



**Towards a greener future**

# **SUNREF Mauritius, the lending programme that promotes green and inclusive growth**

10<sup>th</sup> September 2020

Business Mauritius,

Ebène

Developed by



**Partner with  
France**  
\*Portenaire de la France

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# Programme

**09h45 :** Welcome

**10h00 :** Welcome Address

**10h05 :** SUNREF Mauritius - Video

**10h10 :** What is SUNREF Mauritius ?

**10h20 :** Small and Large scale investments

- List of Eligible Materials and Equipment

- Climate Change Mitigation

- Eligibility criteria

**10h30 :** Air conditioning and Cooling

- Solutions available to the market

**10h45 :** Legal framework and applicable laws – Ministry of Environment

**11h00 :** Open floor for questions and presentation by participants

**12h00 :** End of workshop



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## 10h00

## Welcome Address

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**Towards a greener future**

## Welcome Address

**Mickaël Apaya**

Head of SUNREF Technical Assistance

Head of Sustainability & Inclusive Growth, Business Mauritius

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Building our Future

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SUNREF Mauritius - Video

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10h10

## What is SUNREF Mauritius ?

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# What is SUNREF Mauritius ?

Vimal Motee

Project Manager, Business Mauritius

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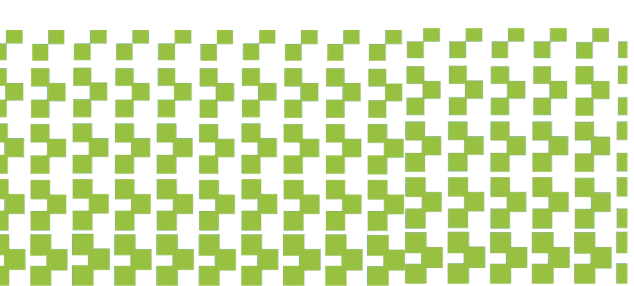


# SUNREF Mauritius

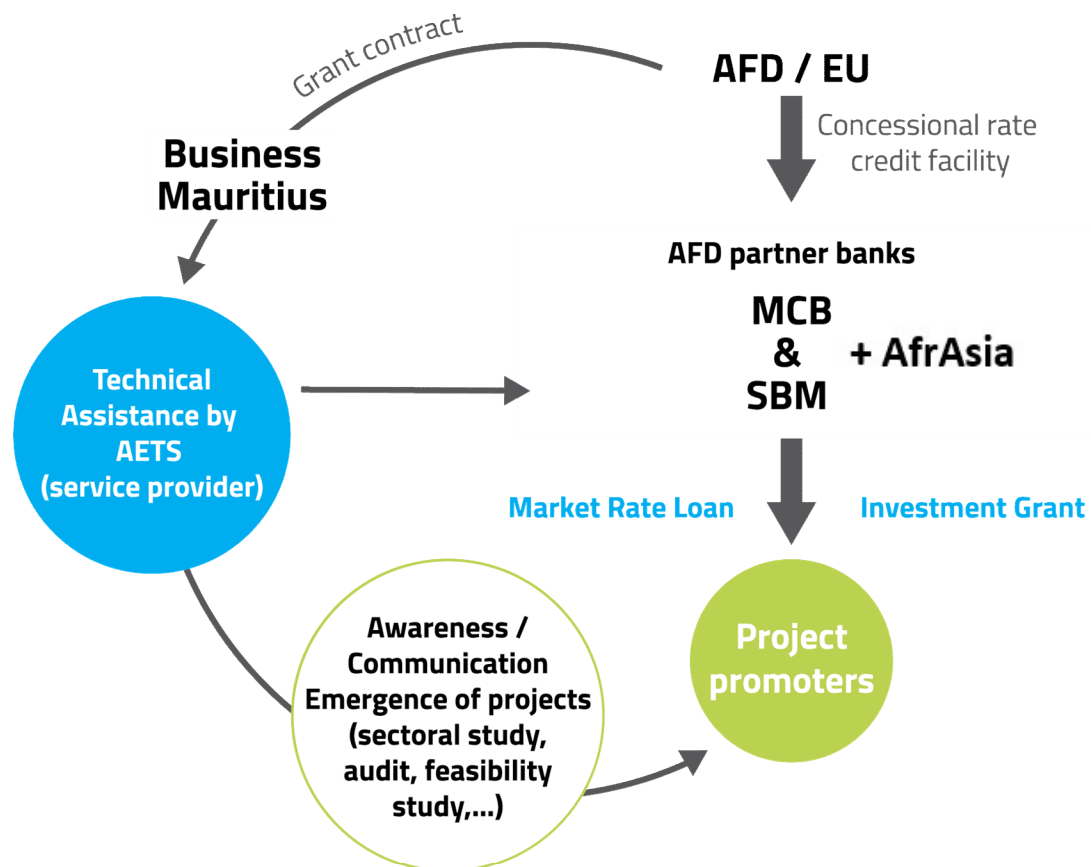
- ❑ EUR 85 million provided by AFD through partner banks to finance green projects
- ❑ Investment Grants between 5% and 16% of the eligible loan amount
- ❑ Free technical assistance

