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## **Trust Female Competence! An example for empowerment of women in refrigeration by the ROCA project**

**OEWG45 side event, Bangkok Thailand**

**Monday, 3<sup>rd</sup> July 2023, 1 pm (ICT Bangkok time) Room CR-4**



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# *Femmes frigoristes – les médecins des climatiseurs* (Women in Refrigeration – the air conditioner doctors)

[Video](#)



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<b>Welcome Remarks</b>	Dr. Claudia Hiepe, Federal Ministry for Economic Cooperation and Development (BMZ) of the Republic of Germany
<b>The ROCA project and its efforts for female empowerment</b>	Dr. Cornelius Rhein, European Commission
<b>Challenges for Senegalese women in refrigeration – and how to tackle them</b>	Sokhna Fall, president of Senegal's association of women cooling technicians (RENAFF)
<b>Questions &amp; Answers</b>	Everybody
<b>Conclusion and Closing Remarks</b>	Nils Hansen, GIZ Proklima / ROCA



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# Welcome Remarks

**Dr. Claudia Hiepe**

**Federal Ministry for Economic Cooperation and Development  
(BMZ) of the Republic of Germany**



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# The ROCA project and its efforts for female empowerment

Cornelius Rhein, European Commission



**ROCA:**

## **Ozone- and Climate-Friendly Cooling in West and Central Africa**

*Refroidissement Respectueux de l'Ozone et du Climat en Afrique de l'Ouest et Centrale*

# Objectives of ROCA

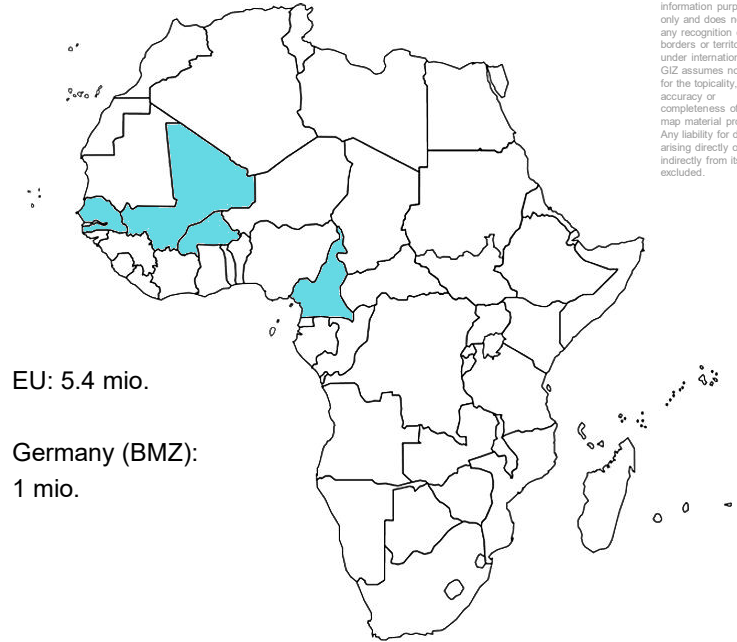
**Overall objective:** Reduction of the climate impact of the Refrigeration and Air conditioning (RAC) sector in partner countries



**Specific objective no. 1:** Adoption of policy instruments that favour Green Cooling technologies



**Specific objective no. 2:** Increased use of climate-friendly cooling technologies with improved energy performance and natural refrigerants



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**Project countries:**  
**Senegal, Mali, Burkina Faso, Cameroon**

# Working areas

1. Policy Advice	2. Capacity Building	3. Technology Transfer
<ul style="list-style-type: none"><li>• Supporting decision-making for sustainable sector strategies</li><li>• e.g. energy efficiency strategies/minimum energy performance standards (MEPS)</li></ul>	<ul style="list-style-type: none"><li>• Training of technicians in the use of Green Cooling technologies</li><li>• Awareness raising of decision makers and population</li></ul>	<ul style="list-style-type: none"><li>• Pilot projects that show the benefits of Green Cooling</li><li>• e.g. agricultural cold rooms, vaccine cooling, R290 ACs for public buildings</li></ul>



# Women empowerment

- Capacity building: female technicians are invited to all ROCA trainings
- Awareness raising: communication material shows women at work



# Special activity in Senegal

- Training for Senegalese association of women cooling technicians (RENAFF)
- Training Elements
  - use of natural refrigerants
  - Entrepreneurship
  - Financing options for business creation
- In cooperation with the national agency for vocational training of youth (ANAMO) (*Agence Nationale de la Maison de l'Outil*)





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# Challenges for Senegalese women in refrigeration – and how to tackle them

Sokhna Fall, president of Senegal's association of women cooling technicians (RENAFF)



# Challenges for Senegalese women in refrigeration – and how to tackle them

**Presented by Mrs. Sokhna Fall Diawara,**

President of the National Network of Female Refrigeration  
Technicians in Senegal (RENAFF)

3rd July 2023, in Bangkok.

# INTRODUCTION

Despite the importance of refrigeration in our society, women are unfortunately underrepresented in this sector in Senegal. They account for only about 4% of the total number of refrigeration technicians. Limited access to education, training, and information, gender discrimination, and cultural, social, and economic constraints are all barriers they face. However, by implementing awareness, education, and support initiatives for female entrepreneurship, we can create a more equitable and prosperous future for Senegalese women in the refrigeration field.

