# **CLIMATOPOLIS PRESENTATION**

**GREEN SMART CITY** 

# CLIMATOPOLIS GROUP

INTERNATIONAL NETWORK OF CLIMATE
INNOVATION SMART CITIES



By Janar

# Together for Reunion Island

With the support of:











**ILE DE LA REUNION** 

### **CONSTRUCTION PROJECT OF A CLIMATOPOLIS GREEN SMART-CITY ON REUNION ISLAND**

An intelligent scientific technopolis, virtuous for the environment, for the benefit of employment, citizens and territorial development.







A UNIQUE ECONOMIC, TAX AND ENVIRONMENTAL CONTEXT

Reunion Island is a French overseas department with the status of European ultra-peripheral regions (RUP). A LEADING REGION in training schemes, research, development & innovation.

Reunion Island provides a set of incentive measures that encourages the establishment and development of companies (a reduced rate of VAT 8,5%, advantageous taxation CIR 50%, grants to researchers, and numerous aids...)

The safest living environment and the most important area for business development in the Indian Ocean and in Southern Africa.

Reunion Island has a stable macroeconomic environment and a high-quality banking market.

Reunion Island is located 200 km southwest of the island of Mauritius, 800 km east of the island of Madagascar, and about 2000 km from Africa: the island is at the core of the African south-west area, a continental and insular zone.

For several years now, Reunion Island has developed strong relations with many African countries (South Africa, Mozambique, Madagascar, Mauritius...) and with some organisations for regional economic integration and cooperation such as COMESA (Common Market for Eastern and Southern Africa) and SADC (Southern African Development Community).

Reunion Island is part of the Indian Ocean Commission (IOC), which also includes the Seychelles, Mauritius, Madagascar and the Comoros.





Web: www.Climatopolis.fr

Email: olivier.camp@climatopolis.fr



AN EXCEPTIONAL BIODIVERSITY AND ENVIRONMENTAL CONTEXT

Reunion Island, an insular and tropical European territory, holds geostrategic assets and possesses human, material and financial resources that are propitious for the development of Research, Developement and Innovation activities.

## A UNIQUE NATURAL ENVIRONMENT A Research and Development « source »

- Reunion Island is one of the 34 global biodiversity hotspots registered as a UNESCO World Heritage site for its "Pitons, cirques and remparts".
- A national park, a natural marine reserve, an active volcano, a privileged access to French Southern and Antarctic Territories (and its scattered islands)
- An exceptional dynamic of telluric and hydrometeorological phenomena: a real opportunity for the research and observation in the Indian Ocean zone
- An advantageous geographical location for the study of biological adaptation in an intertropical environment
- An insular character that requires a sustainable management of Energy, Food and Waste



### Why is **BIODIVERSITY** important?

**Biodiversity** provides vital goods and services



An exclusive economic opportuny and a strong value-added for CLIMATOPOLIS and Reunion Island



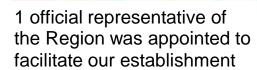
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PUBLIC INFRASTRUCTURES THAT PROMOTE AND SUPPORT INNOVATION



LOCAL AUTHORITIES AND PUBLIC INFRASTRUCTURES SUPPORT THE ESTABLISHMENT OF OUR SMART CITY







1 official representative of the Department was appointed to facilitate our establishment







La Réunion commence ici...



l'observatoire des tortues marines





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### **CLIMATOPOLIS SMART CITIES**

### A project for Reunion Island of:

- General interest
- Community interest
- Territorial interest



For the benefit of the environment and the fight against climate change

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### **CLIMATOPOLIS SMART CITIES**

An inclusive and unifying project for **Reunion Island** 

For the fight against climate change and the benefit of Reunion Island and its employment

GOUVERNANCE

### **TOGETHER**

- Collaborating with all the actors of the Island
- Generating complementarity between technopolis, institutions and scientists
- Sharing resources and knowledge to be efficient
- Creating synergy, trade flows and employment
- Working with inclusive pratices

### **EXCELLENCE**

- Activities focused on partnership, proximity, pragmatism, joint efficiency and excellence
- Client satisfaction, quality, standardization and added value are at the core of our actions
- Anticipate, innovating for the environment market
- Training/ Developing new skills

### **ENVIRONMENT**

- Protecting the environment
- Promoting recycling and circular economy
- Green Smart city, an exemplary behaviour towards the environment
  - A positive energy building made of biomaterials and based on green architecture
    - Soft mobility - Increasing fluidity

### **ETHICS**

- Sticking to our values
- Working with ethics, integrity and in collaboration
- Contributing to our partners' ethical practices
- Communicating with transparency
- Contributing to the territorial development

and the general interest

- Not relocating our activities

SAUTATEURS



Email: olivier.camp@climatopolis.fr Web: www.Climatopolis.fr OURNISSEURS



CLIMATOPOLIS is a unique REAL ESTATE, TECHNOLOGICAL and INNOVATIVE concept with HIGH ADDED VALUE, whose mission is to build scientific Green Smart Cities around the world, true showcases for green buildings and efficient technological solutions to climate change.

Our disruptive and innovative concept, both architecturally and environmentally, is of interest to many cities and developers, as it has the advantage of ensuring high real estate profitability thanks to a rental balance between scientific activities (climate technology park), commercial activities (hotel, restaurant, climate museum, shops, etc.) and residential activities (bioclimatic housing for employees of the smart city)

Our mission is to lead the way to a zero-carbon economy, stimulating innovation and sustainable growth by setting ambitious emission reduction targets based on science, innovation and business development with a high return on investment.



## Why a green smart-city?

**CLIMATOPOLIS REUNION ISLAND** 

Because, intelligent buildings are a key element to promote the evolution of green technologies, with efficient use of energy.

They are widely recognized as a real support to meet the climate challenges that today's society is facing. These bio-based and energy-positive ecosystems provide (thanks to AI, big data and IOT), connectivity and interoperability: key elements to reduce CO2 emissions within cities.







### **CLIMATE CHANGE**

- •Our CO2 emissions contribute to global warming
- •Caused by human activities, CO2 is damaging our biodiversity
- •Global warming increases drought
- •Critical water shortages will increase international tensions
- •Pandemics and climate disasters will increase.





### **RAISING AWARENESS**

- •We must change our behavior
- •We must invest massively in the green economy
- •We must centralize research and scientific innovation for the environment
- •We must teach future generations the environmental sciences, as well as the technological and behavioral solutions that protect our planet.







# A project of general, community, educational and social interest to fight against climate change

A scientific green Smart-City, a true international technological showcase in environmental matters and associated services:

#### **CLIMATOPOLIS**

•An accelerator of startups all dedicated to the development of virtuous technologies to protect our environment

•A research center, an engineering school, a center for training, integration and apprenticeship with programs focused on the environment and new scientific discoveries, with a focus the jobs of tomorrow

•A unique place to develop all the innovations and 50 startups to benefit the climate and the environment

•A high value-added managerial and technical approach that combines financing, marketing, international trade, scientific research and legal support

•An innovative investment vehicle linked to our acceleration model

•Guaranteed profitability for our investors (funds, foundations, banks, local authorities, etc.), who are as committed as we are to virtuous innovations for our environment and climate change











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## CLIMATOPOLIS SERVICES

# CLIMATOPOLIS

First international network of SMART CITIES on climate change

An eco-designed SMART BUILDING complex, an international green and smart technology showcase (renewable energies, sustainable architecture, bio-based materials, smart networks, robotics, integrated smart-agriculture, waste recovery...)

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#### EACH CLIMATOPOLIS OFFERS A SET OF SERVICES FOR THE BENEFIT OF ENVIRONMENTAL INNOVATION AND EMPLOYMENT:

- An innovation and business accelerator for 30 to 100 startups
- An R&D laboratory and a production workshop for pre-production
- Offices equipped and optimized to promote innovation and synergies between startups and our teams
- ·A congress center
- .The world's first climate museum
- Shared services to promote R&D and business development
- .Dedicated research team
- Shared purchasing and international sourcing services
- Financial, accounting and marketing services
- ·Tax and legal optimization service
- ·A sales team that will sell our startups' products and services internationally
- An engineering school, doctoral training and agroecological rehabilitation activities
- ·A hotel and organic restaurants and associated services (gyms, wellness etc.)
- Student accommodation and short stays
- An intelligent ecological greenhouse in aquaponics
- Renewable energy solutions for the entire site (which will be energy positive)
- •A test center for drones (terrestrial, aerial and aquatic in the lake)
- ·A vertiport for drone cab





# An economic and territorial structuring project A network of technological partners for the benefit of innovation

In accordance with the 7 trajectories of Reunion Island

Impacts of CLIMATOPOLIS for the benefit of Reunion Island

Territorial and demographic trajectory

Economic and social trajectory

Educational trajectory

Environmental trajectory

Food trajectory

Trajectory of territorial happiness

Citizen trajectory

Territorial attractiveness, scientific smart city, "the Silicon Valley of the Indian Ocean", soft mobility, architectural and climate strategy of mid-slope cities

Creation of 600 to 1000 jobs over 5 years, social and solidarity economy. Capital sharing (10 farmers and scientists from Reunion Island are associated in Climatopolis Reunion Island), creation of allotments and scientific gardens

Cluster of climatic and scientific excellence in the Indian Ocean / Creation of the first university hub in St Paul / greentech specializations / fight against school failure around agro-ecology / learning and return to work

Energy autonomy, decarbonized island, biomass valorization, protection of the marine environment and endemic species, agrotech, urban mobility

Semi-robotized smart greenhouses, import reduction, water saving and crop optimization in agroecology, food security, aquaponics

Quality working conditions in a smart city, a technological showcase for environmental well-being, respect for gender parity and valuing women in our teams for the benefit of collective performance and citizenship

Climatopolis must be the environmental project of the people of Reunion Island, bringing together in one place all the island's research and skills for the benefit of the territory and its citizens.

