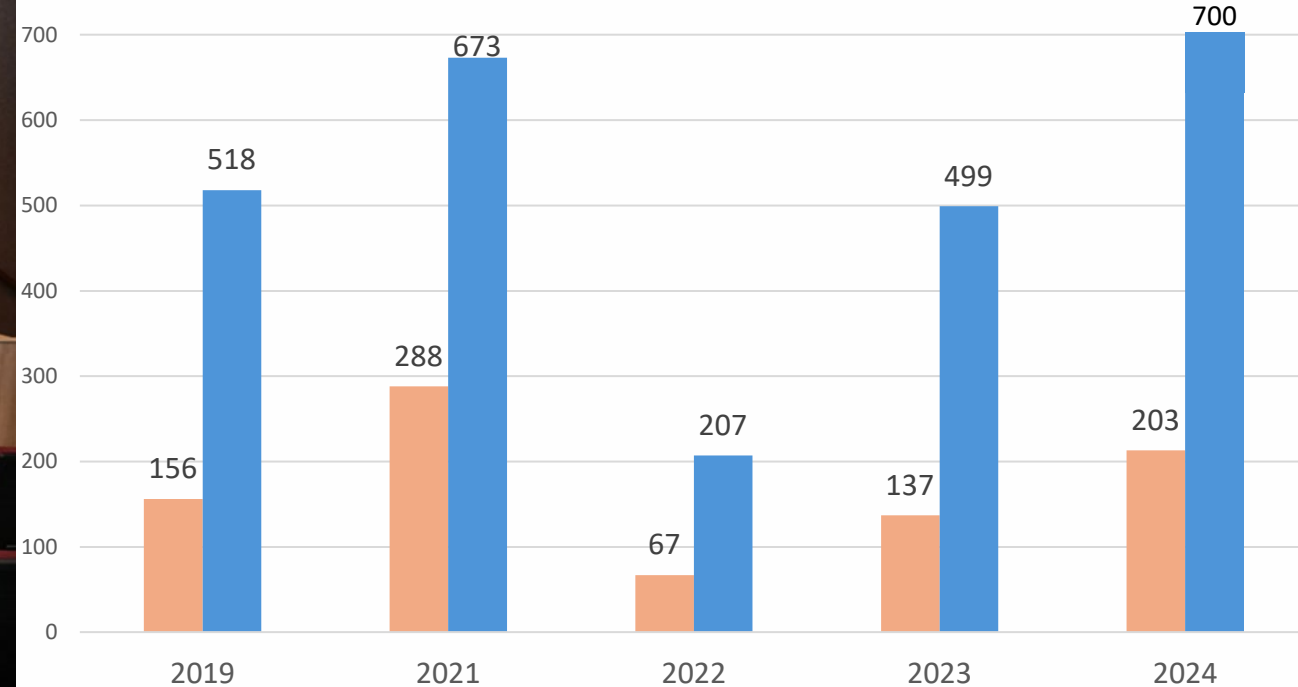


Damsweek 2024 - 903 participants

Young Engineers Forum YEF – 193 participants



Female Participants in CBDB's Congresses



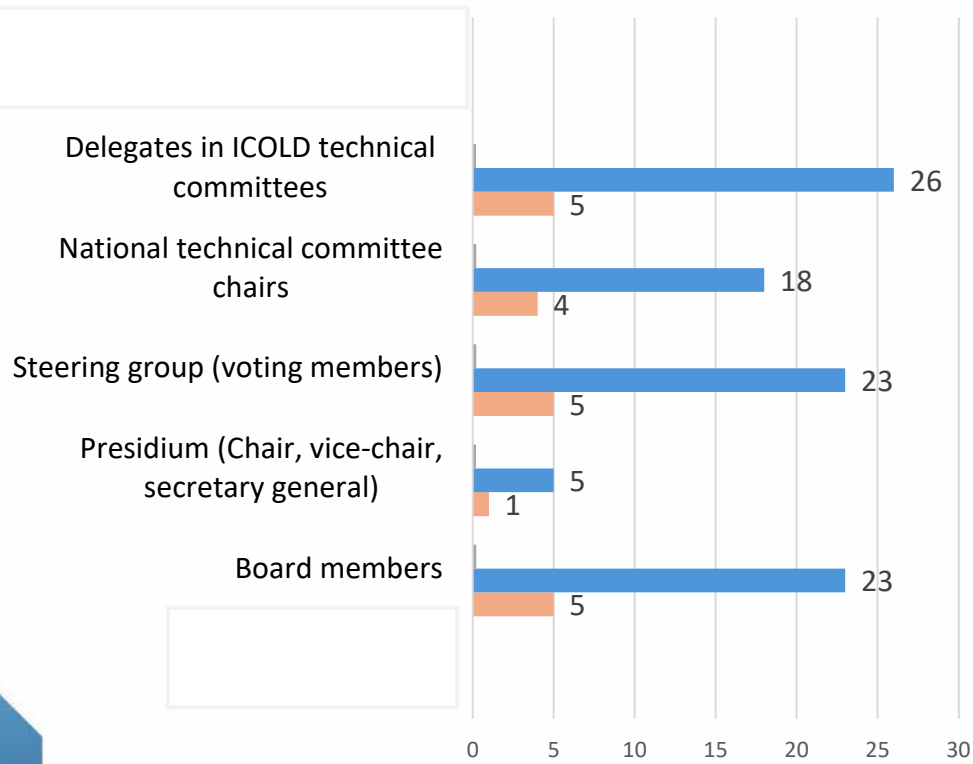
Women participation at Damsweek 2024- 22%