Business Mauritius has upskilled its capability to foster the development/emergence of green projects within the private sector.

The Technical Assistance expertise is financed by the European Union.



# Stakeholders



# THEMATIC COVERED

Mitigation



Adaptation



Gender



# Climate Change Mitigation



## Eligible Investments

- ☐ Investments in **renewable energies**.
- ☐ Investments in **energy efficiency projects**.
- ☐ Investments in **electric mobility**.
- ☐ Financing of **eco-businesses**.
- ☐ Investments in **green buildings** with technologies/solutions to reduce energy consumption.



# Climate Change Adaptation



## Eligible Investment - Sectors

- ❑ **Agriculture:** Water resource management (irrigation, recycling, rainwater harvesting), land use, Smart Agriculture (sheltered farming, resilient varieties, use of technology).
- ❑ **Tourism & Hospitality:** Water supply management (desalination plant, irrigation, recycling, rainwater harvesting), Coastal zone protection, Thermal insulation and cooling
- ❑ **Manufacturing:** Water supply management (desalination plant, irrigation, recycling, rainwater harvesting), effluent treatment.
- ❑ **Building and construction:** Green buildings with resilient solutions (case by case treatment on water management, resilience against strong winds, risk of flooding, extreme temperatures, etc.). Certified green buildings are eligible under Mitigation and/or Adaptation (case by case treatment to identify the nature of the certification and the solutions implemented).



# Gender



## Eligible Investments

On a **case by case basis** and upon validation by the assigned expert in the technical team prior to project launch.

Examples of eligible equipment/solutions:

- ☐ On site day care centres/nurseries or shared nurseries between several companies
- ☐ Means of transport, adapted in such a way to allow traveling with babies
- ☐ Breastfeeding room
- ☐ Resting room for pregnant women
- ☐ Machines adapted to the female physique, in the sectors such as agriculture, construction, hotel.



# Who can benefit ?

Any **existing** or **new client** of the MCB, SBM and AfrAsia, applying for a loan to finance a **green project** in Mauritius.



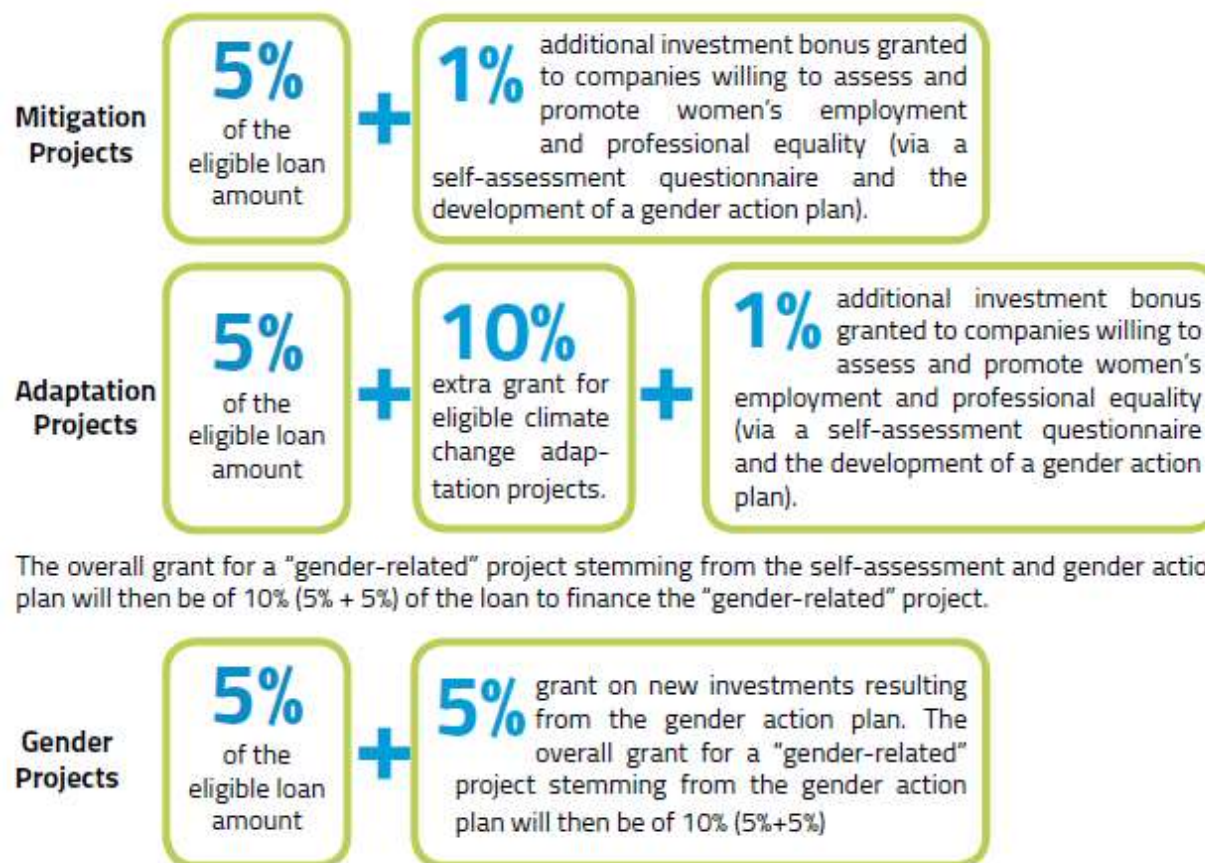
Any **company\*** or **individual** who will benefit directly from the implementation of a project promoting climate change mitigation or adaptation or gender equality.