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CLIMATOPOLIS ILE DE LA REUNION

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# **CLIMATOPOLIS** GROUP

INTERNATIONAL NETWORK OF CLIMATE INNOVATION SMART CITIES



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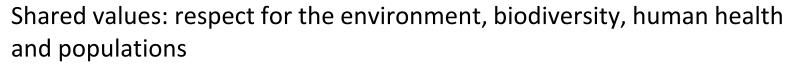
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# ABOUT US Expertise and brands











Technological and environmental auditing specialties (EMAS, ISO 14001 and Green Safe standards)

A global positioning and 2 brands Climatopolis Smart City & Climatopolis Care



www.climatopolis.fr

www.climatopolis.ca



### THE TEAM

### The founding team



Olivier CAMP Founder / Owner / CEO / Board Chairman

Master in Finance Senior technician in green chemistry - Ecological technologist

Expert for the European Union Greendeal and H2020

Expert in renewable energies, biomass valorization, waste heat, plant chemistry and solar hybridization

Designer of an applied research methodology aimed at accelerating virtuous innovations for the environment.

CEO www.climatopolis.fr CEO www.libra-capital.fr CEO www.smartkas.com France



Duccio CARDELLI & Ning WANG
Co-Founder / CCO (Chief Creative Officer)
& Senior Partner / Board Vice- Chairman

Founding architects of the architecture firm www.andstudio.net

Famous green architecture firm, And Studio is located in Paris and Shanghai. (many great prizes of architecture won in China)

A firm of 45 people passionate about the environment, the territory, and green architecture, focusing their design around human needs.

They aim to shape the world of tomorrow (good quality of life, cultivating the knowledge and education of the younger generation, keeping up with emerging technologies and above all respecting the planet).



Kamel BENNAOUM
Co-Founder / CPO (Chief Political Officer) /
Board Vice- Chairman

Kamel holds a DEA in Philosophy.

After his studies he joined the political world as a study officer - Parliamentary Group under the presidency of Jean-Louis Debré at the National Assembly.

Director of communication of several communities (Chalon-sur-Saône, under the authoritý of Dominique Perben, South Province New Caledonia - Cynthia Ligeard, Leucate -Michel Py)

Chief of the Office of the President of New Caledonia

Consultant in political marketing and institutional communication at L&O and then at Baylaucg & Co



David MESZAROS

Co-Founder / CLO (Chief Legal
Officer) / Board of Directors

Specialist in innovative solutions (smart agriculture, drones, Al, blockchain...)

Business lawyer - Global fundraising and partnerships - Services to international groups and princely families UAE - Legal and tax advice Asset management -

Strategic advisor for innovative start-ups, multinationals and largescale industrial project development

Founder of Smartkas greenhouses in the Netherlands with a team of researchers www.Smartkas.com



Ibtissem KHAMASSI Co-Founder / CXO (Chief Experience Officer ) / Board of Directors

Ibtissem holds a double Master's degree in International Law and Marketing.

She is the founder in China of KTI International, a business development consultancy in the Asia and Middle East region, notably with large international groups and luxury brands.

In direct relation with investors and federal governments, she will lead with Zuoning Liu 2 Climatopolis in China

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### The group's management team







Master's degree in international business

Multilingual (French, Spanish, English, Italian) - Intermediate German.

Business Officer at the French Embassy in Venezuela.

Communication officer at the Alliance française in Caracas Financial analyst at Libra Capital (tax and financial support for startups)

Alexia is in charge of the startup acceleration process at Climatopolis: Finance & taxation Pedagogical programs International business development Partners and subsidiaries relations





#### Diane OBAM Startups Network manager Climatopolis Group & Africa

Businesswoman, Diane OBAM is the founding director of Booster Activ Network.

Her firm specializes in supporting its various partners (entrepreneurs, sportsmen, institutions or associations) to boost their activities through consulting, training and networking with concrete actions according to their objectives, their stakes and their budget.

Booster Activ Network clubs are being created in 10 French-speaking cities, Toulouse, Paris, Ottawa, Douala, Yaoundé, Rouen, Casablanca, Martinique...

Diane is in charge of the relationship with the African diaspora in the framework of the development of Climatopolis in Africa



#### **Haydar SEVIN** Finance manager **Climatopolis Group**

Master's degree in law and economics of banking and financial markets

Certified international investment analyst for the French Society of **Financial Analysts** 

15 years of experience in the banking sector

10 years of experience in the development of photovoltaic projects and solar farms

Grant expert for the European Union in the fields of crypto-currency and renewable energy



Laurent SABLAYROLES **Network Development Manager Climatopolis FRANCE Climatopolis** Group

Laurent put his skills at the service of real estate professionals as a consultant for over 20 years. In 2000, he decided to create his own group to meet a new need for "clés en main, prêt à construire" support for a B-to-B target (developers, builders, managers and investors).

He developed a new business by industrializing his process. This service is the provision of skills to developers to carry out their projects: choice of assembly and development of real estate operations, projects with high added value, such as Climatopolis

CEO of www.directofoncier.fr



**Bastien QUADJOVIE Research Director Climatopolis France & Reunion** Island

Aerospace Engineer

Mechatronics - Design of drones or suborbital aircraft

Engineer in mechanical structure design for satellites, Thales Alenia Space

Project management engineer for Snecma, CEA, DCNS and French Army

Founder of the smart agriculture start-up BIOVAFARM

Creation of a range of modular solutions (recycled containers) for high-pressure aeroponics as well as horticultural management software for optimal control of these microfarms.

www.biovafarm.com

Web: www.Climatopolis.fr

### Reunion Island's management team



Jérôme LASSUS **General Manager Climatopolis Reunion Island** 

Master's degree in real estate and business law

25 years of professional experience in real estate development, green architecture, eco-construction and business development in the building sector.

Conduct of experimental projects in the field of sustainable construction / AMO CLIMATOPOLIS

Expert in European Union subsidies in the field of eco-construction, recycling, waste recovery and biomaterials.

Former non-commissioned officer 31st regiment of engineers Castelsarrasin of the company Billant (current prefect island of Reunion)



Marc AGOUNI **Deputy Director Climatopolis Reunion Island** 

Expert in blockchain

CEO of TokenAsset,

consulting for Training Islanders and Indian Farmer and horse dealer Reunion Ocean towards blockchain and smart technologies.

to Reunion Island and sharing of the magnificent Moka Beef. knowledge on cryptography and the potential of this technology for Thanks to his expertise and his the island.

Island and 30 in different places.

In 2020, he creates the first digital beautiful island of the Indian Ocean. event: SmartSummit



Jean Noël JAVEGNY Head of the Agritech division **Climatopolis Reunion Island** 

Commercial studies **BTS Transport & Logistics Reunion Island** 

Laureate in charge of Farming operation in 2005

With a typical cattle breed of Reunion Island, he relaunches the production of a herd in order to sensitize and educate Organization of seminars and trips the Reunionese families on the history of

knowledge of the biodiversity of the highlands of the island, he will bring his More than 30 events in Reunion expertise to the AgriTech and agroecology pole of Climatopolis, in order to preserve through innovation, the endemic fauna & flora of this



**Baptiste ROGER** Financial and tax manager Climatopolis Reunion Island

Master's degree in legal and economic real estate techniques.

Established in Reunion Island for 17 years.

Advisor in wealth management specializing in "Promotion and construction. "

Thanks to a global vision and a mastery of civil, social, tax and financial law, Baptiste accompanies individuals and legal entities in their short, medium and long term asset strategies.

Baptiste has a long experience as a "land prospector and developer" on Reunion Island.

AMO CLIMATOPOLIS



### **Bastien QUADJOVIE** Research manager **Climatopolis France & Reunion** Island

Aerospace Engineer

Mechatronics - Design of drones or suborbital aircraft

Engineer in mechanical structure design for satellites, Thales Alenia Space

Project management engineer for Snecma, CEA, DCNS and French Army

Founder of the smart agriculture startup BIOVAFARM www.biovafarm.com

Creation of a range of modular solutions (recycled containers) for highpressure aeroponics as well as horticultural management software for optimal control of these micro-farms.