Brazilian Committee on Dams, Brazil

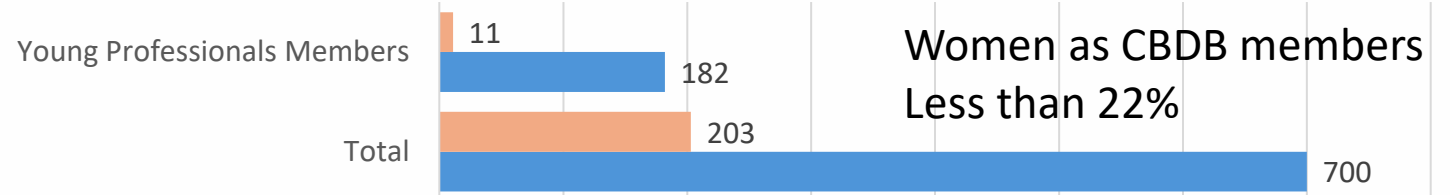


Women in Leading Positions at CBDB



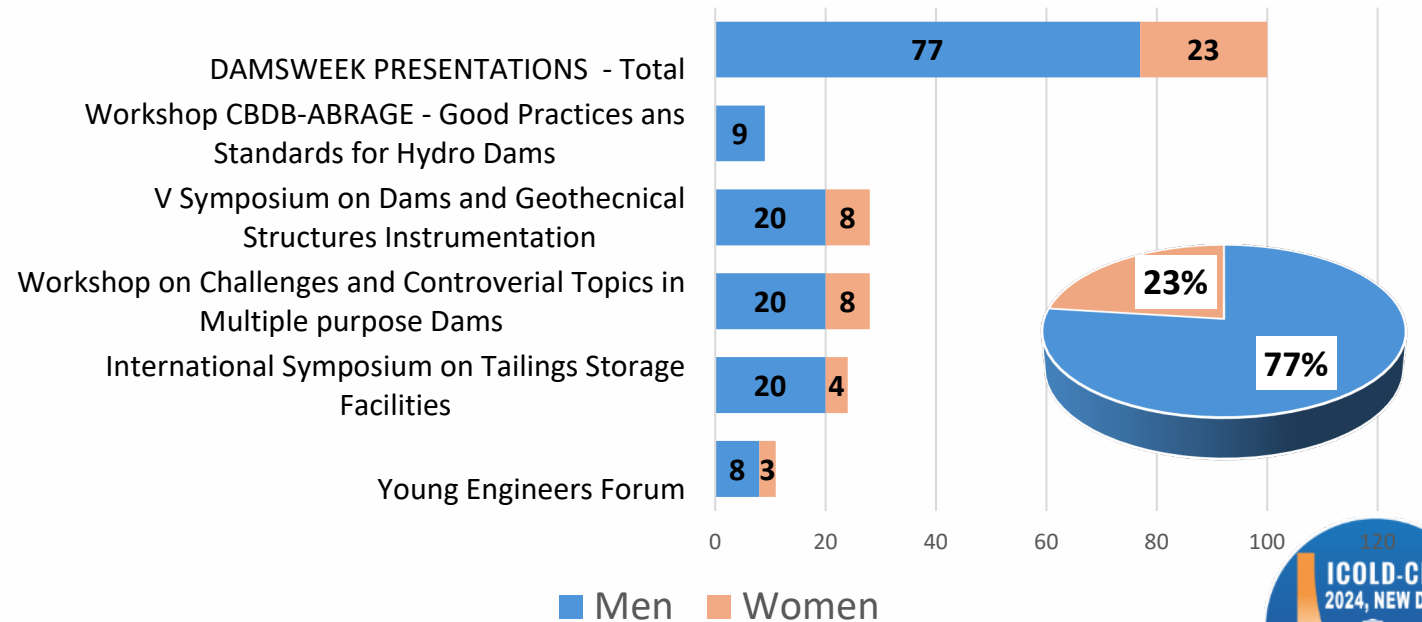
Women in leading positions
Less than 20%

Brazilian Committee on Dams Members



Women as CBDB members
Less than 22%

Speakers at Damsweek 2024



13. USA





Presented by:

Catrice Jones – Executive Director, USSD

Merry Dang - Director of Business Development

Lucky Nagarajan – Director of Business Development



Q3 - Leading positions in your NC and general membership. Please provide numbers on gender distribution.						
Today and some 5 years back	Current numbers 2023/2024			Previous numbers 2018/2019		
Leading positions:	Women	Total	% women	Women	Total	% women
a. Board members	4	13	31%	5	13	38%
b. Presidium (Chair, vice-chair, secretary general)	19	55	35%			
c. Steering group (voting members)						
d. National technical committee chairs	2	7	29%			
e. Delegates in ICOLD technical committees	10	55	18%			
f. Possibility to add another organization unit and its leading positions: xxx						
Overall comments:						
Membership:	Women	Total	% women	Women	Total	% women
g. Members in national organization	259	1558	17%			
h. Young professional members	68	203	33%			
i. Possibility to add another type of organizational unit and its members: yyy						



Gender Inclusion within

USSD
U.S. National Committee of ICOLD



- USSD has an all-women staff of five, including the Executive Director, Catrice Jones