\* company that complies with AFD's exclusion list



## Investment grants (applicable for small & large scale investment projects)





# Financial indicators

- ❑ **Maximum SUNREF eligible loan amount per project:** EUR 5 million (approx. MUR 200 million), even though the project cost and the overall loan amounts subscribed with the partner bank might be greater than EUR 5 million.
- ❑ **Loan Currency:** EUR/MUR or any other currency.
- ❑ **Loan tenor:** minimum 4 years.
- ❑ **Maximum grace period under the granted loan:** 3 years.
- ❑ **Interest rate cap** (ceiling): none (at the discretion of the partner bank)



## An innovative approach: building a SUNREF project in 9 easy steps

**1**  
Initiating contact through one of the available channels (partner banks or technical assistance) to have preliminary discussions on the proposed project, evaluate its feasibility and determine its potential technical and financial outcomes.



**2**  
Formal loan application request by the project bearer to the partner bank (MCB or SBM).  
+ AfrAsia



**3**  
Decision by the partner bank to finance the investment and to request SUNREF financing as well as expertise from the technical assistance.



**4**  
Issuance by the technical assistance of the SUNREF Technical Eligibility Opinion with a project appraisal report and submission to AFD and to the partner bank, for large scale investments only.



**5**  
Non-objection opinion from AFD to finance the project under SUNREF.



**6**  
Signature of the loan agreement between the project bearer and the partner bank.



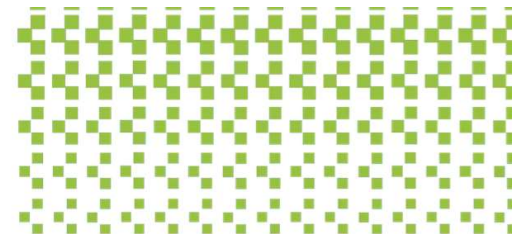
**7**  
Validation, disbursement and implementation of the project following terms and conditions listed in the loan agreement.



**8**  
Payment of the applicable investment grants upon completion of the project.



**9**  
In operational phase, monitoring and impact assessment of the project with recourse to a verification consultant mandated by AFD, at no cost for the project bearer.



# CONTACTS



AGENCE FRANÇAISE DE DÉVELOPPEMENT

✉ AFDPORTLOUIS@afd.fr

☎ (230) 213 64 00

TECHNICAL ASSISTANCE



✉ sunref@businessmauritius.org

☎ (230) 466 36 00

## SUNREF PARTNER BANKS



The Mauritius Commercial Bank Ltd

✉ contact@mcb.mu

☎ (230) 202 5000



SBM Bank (Mauritius) Ltd

✉ sbm@sbmgroup.mu

☎ (230) 207 0111



AfrAsia Bank Limited

✉ afrasia@afrasiabank.com

☎ (230) 403 5500

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# Climate Change Mitigation – Eligibility criteria

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# Climate Change Mitigation - Eligibility criteria

Avinash Ramessur

Coordinateur Local, Assistance Technique

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# Climate Change Mitigation



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## Investment grants (applicable for small & large scale investment projects)

### Mitigation Projects

**5%**  
of the  
eligible loan  
amount

+

**1%** additional investment bonus granted to companies willing to assess and promote women's employment and professional equality (via a self-assessment questionnaire and the development of a gender action plan).