Training Manager / Speaker Climatopolis Reunion Island

**HEC:** Business Model Innovation Master II: Business Creation and Entrepreneurship

Expert in fundraising pitch, storytelling, equity-story, public relations, crisis communication, media, politics, humanism.

Initiator of Happynextdoor: festival of constructive enthusiasm through intercultural and intergenerational sharing.

Creator of emancipation workshops for citizen action and self-managed movements.

Founder of the University of the Free Life: popular education for alternatives of society in harmony with oneself and biodiversity.

https://farzadfelezzi.wixsite.com

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#### Scientific Comittee









DEA Syst. Animal and Plant Comparative anatomy - Phylogeny -Systematics - Theories of evolution -Nomenclature

Director of www.qualitropic.fr , an innovation accelerator and competitiveness cluster

Based in Reunion Island, it brings together the business and research communities around the tropical bioeconomy.

Qualitropic's objective is to develop collaborative projects that are sources of competitiveness, performance and economic development.

Expert in European standardization committees "TC38 - Durability of wood and wood based products

Lecturer for the Bachelor's degree in Urban/Civil Engineering and Environment





Patrice HUET

MBA Business Administration Master's degree in law, economics and management Master's degree in computer science applied to earth sciences Master's degree in science with volcanology option

Volcanologist and scientific director of the museum "la Cité du volcan

Geologist and computer scientist by training, passionate about the Earth and Universe sciences.

Museographic referent of the transformation of the Maison du Volcan into the Cité du Volcan.

His mission is to contribute to the promotion and popularization of knowledge on Volcanism and more broadly on the Earth and Universe Sciences.

Thanks to his expertise in the management of a museum, Patrice will co-direct the Climatopolis Climate Museum





**Estelle Crochelet** 

Doctor in Marine Ecology / Agricultural Engineer specialized in Marine Ecology and Information & Communication Technologies

Specialized in spatial ecology of marine ecosystems in the Indian Ocean. (coral ecosystems and seamounts) Publications in international journals. Regional manager for the Indian Ocean for the European BEST programs, within the **IUCN** 

Vice president of the Research Agency for Biodiversity in Reunion Island at ARBRE https://arb-reunion.fr/

The purpose of ARBRE is to contribute to the monitoring, the follow-up, and the development of biodiversity (marine and terrestrial) in Reunion Island and in the Indian Ocean as well as to disseminate information.

Approval for environmental protection.



**Claude Marodon** 

Pharmacist

President of the Pharmacists Association of Reunion Island-Mayotte

President of the APLAMEDOM CRED in the Reunion-Mayotte region

https://aplamedom.org/

Claude defends the medicinal plants of Reunion Island.

They have been used for generations and some of them are only beginning to be recognized. Thanks to the work of Claude Marodon and his association APLAMEDOM, molecules from plants of Reunion Island could be used in new medicines.

### **DIRECTORS STRATEGIC COMMITTEE**





Dominique PERBEN Lawyer – Former Minister

#### Graduate in political science and ENA class of 1972 International business lawyer

Several times Minister from 1993 to 2007:

·March 1993 - May 1995: Minister for Overseas Departments and Territories (Edouard Balladur Government)

November 1995 - June 1997: Minister for the Public Service, State Reform and Decentralization (Alain Juppé Government (2))

·May 2002 - June 2005: Garde des Sceaux, Minister of Justice (Jean-Pierre Raffarin government 1, 2 and 3)

June 2, 2005 - May 15, 2007: Minister of Transport, Equipment, Tourism and the Sea (Dominique de Villepin government)

- Chevalier de la Légion d'honneur (2014)
- Commandeur du Mérite maritime, de droit en tant que ministre chargé des affaires maritimes 11
- Commandeur de l'ordre de Tahiti Nui (nomination à titre exceptionnel, 1999)

#### **MISSIONS CLIMATOPOLIS:**

Institutional relations

International development: diplomatic network / heads of state / foundations / investors / business relations & networks







Joël NARAYANIN CEO LA FINANCIERE JANAR Reunion Island

Mining engineer

Strong synergies around environmental values

Founded by Mr. Joël Narayanin 40 years ago, his group with a capital of 15.5 M€ has multi activities companies in the direction of ecology.

A strategic opportunity to work with a recognized group, with strong skills and a good knowledge of the ecosystem and biodiversity of the island.

Recognized hotel and restaurant expertise (owner of the \*\*\*\*\* AKOYA hotel), which will allow CLIMATOPOLIS to deploy its accommodation, commercial and tourist offers in a secure manner.

#### **MISSIONS CLIMATOPOLIS:**

Subsidies: Close to the political institutions of Reunion Island, he is in charge of obtaining the maximum of public funding for Climatopolis Reunion Island

Indian Ocean Development: Business relations & networks - marketing by Climatopolis of its range of bio-based products for the building industry

**OTHERS UNDER DISCUSSION:** 

Research directors of large international groups

Environmental experts

### WHAT WE DO

**GREEN SMART CITY** 

## Our jobs

- •BUILDING an international network of smart green cities
- •GREEN SMART CITIES: green technology showcases in professional, commercial and residential real estate / smart building / green architecture
- •ACCELERATING green startups and environmental scientific innovations
- •COMMERCIALIZING virtuous innovations for our environment via an international business network involved in greentech
- •TRAINING engineers, technicians and researchers for tomorrow's jobs
- •PROFITABILITY: Real estate, industrial and commercial and patented innovations

# CLIMATOPOLIS GROUP

INTERNATIONAL NETWORK OF CLIMATE INNOVATION SMART CITIES



# CLIMATOPOLIS GLOBAL NETWORK TARGET **CLIMATOPOLIS** GOAL: **GROUP BUILDING 35 GREEN SMART CITIES IN THE WORLD** CLIMATOPOLIS **AFRICA REUNION ISLAND** Center of Competence and Climate innovation in the Indian Ocean and Southern Africa

### CLIMATOPOLIS GLOBAL NETWORK TARGET





Southern Africa

### **EXEMPLE**: OUR SITES CLIMATOPOLIS France (Paris and Toulouse)

### **MASTER PLAN**

40 hectares

110 000 m2 of buildings

160 M€ invested

100 startups

1500 jobs within 5 years

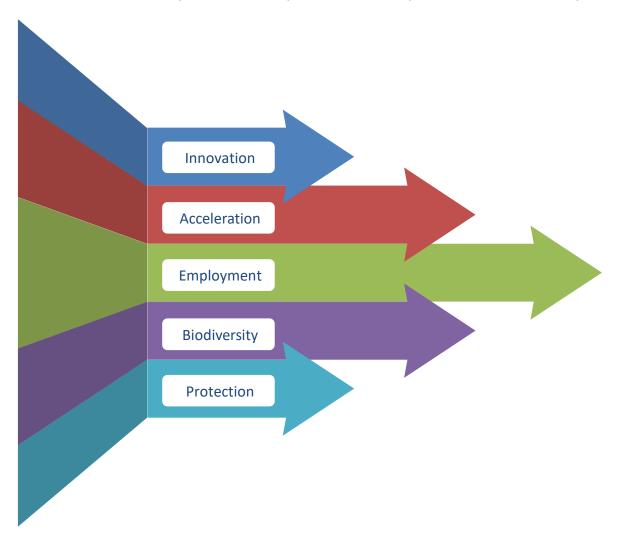


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### Our missions for the benefit of the environment and local employment

Reunion Island: a unique biodiversity and endemic species which must be protected





We fund and develop our startups using a unique methodology



### **ACCELERATE**

Accelerate, structure and develop startups to commercialize their innovations internationally



Our team of researchers will support startups in their innovation process



### **PROTECT**

All our actions aim at protecting the environment and the biodiversity of Reunion Island.



<u>.fr</u>

### The innovations we develop

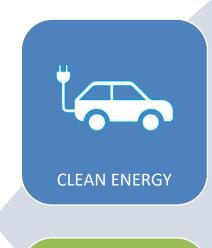
Climate science research - startups - innovation - employment - political communication - citizen services - efficiency



Solar, Wind, Marine, Biomass, CO2 capture Smartgrids, Green Hydrogen, Cogeneration, Methanization, Fatal Heat, Hydroelectricity, Energy storage, Thermal spa...



Smart Agriculture, aquaponics, organic and sustainable agriculture, permaculture, protection of biodiversity, animal and plant species, biomimicry, water management, protection of the coastline, oceans and marine species, deforestation management...











Natural formulations, Active ingredients
(Cosmetics - Pharmaceuticals), CO2 capture,
Organic solvents, Biocatalysis, Biomass and
waste valorization,
Industrial Eco-efficiency, Biomedical....