In this presentation, I will talk about three women who serve as successful role models in the refrigeration industry in Senegal.



**Mrs Sokhna fall Diawara, 47 years old,**

- Higher Technician Diploma in Refrigeration and Air Conditioning, 23 years in the field
- Areas of expertise: Industrial refrigeration, automotive air conditioning, commercial refrigeration, domestic cooling installations
- Self-employed entrepreneur, trainer in refrigeration, consultant in the Senegal Ozone Program
- President of RENAFF (National Network of Female Refrigeration Technicians in Senegal)



**Mrs. Astou Coulibaly, 38 years old,**

- Higher Technician Diploma in Refrigeration and Air Conditioning,
- Professor in refrigeration and air conditioning
- Workplace: CFPT Senegal/Japan (vocational training center)
- 12 years in teaching and industry





**Mrs. Ndeye Marème Niang Sidibé, 24 years old,**

- Higher Technician Diploma in Refrigeration and Air Conditioning,
- One year of experience.
- Cold maintenance supervisor
- Workplace: Dakar Arena (cultural and sports complex)
- Responsibilities: Maintenance of air handling units, chillers, individual air conditioners

# Difficulties and barriers

## 1. Lack of access to education and training

- Limited access to formal education for girls compared to boys.
- Barriers for girls in choosing technical study fields due to societal perceptions.
- Statistics show that scientific and technical fields are predominantly male-dominated.
- Social expectations confine women to traditional feminine roles, hindering their pursuit of technical training.

## 2. Lack of information

- Initial hesitation, but developed interest after starting classes.
- Directed towards the field by circumstances or advice from others.
- Embracing the profession through practical training.
- Transformation of initial disinterest into passion.

# Difficulties and barriers

## **3. Gender discrimination**

- Difficulties being taken seriously and facing harassment
- Cultural and social barriers that limit women's professional opportunities
- Economic constraints

## **4. Difficulties in accessing financing and resources**

- Discrimination in lending based on gender
- Difficulties in accessing government-funded financial support specifically designed for women.

# The solutions to overcome the challenges

## **1. Access to education and training:**

- Awareness raising to challenge gender stereotypes.
- Mentorship programs for guidance and support.
- Scholarships targeting girls in refrigeration studies.

## **2. Information dissemination:**

- Awareness campaigns to inform women about career opportunities.
- Showcasing successful female role models as inspiration.
- Online platforms for access to information and resources.
- Empowering women to pursue refrigeration careers.

# The solutions to overcome the challenges

## **3. Combatting discrimination and gender bias:**

- Strengthening laws and policies against gender discrimination.
- Raising awareness and providing training on equality and harassment prevention.
- Fostering inclusive and respectful work environments.

## **4. Overcoming cultural and social barriers:**

- Community awareness on gender equality and career choices.
- Encouraging family support for girls' professional aspirations.
- Economic empowerment programs for women entrepreneurs.
- Access to financing and resources for refrigeration businesses.

# The solutions to overcome the challenges

**The RENAFF** (National Network of Women Refrigeration Technicians of Senegal) was established in February 2018 with the following objectives:

- Platform for sharing experiences and knowledge.
- Communication and information on new technologies.
- Support for girls' integration and success.
- Encouragement of entrepreneurship and project development.
- Environmental awareness and updates in the field.

# The solutions to overcome the challenges

## **Some activities of RENAFF include:**

- Two training sessions on automotive air conditioning were provided to women at the reference center by the National Ozone Office, under the supervision of the Ministry of Environment.
- Training conducted by GIZ as part of the ROCA project, for RENAFF women, focusing on natural refrigerants and entrepreneurship.
- Participation in the annual World Ozone Day.
- Organization of the International Day of Refrigeration.
- Regular organization of discussion forums via the WhatsApp group.
- Ongoing representation of RENAFF in capacity-building training programs under the ROCA project and technician training programs of the Senegal Ozone Program.

# The solutions to overcome the challenges

## Some activities of RENAFF include:



During the celebration  
of World Ozone Day,  
2022



During the capacity-  
building training for  
technicians in the  
Louga region,  
organized by the  
National Ozone Office,  
2022



Capacity-building  
training for women of  
RENAFF, organized by  
GIZ through the ROCA  
project, 2023



# Conclusion

Female technicians in the refrigeration field in Senegal face the following challenges:

- Lack of access to education and training.
- Gender discrimination and bias.
- Cultural and social barriers.
- Difficulties in accessing financing and resources.

To address these challenges, initiatives like RENAFF have been established, focusing on:

- Awareness campaigns to promote gender equality and opportunities.
- Training programs to enhance skills and knowledge.
- Economic empowerment initiatives to support entrepreneurship.
- Creating a supportive platform for knowledge sharing.

By promoting equal opportunities and supporting female technicians, we can build a more inclusive and sustainable refrigeration sector where their contributions are valued and recognized.

A stylized winter scene. On the left, a dark blue silhouette of a pine tree is partially visible. In the center, a light blue snowflake is positioned above a light blue mountain range. The background is white with faint, light blue outlines of a mountain range and a snowflake.

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# Questions & Answers



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# Conclusion and Closing Remarks

Nils Hansen, GIZ Proklima / ROCA



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# Thank you for your attention!

## Merci pour votre attention !

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