- Female Board Members:
 - President - Dina Hunt, Gannett Flemming
 - Secretary - Georgette Hlepas, US Army Corps of Engineers
 - Members - Elena Sossenkina, HDR and Jennifer Williams, AECOM
- Four Female Committee Chairs
 - Public Safety, Security, and Emergency Management
 - Earthquakes
 - Diversity, Equity and Inclusion
 - Young Professionals



What

USSD

U.S. National Committee of ICOLD



is working on



- USSD is focused on gender inclusion as part of Diversity, Equity and Inclusion (DEI) initiatives
- The board has identified that DEI needs to be discussed in the overall strategy of USSD
- The board is developing a statement on USSD's commitment to DEI, which will be shared with members and with ICOLD
- DEI Sessions and Events at Annual Conferences
- It is not quick and easy
- A primary goal is creating a safe space for uncomfortable discussions





14. Canada

Canadian Dam Association

Eric Peloquin, CDA Acting President, Hydro-Québec



Equity, Diversity and Inclusion

- Recently established Board Task group to:
 - Develop EDI vision statement for CDA to be embraced by all members
 - Establish baseline understanding of the CDA membership demographics (Review of best practice to collect and manage members demographic data and come with a recommendation to the Board)
 - Research and recommend future EDI activities (i.e. Creation of a permanent Committee as first step)