Drones, Eco-construction, Biomaterials, Green architecture, Autonomous robotics, Blockchain,
Smart sensors, Mapping,
Artificial intelligence, Digital, IOT, Big data,
Sustainable mobility...



### 1- THE FINDING



#### THE CLASSIC INCUBATOR

Among the 2600 incubators in the world, the vast majority are generalists and there are none that specialize exclusively in climate change (some focus on cleantech, others on green chemistry, but there is no incubator that combines all the skills, training and innovations around the climate cause...)

Acceleration programs exist in some incubators, but are often limited to coworking spaces with business experts and networking with business and financial networks

### 2- THE ANSWER

**CLIMATOPOLIS** is a profitable **innovative investment vehicle** and a **unique incubator** for accelerating startups that offer clear environmental benefits, with a significant degree of disruptive innovation in a captive traction market and a skilled founding team.

Climatopolis offers all the necessary components for a successful startup:

- .Capital investment and financial optimization with strong leverage effects
- ·Tax optimization
- .R&D and industrial synergies via an innovative shared fablab and a unique methodology in applied research
- An engineering school and researchers to accelerate innovations
- A convention center for international symposiums on environmental research topics that allows acceleration and training.
- .Patent registration and creation of startups in their own name
- Business development handled by the Climatopolis teams, which will market its startups internationally (also relayed by other Climatopolis worldwide)

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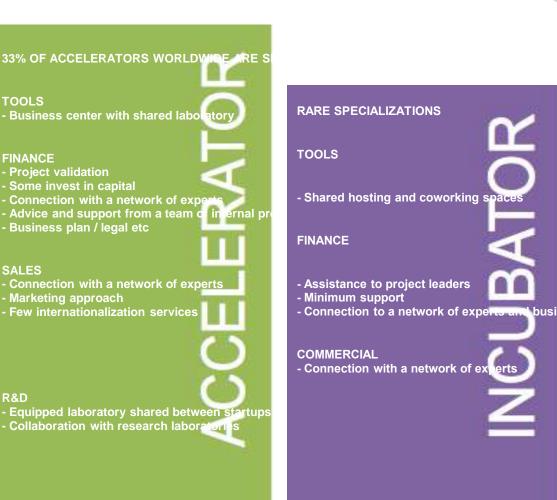
Expert administrators who will support the development of the startups and their managers



### **COMPARISON OF OFFERS TO STARTUPS**







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### THE CONCEPT

Climatopolis is the first incubator for startups specializing in solutions to fight global warming.

We support startups that have a real impact on sustainable development and climate change and that are in the early or growth phase.

We are particularly looking for disruptive startups that offer new technologies to the market and present concrete prospects for industrialization and commercialization, at the international level.

Our mission is to accelerate these startups and to develop new virtuous innovations for our environment thanks to an original model specific to Climatopolis and developed by its founder Olivier Camp. Experienced in the development of large-scale projects and startups specialized in the energy and ecological transition, Olivier Camp has gradually become a recognized technologist, ecologist and lecturer, consultant in Greentech project development, and expert to the European Union on the Green Deal, H2020 (ENR & Health) and smart-city.

This unique model in applied research and management of innovative projects allows us to identify, model and generate synergies between technological bricks of our startup ecosystem in the different markets in which they operate.



There is no incubator in the world out of the 2600 existing that offers the same model of acceleration.



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### THE BUSINESS MODEL

We will be able to accelerate the business development of the majority of our startups, with the aim of quickly bringing to market solutions that are environmentally friendly, financially accessible to the greatest number of people and profitable for our investors.

#### Our incubator business model is based ON:

•Investments in industrial and research equipment, in strong skills and in smart green technologies

International synergies between the different Climatopolis and their •Our tools are the startups: Systematically taking a **20% stake in each startup**startups to develop new markets, innovations and virtuous startups for €150K to €500K for our environment.

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•Financial and tax optimization to obtain financing up to **10 times the amount**®The invoicing of shared services with high added value. **of the capital** (Libra Capital team highly experienced in leverage)

®Translated with www.DeepL.com/Translator (free version)

•Acceleration of the business of each startup:

Prinancing and securing of each startup's incubator program by the Climatopolis team for the first two years (optimization of financing cycles)

②Sale of the startups' shares after 4 years with capital gains, in order to reinvest in new ones

Identification of potential future unicorns (deferred sale of shares)

The filing of Climatopolis patents, following the aggregation of technological bricks identified by Olivier Camp and other future technologists

The creation of new startups based on these patents

Unlike most incubators, Climatopolis provides specialized stateof-the-art services, an exceptional location, a unique innovation acceleration methodology, training, research, and strong business, technical, and financial skills to accelerate startups and secure backers and investors.



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# THE CLIMATOPOLIS STARTUP LEVERAGE MODEL







- Capital invested (minimum 150 k€)
- Loans
- Grants
- Foundations

### Tax optimization:

JEI CIR CII Subsidies

Mutualisation of expenses between startups

### **Business synergies**

between startups

### **Business development**

via commercial team Climatopolis

#### **International business network**

Climatopolis and local actors of the island

**R&D synergies** between startups

**Aggregation** and optimization of technological bricks

**Sharing** of expenses and projects in applied research

**Detection** of innovations on a global scale





### THE CONCEPT OF INNOVATION ACCELERATION AND STARTUPS











Patents

Startups

Research demonstrators

Technology bricks

Olivier Camp and his team of technologists



### **INSPIRATION**

### Identify

Weak signals Disruptions Trends Culturalisms

What are the needs and revenues of tomorrow?



### INCEPTION

#### **Analyze**

Pivotal strategy Epistemology **Paradigms** Technological bricks

We must not see the world as everyone else does Adapting it, changing it...



### **IDEATION**

#### Create

Innovate Generate synergies Improve Test

> Complexity management Emergence of ideas up to prototyping



### INDUCTION

### **Accelerate**

Global market Growth / scale up Anchor a culture of sustainable innovation

> Project management Results **Profitability** Valuation





**ILE DE LA REUNION** 

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# Common characteristics of startups

•Technology monoculturee •Single market •Gaps in business and technology strategy •Financial limits •Short-term vision

#### **TECHNOLOGY BRICKS FOR STARTUPS**



#### **OBSERVATION - IDENTIFICATION OF POTENTIAL SYNERGIES**

Carried out by Olivier CAMP and future technologists of Climatopolis

### **DEVELOPMENT OF SYNERGIES**

IN APPLIED RESEARCH

### **ACCELERATION**



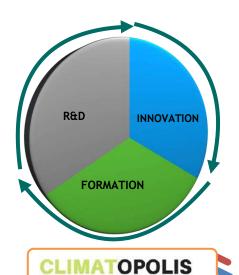




**SOLUTIONS** 

**ACTORS** 

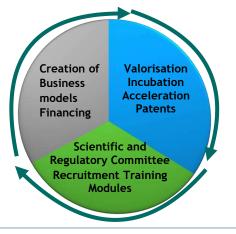
MARKET



- Majors of the industry SME/I, Startuppers, ETI
- Engineering students and researchers, future collaborators or startups
- Researchers, Engineers and Innovation Managers

Missions of Olivier CAMP and his future technologists

Identify and develop innovation, technical and commercial synergies
Register new patents
Create new startups
Accelerate innovations
Train technologists
Make it profitable



### OUR OFFER FOR REUNION ISLAND

**GREEN SMART CITY** 

# CLIMATOPOLIS GROUP

INTERNATIONAL NETWORK OF CLIMATE
INNOVATION SMART CITIES



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# OUR OFFER FOR REUNION ISLAND

Innovation - environmental protection - citizenship, political communication, employment, economic development

**Structuring complex for the island**: An intelligent scientific smart-city specialized in technologies for the benefit of the climate and biodiversity.

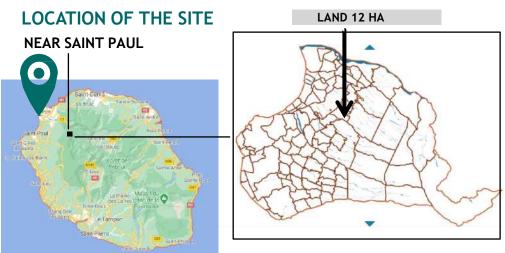
**Reunion Island, a living laboratory of evolution:** Native species that have evolved to the point of becoming different from their original species. It is a great scientific opportunity for us to build a Climatopolis where startups can work on these species to protect them and valorize their waste for the cosmetics, pharmaceutical and food industries.

An economic opportunity: For farmers and fishermen who will be able to sell their biomass for energy or active ingredients. For the young people of Reunion Island who will be able to find training and employment in future sectors related to the climate cause and the protection of their native island.

A great political communication tool for the island and its citizens: A solution that can protect this unique hub of biodiversity while respectfully exploiting its endemic species, while creating a smart city, local employment, economic activity, tourism and industry.