### Adaptation Projects

**5%**  
of the  
eligible loan  
amount

+

**10%** extra grant for eligible climate change adaptation projects.

+

**1%** additional investment bonus granted to companies willing to assess and promote women's employment and professional equality (via a self-assessment questionnaire and the development of a gender action plan).

The overall grant for a "gender-related" project stemming from the self-assessment and gender action plan will then be of 10% (5% + 5%) of the loan to finance the "gender-related" project.

### Gender Projects

**5%**  
of the  
eligible loan  
amount

+

**5%** grant on new investments resulting from the gender action plan. The overall grant for a "gender-related" project stemming from the gender action plan will then be of 10% (5%+5%)



# A TAILOR-MADE APPROACH



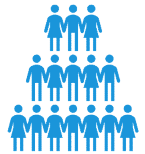
## Small-scale investment projects

up to MUR 10 million

- ☐ Up to 100% of the investment amount.
- ☐ Loan of up to EUR 250,000 (approx. MUR 10 million) for the purchase and installation of equipment and technologies contained in a List of Eligible Materials and Equipment (LEME) established by the Technical Assistance.
- ☐ The partner banks are entitled to directly approve the project through a simplified process.



# A TAILOR-MADE APPROACH



## Large-scale investment projects

up to MUR 200 million

- ☐ Up to 100% of the investment amount.
- ☐ Maximum eligible loan amount of EUR 5 million (approx. MUR 200 million), even though the project cost and overall loan amounts from the partner bank may exceed EUR 5 million.
- ☐ Each project will be subject to a comprehensive technical assessment by dedicated expert(s) to assess and ascertain its eligibility against a pre-determined set of criteria for each of the investment categories covered by SUNREF (Mitigation, Adaptation, Gender).



# TECHNICAL ELIGIBILITY CRITERIA

## □ **Brownfield investments** (including retrofitting projects):

- Minimum 20% reduction in energy consumption.
- Energy savings should represent at least 50% of cost savings induced by project with a payback period between 2 to 8 years.

## □ **Greenfield investments:**

- Renewable energy projects such as solar photovoltaic, wind turbine, etc...
- Energy from sustainable biomass sources, provided that the biomass resource does not originate from deforestation activities.
- Mini-hydro or biomass power stations.
- All other investments will be considered on a case by case basis, on the best available technologies concept.



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# Air conditioning and Cooling

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# Air conditioning and Cooling

**Philippe Beutin**

Coordinateur Général, Assistance Technique

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## Sectorial approach for EE targeting

Industry (retrofitting  
or new invest):  
food processing,  
logistics

Retail (mass  
distribution)  
Cooling: 40-  
60%  
electricity  
demand

Tertiary surfaces:  
offices,  
education

Public  
buildings

Agriculture

Health care:  
hospitals



## EE solutions

Hot water: solar  
technologies,  
heat pumps

Lighting : LED and  
supervision

**Cooling systems  
with new fluids  
or alternatives  
with low GWP**

Efficient  
insulation

**Air conditioning:  
split-systems, VRV-  
VRF, centralised  
solutions with cold  
storage, ...**

Building  
management  
systems: BMS

Heat recovery

Specific utilities:  
compressed air  
systems ...



# Air Conditioning: huge potential for energy efficiency



**Markets:** households and small-scale buildings ‘residential or tertiary’, large-scale AC for “Greenfield buildings” and “retrofitting” activities

**Combining solutions** to have the best impacts: best available technologies (AC) and building management systems or BMS (monitoring, data acquisition), CO2 sensors for air handling systems coupled with AC installations). Efficient insulation is always required for limiting AC loads.