Activities to date

Panel sessions during annual conferences on:

- Women in the Dam Industry: Calgary 2019, Winnipeg 2021
- Equity, diversity and inclusion: Winnipeg 2023

Ad-hoc outreach throughout the membership to promote women in the Dam Industry





Moderated workshop session
- Next steps for ICOLD

Potential themes to discuss

- How have your **NC-initiatives** been received by your members?
- Any good experiences from **mentorship programs** to share?
- Experiences from **GD&I groups** in your NC or country?
 - Would ICOLD benefit from a permanent GD&I committee?
 - What would you like the committee to do?
- Experiences from **capacity building** initiatives in general?
- **Reasons** women are still not enough represented in our various countries/environments
- **Tools** to empower women in leadership
- **Takeaways & recommendations** to bring home





Wrap-up and closure

Potential next steps for ICOLD

- Ideas



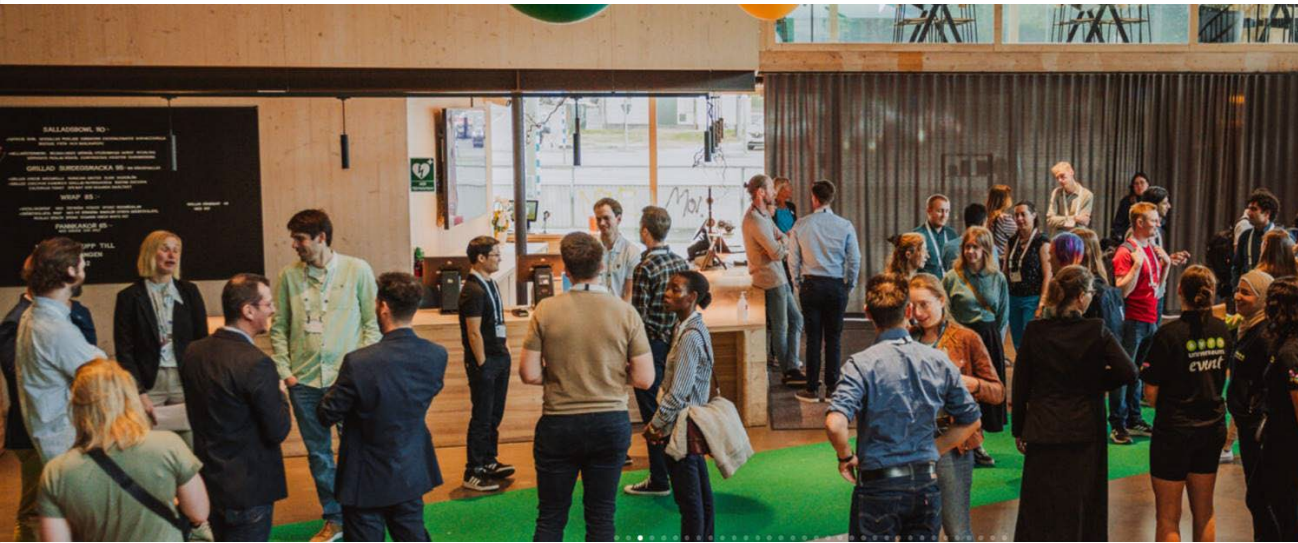
- **Permanent GDI-committee from 2025**
 - Support integration of “commitment statement” and actions in ICOLDs org. and routines, monitor progress
 - Facilitate collaborations with selected organizations/exiting initiatives
 - Events/webinars/articles through ICOLDs channels
- **GDI page on ICOLD web**
 - Share information, link to and promote existing initiatives and toolkits
- **Special events on annual meetings**
 - Would you like to participate on such an event on ICOLD2025? What type?



Do you have suggestions on goals and action items for ICOLD?



Would you like to be involved in future activities?



Please let us know!

Contact: maria.bartsch@svk.se
or any committee member

Thank you for your participation!