3 7



#### **KEY FIGURES OF THE ISLAND**

Population: 859,959 (2020)

Density: 340 inhabitants/km2

Surface area: 2512 km2

Municipalities: 24

Number of companies: 59 937

Number of employees: 230 868

Number of hotels: 112 and 3,558 rooms (12\*\*\*\* and 4\*\*\*\*\*)

Number of homes: 368,895

40% of the population has no diploma and 20% a CAP 18% of the population has a higher education diploma

Unemployment rate: 24%.

.45% of jobs are public and 40% in business.

Culture: 200 events per year (animations, music, shows)

# Saint-Paul LE DE LA REUNTON Berceau du peuplement

#### PRESENTATION OF THE CITY

Saint Paul is the second largest city of Reunion Island after Saint Denis, but its surface area is superior since the city extends from the coast to nearly 3000m of altitude. Because of its size and its location, it is a real center of attraction, where many activities are concentrated.

The mayor of Saint-Paul, Huguette BELLO is very committed to the environment and biodiversity. Her commitment has enabled her to have the Constitution amended with an article on "the protection of seas and oceans".

Considered as one of the cradles of the population, the city developed initially thanks to agriculture and trade, while tourism is very present today.

#### **TRANSPORTS**



Served by 16 inter-city bus lines that cover the four corners of the territory



The airport of Reunion Island Roland Garros is located 10 km from Saint-Denis, 51 km from Saint-Gilles and 41 km from Hell-Bourg and Saint-Paul

#### **BIODIVERSITY**

.Biodiversity is exceptional, whether in the reefs, offshore or in the lagoons. It is listed among the 10 main "marine hot spots" of world biodiversity and is composed of more than 150 species of corals, about 3,000 species of mollusks, more than 500 species of crustaceans and 900 fish.

Reunion Island is rich in native flora, which can only be found here. It is an exceptional territory, on which rests a considerable responsibility of conservation of these endemic species. Reunion Island has 871 indigenous vascular plant species, which are certainly full of rare active ingredients that are not yet exploited for our cosmetic and pharmaceutical industries.

#### WORLDWIDE RECOGNITION

Reunion Island has a remarkable natural heritage. International recognition has earned it:

to be one of the 34 hotspots of world biodiversity,

to be included in the top 10 eco-responsible destinations in the world in 2015,

to be listed as a World Heritage Site by UNESCO thanks to its "Pitons, cirques and ramparts" (42% of its territory),

to offer to the visitors a volcano renowned among the most active in the world: the Piton de la Fournaise...

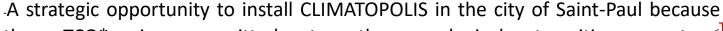












the TCO\* committed to the ecological transition (https://cte.ecologique-solidaire.gouv.fr)

contract The \*Territory Côte Ouest (TCO) is an urban community located in the west of Reunion Island which includes five municipalities: Le Port, La Possession, Saint-Paul, Saint-Leu and Trois-Bassins.

In close collaboration with the TCO, we wish to demonstrate that through action, The three strategic axes defined for the CTE are: the bioclimatic tropical aterritory; the collaborative ecological and solidarity territory; the smart and training and scientific innovation, ecology is a driving force of the economy, decarbonized territory. source of local employment and sustainable jobs.

-Climate action, energy and ecological transition allow the structuring of sectors Several operational projects are already planned: and the development of new training courses, as will be the case in our missions -Develop a university program on climate and ecological action in St Paul (program from fish waste, and the ETC can help structure this sector. under study with the University of Reunion)

Our strategic axes are in line with those of the TCO's CTE program

-A team of experts at Climatopolis on the Green Deal and EMAS (Environmenta Management and Audit Scheme) at the service of companies and territories

The CTE will support the "fertile lands" project - which consists of reconstituting healthy soil with bio-waste - through legal aid and support in the procedures. Other entrepreneurs in the area intend to make fertilizer

To fight against the isolation in terms of energy, the CTE will accompany the experiment that EDF is conducting in Mafate for collective and individual selfconsumption of the most remote homes, with storage and 100% renewable energy. The project will bring electricity to 300 families living in the cirque.

Through the CTE, the Ministry will support the Pôle d'Aménagement et de Construction Durable (PACD) project, a reference and training center in partnership with the Ecole Nationale Supérieure d'Architecture and the University of La Réunion, on how to build sustainably in a tropical environment.

.https://www.tco.re/competences-et-projets/cte-contrat-de-transitionecologique



# CONSTRUCTION PROJECT OF A CLIMATOPOLIS ON A 12 HA LAND





# OUR OFFER FOR REUNION ISLAND

Innovation - environmental protection - citizenship, political communication, employment, economic development



A science technopolis for 50 startups

An engineering school and training courses at all levels in agro-ecology, clean energy, green chemistry, robotics, innovation management, in partnership with universities, training organizations, associations for integration and local scientists

An R&D laboratory, a test center, an aquaponic greenhouse in smart agriculture, and a production workshop for pre-production and valorization of local biomass and co-products

A conference center, an interactive amphitheater, a climate and biodiversity museum on Reunion Island

100 coliving apartments (students and start-ups), a hotel residence, a restaurant, 15 stores and associated services (work and eat next to your home to avoid CO2 emissions)

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An eco-designed complex, a green and intelligent technological showcase an international visibility for Reunion Island and Saint-Paul











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# **OUR MISSIONS FOR THE ISLAND**

**GREEN SMART CITY** 

# CLIMATOPOLIS GROUP

INTERNATIONAL NETWORK OF CLIMATE
INNOVATION SMART CITIES



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# Our integration strategy

Innovation - environmental protection - citizenship, political communication, employment, economic development

Our ambition is to make our Climatopolis the project of the Reunionese, that they identify themselves around our concept so that the population and our teams can work together to set up behaviors and technological solutions respectful of the environment.

- -We are a private structure in SAS that we open to the Reunionese (already 10 farmers and scientists have invested with us to create Climatopolis Reunion Island)
- -A team of farmers from the upper part of the island will manage and pilot our aquaponics and smart-agriculture farm
- -Large spaces for experimentation and innovation will be reserved for any Reunionese citizen who would like to test his know-how or his prototype before creating his company. (insertion workshops and trainings for the benefit of those who are far from employment)
- -We have received strong interest from the representative, scientific, agricultural and academic bodies of Reunion Island to support our establishment on the island
- -Climatopolis Reunion Island will be a reference smart city, an international technological showcase and the center of expertise, innovation and business development of our network, for the entire Indian Ocean
- -We have met with a group of public, associative and private partners so that we can generate a territorial network of skills to work together for the benefit of the island and employment. A Climatopolis scientific committee will be created and led by various representatives of our partners









10 startups already want to benefit from our accelerator model



4 5

## Our model for Reunion Island

**Eco-mobility and ICT-assisted logistics ICT-enabled public services** Clean and green transports **Governance transparency** Real-time traffic information Citizen participation Car sharing or living and working in our Smart City Information and open data **Battery refills for electric vehicles** Social and solidarity economy **Digitalisation and e-business** Richness of the cultural life with our **SMART** climate museum Lifestyle Use of ICT in industries and services **Quality Climatopolis housing that meets Economy** environmental standards (technological showcase **CITY Favored innovation** Social cohesion based on respect for the island's **Creation of companies assisted with local** job creation biodiversity Citizen **Ethnic and social diversity** Renewable energies (Hydrogen, Biomass ...) Fighting against school failure through e-learning Control and reduction of CO2 emissions and on-site environmental training **Renovation of public buildings and spaces** Creativity, workshops and openness to all innovative **Smart-building eco-designed buildings** 

**Circular economy and short circuits** 

**ILE DE LA REUNION** 

**CLIMATOPOLIS** 

4 6

Efficient management of water, waste and energy

## Our scientific offer for Reunion Island

Innovation - environmental protection - citizenship, political communication, employment, economic development

Due to the insularity and a high dregree of endemism, island ecosystems are particularly vulnerable to invasive species which impact all terrestrial and marine biodiversity. Our solutions aim to protect the biodiversity.



- Agroecology
- Waste recovery
- Sustainable management of water
- •Atmospheric water generator
- Smart greenhouses
- Ancient plants
- Protection of the ocean
- Aquaponics
- Biomimicry
- Protection of species
- Fight against invasive species
- Revegetation



- Bio-based chemistry
- •Biomass valorization to produce electricity and for its active ingredients
- Green solvent
- Biodegradable products
- Producing organic fertilizer with biomass



- •Biomass
- •Green hydrogen
- Heat recovery system
- Hybrid solutions
- Onshore wind turbine
- Energy control
- •Kinetic energy recovery system



- •Green Construction
- •Green Architecture
- Tropical green construction
- Biomaterials
- Drone
- Sustainable mobility
- Artificial Intelligence
- Mapping

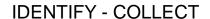




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## Our technical and commercial offer for Reunion Island







TRANSFORM PROCESS



**VALORIZE COMMERCIALIZE** 

# SOCIETAL INTEREST

Creating "responsible" plant chains means allowing the development of active ingredients and quality ingredients that guarantee the security and sustainability of supplies while respecting all local populations.