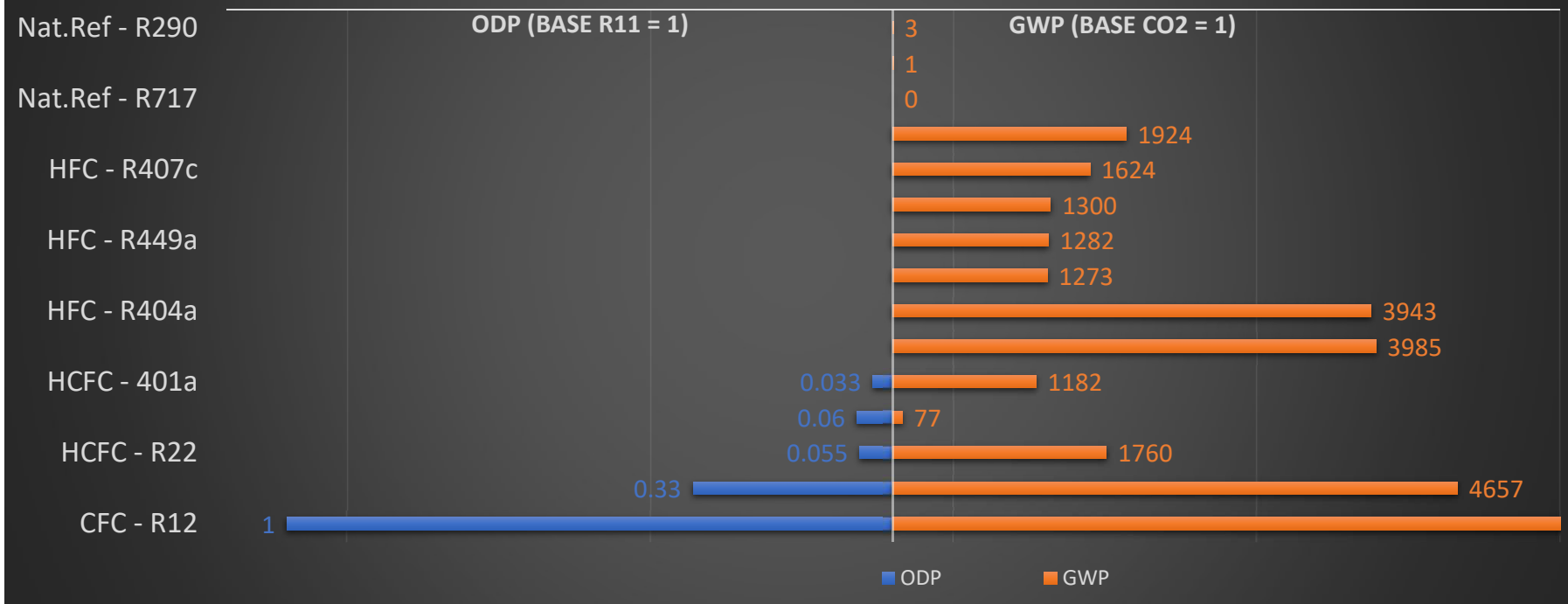
## **Best available technologies:**

- Inverters (Monosplits) with SEER above 5,10 (Class A, A+) as baseline acceptable for SUNREF (20% energy saving) and promotion of equipment with Class A++ (SEER of 6,2) if available on the market,
- VRF or VRV systems (variable flow or volume) for “Greenfield” buildings with high efficiency standards
- Water cooled cooling systems for getting high efficiencies if context is possible (harbour basin...)



# Cooling applications: huge potential for energy efficiency

GWP of different refrigerants





# Cooling applications: huge potential for energy efficiency



- **Targeted sectors:** industry (food processing, logistics, retail activities - medium or large scale)
- **Eligible solutions:** retrofitting activities to comply with refrigerant legislation in place and promote energy efficiency at the same time. With the objective of achieving at least 20% efficiency rate.
- **Combining solutions** to have the best impacts: best available technologies with fluid having the best GWP ratio (fluid available on the market with a focus on natural fluids), energy recovery to improve the energy balance, cooling chambers insulation, supervision equipment ...and monitoring systems (monitoring, data acquisition). **This a global approach to reach the expected energy efficiency expected.**
- **Best available technologies:**
  - Contribute to the elimination of CFC (action already taken) or HFC (R 404 and R 507). Investments can't be avoided.
  - Promote low GWP fluids (under 2500) **as R 448** or much better natural fluids such as **NH3 (R 717) and CO2 (R 744)**

**Projects on advanced cooling processes should be prioritized according to the urgent need to reduce environment impacts but also to promote energy efficiency. Natural refrigerants should be the choice for Greenfield projects (logistics or new retail complexes).**



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## Legal framework and applicable laws

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# Legal framework and applicable laws

J. R. Oh-Seng

Environment Officer

Ministry of Environment,

Solid Waste Management and Climate Change

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