CLIMATOPOLIS will process on the island and market the products from these sectors internationally.

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## Our technical and commercial offer for Reunion Island

## Bioresources will be identified jointly with our partners

#### **Food - biomolecules**

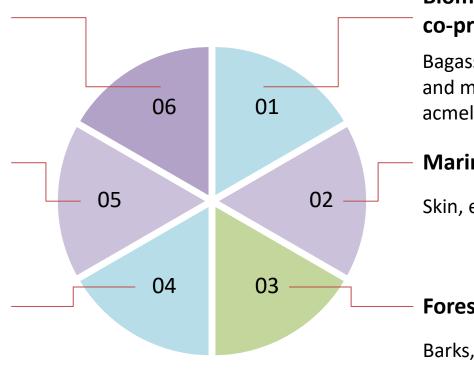
Starch, glycogen, cellulose, proteins, peptides...

#### **Bio-based materials**

Wood, straw, hemp, cellulose wadding, cork, flax, wool, skin etc..

#### **Biowaste**

Various detritus



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# Biomass, agricultural co-product

Bagasse, mango, ananas, litchi, aromatic and medicinal plants, microalgae, vanilla, acmella oleracea...

### Marin biomass, insects...

Skin, edges, insect rearing...

#### Forest and volcano biomass

Barks, sawdust, lava stone...

## Our commercial offer for Reunion Island

Comparision of bio-based solutions

Bio-based solutions can be applied to many sectors and will bring a strong added value to the market of nutraceuticals, cosmetics, pharmaceutics, and the energy transition etc ...

Added value	Market valorization	Applications	Co-products and derivatives
1/7	Agriculture	Soil amendment Limestone Amendment Seeds Protection	Compost Fertilizer Chitin / chitosan
2/7	Energy / Industries	ENR Production Biomatérials Tannery Oenology	Biofalgue Fish paste Industrial grease
3/7	Animal feed	Farming Fish Farming Domestic animals	Fishmeal Fish oil Protein hydrolysates
4/7	Agrifood	Food Gellant – Aroma Thickener – Enzymes Flocculant	Liver Fish oil Gelatin - Enzymes Chitosan – chitin
5/7	Nutraceuticals	Knuckle protection Phospholipid and minerals inputs Omega 3 – Vitamins Alkyglycerol	Marin lecithin Minerals Refined oils Collagen peptides
6/7	Cosmetics	Beauty of the skin, nails and hair Subcutaneous implants	Collagen – elastin Keratin Squalane Nucleic acid derivates
7/7	Pharmaceutics / Biotech	Chemical properties Active ingredients – implants Soft capsules Cultivation	Bioactive peptides Collagen Ģelatin Chitin - chitosan



## SCIENTIFIC PARTNERSHIP STRATEGY

Innovation – protection – environmental citizenship, political communication, employment, economic development

Our desire is to ensure our development through a close partnership between the various scientific and economic structures of the island (research centers, incubators, associations, private partners, researchers and biodiversity actors (farmers, herbalists, medicinal plants...).

The added value must be generated on the island for the benefit of our partners, employment and the environment. Climatopolis is also involved in respecting the principles of gender equality, the women's cause, as well as ethnic and cultural wealth.



#### Example of an active technology partnership for the profit of biodiversity

The Association ARBRE aims to contribute to the monitoring, the follow-up, the enhancement of the biodiversity (marine and terrestrial) of Reunion Island and the Indian Ocean and to communicate the results at the scientific and educational level.

Administered by a female team of 4 scientists, (Natacha Niolic (President), Estelle Crochelet (Vice-president), Melthide Sinama (Treasurer), Amandine Marie (Secretary), the association ARBRE Reunion has for purpose the study and protection of nature.

It allows to gather the necessary knowledge for the elaboration of the regional scheme of ecological coherence. Since 2020, the association has the approval of environmental protection. The association currently has 25 members, with varied profiles: researcher, lecturer, marine biologist, artist, landscape designer, consultant, lawyer, naturalist, etc.

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As administrator of Climatopolis, Estelle Crochelet will represent ARBRE on our Scientific Committee.

In order to accelerate the innovation process of the ARBRE association and of our startups, and in order to spread throughout the Indian Ocean, Climatopolis will make the necessary investments in R&D and operational equipment (underwater drones, laboratories, pumps, etc.) and will finance 2 researchers for a total cost of €450k over 3 years.







## POSITIVE IMPACTS FOR REUNION ISLAND

800 to 1000 JOBS created over 5 years - 92 M€ invested - 15000 visitors / year - 100 M€ of turnover / year + Impact of Tourism



## 800 JOBS OVER 5 YEARS

100 jobs (Team Climatopolis)500 jobs (Startups team)200 jobs created indirectly



## 92 M€ invested

For the construction of our Smart city and to fund startups



# 15000 visitors / year

Congress centre, business meetings, show room, Climate Museum



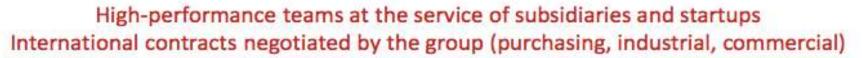
# 200 M€ / year within 5 years

Generated by the startups and the Climapotolis complex + Tourism activities

## **OUR SERVICES TO** SUBSIDIARIES AND THEIR **STARTUPS**







#### **R&D Services**

- 20 scientists and engineers
- •Project management of the climatopolis glassaurepwockassistartups
- Olivier Camp R&D accelerator model
- Industrial synergies
- •Prototypes and pre-series
- .Patents
- •Training

### Sourcing services

- Supplier sourcing
- International payment security
- International legal service
- Delivery service
- Negotiation of international contracts

### Sales & Marketing services

- Customer acquisition strategy
- Industrial design and cultural marketing
- •International catalog of our startups' prod
- Technical partnership with large companie Climatopolis Trade Network (30 sales en
  - •Training

**SUBSIDIARIES AND STARTUPS** 

## CLIMATOPOLIS GREEN SAFE LABEL

Issued by Climatopolis Group, this is the first worldwide label that certifies that the audited company is a guarantor of the environment and of actions to fight against climate change, as a complement of the EMAS environmental management and audit system, a tool for the continuous improvement of environmental performance (EU certification).

### Advantages for the company:

•A competitive advantage, a source of differentiation from competitors worldwide..

A guarantee of quality, credibility and trust, enhancing the value of both the company and the brand among customers and employees.

Promotes the improvement of internal processes and proves the company's commitment to the values of the Climatopolis charter.

Increases employees' sense of belonging and enhances the employer brand.



### DEVELOPMENT PLANING 2021 - 2023

#### **OUR SMART CITY INAUGURATION**

Launch of all activities

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#### **CONSTRUCTION OF OUR SMART CITY**

After obtaining the building permit, we will start our construction site with the launch of the AO on certain lots. Our will is to avoid importing a maximum of products and to use 100 % virtuous solutions for our environment

**END OF 2023** 

**MARCH 2022** 

#### FINANCING ORGANISING ACCELERATING

After receiving funding for the island, the launch of our startup activities (rented on approximately 1000 m2) + training offer + certification offer

**JUNE 2021** 

## **OUR GOALS**

To make CLIMATOPOLIS REUNION ISLAND a center of competence, Green Safe / EMAS certifications, and innovations in GREEN TECHNOLOGIES for the whole Indian Ocean.



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## Why is it important to develop CLIMATOPOLIS brand and label around the world?



Expanding Climatopolis brand will accelerate innovation for the benefit of our planet and the business development of our network of startups around the world.

The more Climatopolis we open around the world, the more it will accelerate the potential for innovation and value creation, as our network of startups will become powerful and effective through our acceleration models.

In order to sell the solutions of our startups which will have a positive impact on the environment and people, we need to create consumer brands with variations in several sectors of activity, supported by an e-commerce site and our international label.

The adherence to the Climatopolis concept by the general public is essential, so that our actions have a positive impact on the environment. Each member must identify with our brand, our values, our charter, thanks to the virtuous solutions of our global network of startups and the products in our range.







## THE INFRASTRUCTURES

**GREEN SMART CITY** 

# CLIMATOPOLIS GROUP

INTERNATIONAL NETWORK OF CLIMATE
INNOVATION SMART CITIES



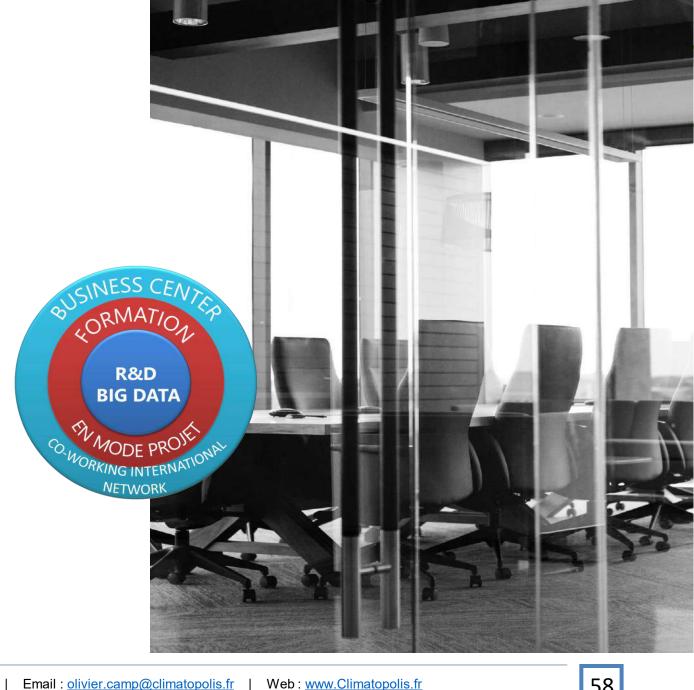
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## **BUSINESS CENTER ACCELERATOR** WITH COWORKING SPACES



- •On-demand services with shared costs, based on a set of solutions (funding of Startups, market study, business plan and business model, pre-industrialization workshop, engineering, R&D, communication, trainings, accelerator)
- •Business lounges and equipped offices (hourly, monthly, yearly rental)
- Meeting rooms, (hourly rental)





#### **Research and Development Laboratory**



A FULLY EQUIPPED LABORATORY TO FOSTER INNOVATION AND SYNERGIES BETWEEN TECHNOLOGICAL BRICKS

•Laboratory material for green chemistry (paillasse, spectrometers, dessiccateurs, réacteurs, centrifuges...)

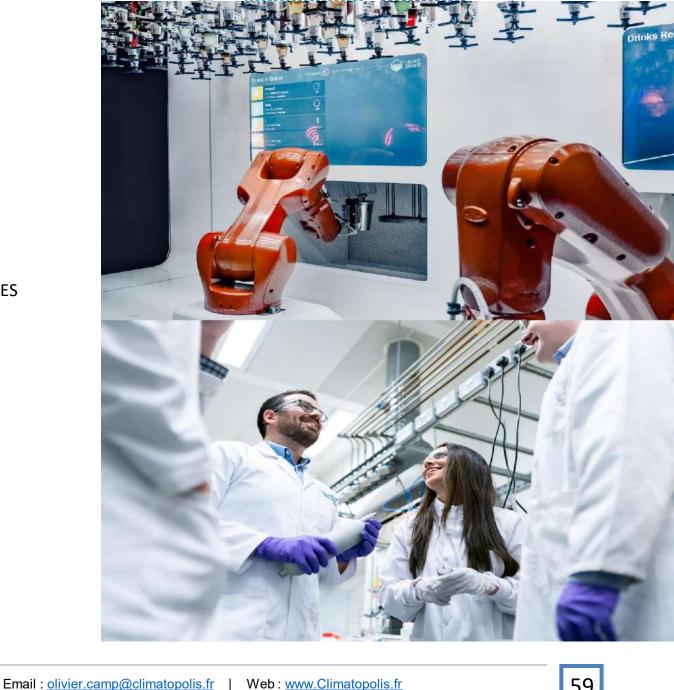
•Clean rooms

•Computers and specialized softwares for Artificial intelligence, project management, industrial design)

•3D printers

•Electronics and robotics workshops for the ENR section, drones

•Test center for prototypes and air zone for drones



# AN ENGINEERING SCHOOL AND A BIOCLIMATIC TRAINING CENTER



- •Training programs based on market needs and projects identified within our startups, in all areas of the environment.
- Online interactive programs (MOOCs)
- •State-approved private training and professionalization programs developing innovative concepts.
- •OPTIMIZING OUR TRAINING PROGRAMS TO SERVE THE NEEDS OF THE MARKET, THOSE OF OUR STARTUPS, AND TO TRAIN FUTURE STARTUPS
- •Providing expertise through engineering degrees or certifications
- •Identify customer projects and create a short-term response
- •Fostering the development of cross-functional projects and innovation
- Detect and improve talent
- •File patents and create new startups



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# PROJECT-BASED TRAINING TO ACCELERATE STARTUPS AND DISRUPTIVE INNOVATIONS



- •Selection of international teaching experts to intervene at the Climatopolis Academy based on their expertise and training curricula adapted to the needs of our startups.
- •Organized in project mode, all of our courses allow the technologist trained with the Olivier Camp methodology, to accelerate the process of fundamental research, innovation and the marketing of virtuous solutions for our planet.
- •At all levels of education, we deliver qualifying or certifying training in the following fields



Renewable energies, energy storage



Green chemistry, agroecology, biomass valorization



Autonomous robotics applied to the environment and disability



Big Data, digital



Artificial intelligence, project engineering, innovation management

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# EDUCATION AND AWARENESS OF THE CLIMATE CAUSE THROUGH SOCIAL AND CREATIVE WORKSHOPS



## APPRENTICESHIP FOR THE MOST DISADVANTAGED, PROJECT LEADERS AND YOUNG PEOPLE IN SCHOOL FAILURE

- •Upgrading training by mobilizing young people in school failure around the climate cause
- •Discovering and assisting talents that could be expressed during our socializing and qualifying trainings
- •To bring out good practices around ecology and the protection of the island's biodiversity
- •To support all those who are in school failure or unemployed, to accompany them in the expression of qualifying projects or the creation of green businesses
- •Large spaces of experimentation and innovation will be reserved for any citizen of Reunion Island who would like to test his know-how or his prototype before the creation of his company. Our support will include all profiles in order to generate more skills and knowledge for the benefit of the environment.









#### **BIODIVERSITY GARDENING**

- •Creation of gardens, beehives and insect hotels to access current scientific knowledge and provide instructions for combining biodiversity in our gardens.
- •Development of biodiversity cells to make them compatible for wild flora and fauna without distinction of species, genera or families. They should benefit from all the advances in ecological engineering in order to be havens conducive to the spread of biodiversity.
- •Development of green spaces of biodiversity in Reunion in order to create a collective and intergenerational scientific adventure, to involve the elders in the transmission of their ancestral cultivation methods to the younger ones.
- •Scientific research requires objective, reliable and numerous measures to build new knowledge. Observation and identification protocols, that can be used by the greatest number of people, have been created. Our plots can become suitable sampling sites. Each gardener will have the pride of being a link in this gardening chain.
- •A great challenge for the youngest in school difficulties or those who are far from employment, to acquire useful skills thus favoring their insertion in the professions of tomorrow around the agroecology.
- •We will provide schools with working spaces with access to our research and development sites, to encourage vocations in the environmental sector





# PRODUCTION UNIT BIOMASS VALORIZATION

•Installation of a biomass plant that will recycle each year about 5,000 tons of plant waste from the island to transform them into raw materials for industry (cosmetics, pharmaceuticals, flavor enhancers, natural dyes etc..)



#### Advantages:

- •Local employment from BEP to BAC+5 (collection, transport, production, packaging, sales)
- •Circular economy: short circuits and the added value remains on the island
- Valorization of invasive species

#### Equipment:

- Latest generation photovoltaic solar solutions
- •Tri-generation systems that will be able to provide steam, hot water, cold water and electricity to cover 100% of the energy needs for the manufacturing and packaging of products
- Carbon neutral footprint
- •No noise pollution or emissions
- •30% of the electricity produced will be redistributed in the Climatopolis complex
- •Surface area of the recovery unit 1500 m2
- .Investment cost: 5 M€



## **800** SEATS

### **INTERACTIVE AMPHITHEATRE**



- Congress center
- Conferences
- Business
- Seminars
- Events
- Amphitheatre for the engineering school
- Projection room for the Climate Museum

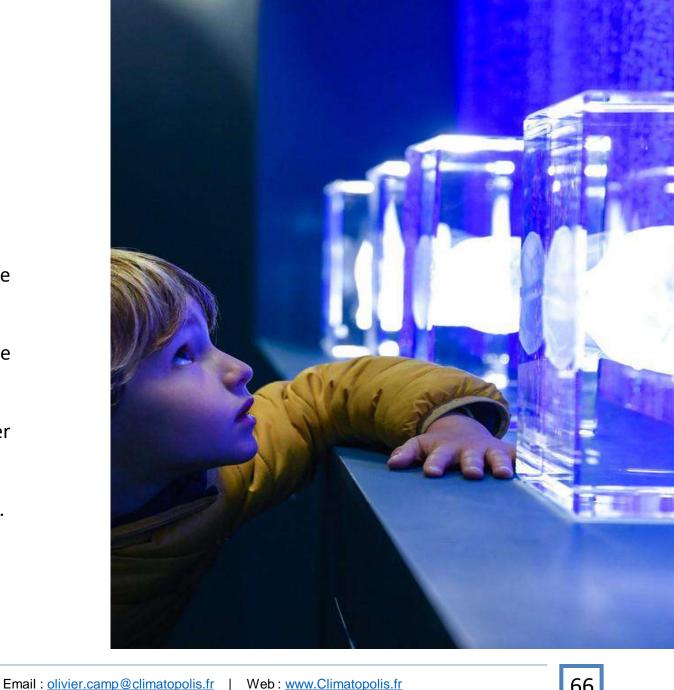




### INTERACTIVE CLIMATE **MUSEUM**



- •Exhibits of old weather service equipment, screens to observe the main climate changes and interactive simulators.
- •Entertainment around sustainability to understand in depth the changes and impacts of global warming on our planet,
- •A drone workshop to learn how to use drones for weather services and the agricultural sector.
- •Leisure and professional simulators for initiations and trainings.
- Creative workshops on climate and biodiversity





# TEST CENTER AND AIR ZONE FOR DRONES



# Dedicated area to allow specialized startups:



In renewable energies to test their solar and wind prototypes, etc.



In autonomous robotics to test their innovations in the aerial drone, the terrestrial drone, the drone of urban and aquatic mobility

Allows visitors to observe drone piloting tests and various prototypes





#### **SMART FARMING**

- •Energy autonomy through hybridization (biomass, solar, wind, hydrogen..)
- Organic market gardening,
   floriculture or fish farming:
   aeroponic and aquaponic techniques
- Specialty crops valorization of coproducts
- •Automated control by drones and artificial intelligence
- •Unlimited production 24 hours a day, 360 days a year, without depending on weather conditions
- •Agricultural yields 15 to 20 times higher than traditional crops
- •No chemical inputs natural amendments

- •Water consumption reduced by 90% compared to traditional cultures.
- •Entirely modular, our greenhouses offer zones with different climates while respecting the biodiversity of the crops.
- •Unequalled prophylactic solutions, guaranteeing 100% healthy products, free of viruses and bacteria (an opportunity in the context of health risks such as Covid19)
- •Adaptable to all environments, even extreme ones (desert, polar cold, etc.)

Email: olivier.camp@climatopolis.fr



Web: www.Climatopolis.fr

An exceptional commercial relay for farmers



#### **SOLAR CARPORTS**



- Allows visitors to protect their cars from the sun
- Reduces the intensive use of the air conditioner when leaving the parking lot and thus reduces the ecological impact
- Generates a positive image involved in the energy transition
- Resale of the energy produced to EDF with a guaranteed contract over 20 years



PHOTOVOLTAIC SHEDS 600m2 hangars will be installed in the area intended for drone piloting tests. They will supply the test center for aerial, terrestrial and aquatic drones as well as for renewable energy solutions.







#### **APPLICATIONS**

- Bicycle path, greenway, trail
- Secondary street and alley
- •Campsite, caravan park
- Driveway in residential area
- Square
- Public garden
- Private area

#### **BENEFITS**

- •0€ electricity bill
- •0€ of trenching
- •0€ of wiring
- •0€ of connection
- No CO2 emissions
- •100% autonomous



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Autonomous solar street lighting and street furniture that will light the squares and streets of the site and its 1000 homes

LED lights, street lamps and lampposts total energy autonomy.

Applications related to telecoms, and monitoring: signage billboards, wifi terminal, 3G relay, video surveillance, webcam ...



### VERTIPORT SUSTAINABLE MOBILITY



A vertiport will be installed to meet the evolving uses of drone cabs or autonomous drones and to comply with regional policies and political projects desired by President Macron and the European Union (sustainable mobility).







# A large and spacious showroom To hold exhibitions and several events...





### LIVING AND WORKING ON CLIMATOPOLIS CAMPUS TO SAVE TIME AND AVOID CO2 **EMISSIONS**

- •90m² houses
- •25 m<sup>2</sup> studios
- •50 m<sup>2</sup> furnished appartment
- •24h/24 concierge services



And coliving spaces

Ecocapsule® is smart, self-sustainable micro-unit, which utilizes solar and wind energy. It allows you to stay in remote places out of reach of infrastructure, with the luxury of a hotel room. Ecocapsule® is your design way to independent living. It can become a cottage, pop-up hotel, mobile office, research station or anything you want it to be. We have engineered the product from scratch to be as self-sufficient, practical and functional as possible.





**ILE DE LA REUNION** 

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## **A Luxurious Hotel**

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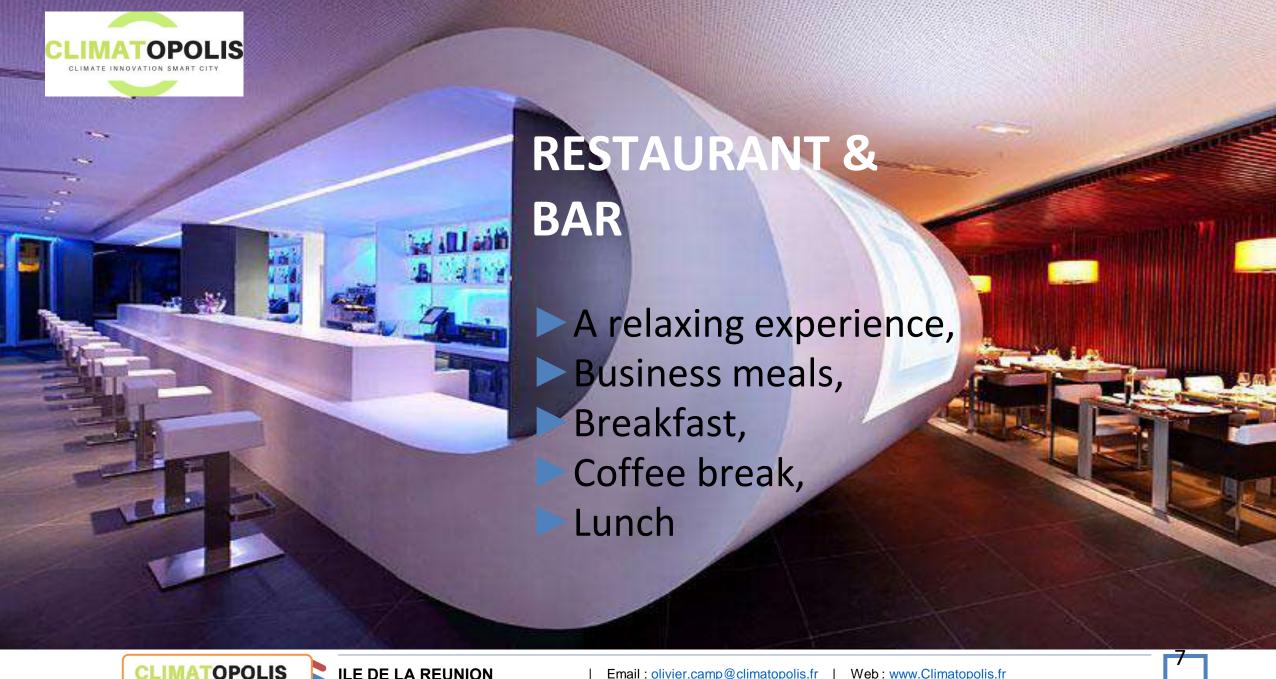
## A service residence

**A Fitness center** 



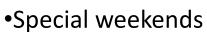








- •A " Lounge " restaurant with a landscaped garden and a fish pond
- •For a breakfast or a business meal with a breathtaking view of the ocean from the heights of Saint-Paul.
- •In the evening, wine bar, tapas, grilled meat.
- •Music, mini-concerts, themed evenings and, cocktails
- •A fitness trail through our woods and picnics organized with our products





# **PARTNERS**

# CLIMATOPOLIS GROUP

INTERNATIONAL NETWORK OF CLIMATE
INNOVATION SMART CITIES



**ILE DE LA REUNION** 

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## Many International Organisations support our actions







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# **Partners**











partenaire du développement



EU Network of U-space Demonstrators Smart Cities & Defense ceo@dronethinkdo.eu - Twitter @DroneThinkDo - www.dronethinkdo.eu

















HUAWEI

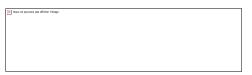


















# **Partners**







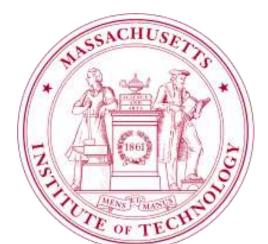




MISSION OF

**EUROPEAN UNION** 































Chris Delhaye and Ambassador China in Belgium

Head of Airbus Vahana Program U

# A strong international network

P EU Commission Maros Sefkovic Brussels 2019

ENTERPRISE IRELAND



JC Robert Delhaye & Directeur Interpo anti-terrorisme EU

**Prince Albert II of Monaco** 







European Investment Bank







# **Partners**

































Center of Applied Aeronautical Research Future. Created in Hamburg.





























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