

### "Out of this world" opportunities

First Centre of Excellence for Microgravity Research, Training and Education, jumpstarting the era of Space Economy, with innovative tourism and bio-med research opportunities for Sub-Saharan Africa

€25M equity for the first phase, cofunding up to phase 4 (see below) in the Republic of Mauritius for an R.O.I. over 400%. The Space Industry has had unprecedented growth since access to Space was opened to the public sector a decade ago. Private companies such as Space-X, Blue Origin, Virgin Galactic, Sierra Nevada, are racing to build the first commercial spacecrafts and habitats for the Moon and Mars and setting milestones in Space Tourism entirely operated by the private sector.

The demand for satellite launch services, weightless bio-manufacturing, pharma, life and material science R&D is growing, while new frontiers are opening for asteroid mining, satellite retrieval, space tourism and even Mars colonization.

This document illustrates our vision and the road map to take Mauritius into Space Age and open its doors to the nearing half-trillion dollar Space Industry.

### I. Mauritius: an undeniable asset for new ventures

SpaceLand Africa Ltd. aims to install a multi-use Space Centre in Mauritius, featuring ground-breaking facilities for low-gravity experiences for everyone, acting as a tourist attraction and a major hub for space training and exploration, evolving with the upcoming technology and proposing new opportunities for services to the Space industry and the future of STEM (Science, Technology, Engineering, Medicine), as they become available.

SpaceLand will open the doors of space travel to the general public, through a future-facing urban eco-system, including a theme park offering a range of experiences from astronaut training to microgravity and suborbital flights. In parallel, SpaceLand will use NASA-certified flight vehicles and commercial spacecrafts to cater for valuable services such as orbital satellites and space debris decommissioning, microgravity STEM education, support to development and on-board operations of pharmaceutical, bioscience and material science research, training aerospace tourists and astronauts for the International Space Station and future orbital programs including first settlements on the Moon and Mars.



#### **Overview of Benefits on Mauritius**

- Qualified workforce: people in Mauritius receive an international, multi-lingual and cultured education and have the ability to work collaboratively and efficiently, in a "service oriented" scheme.
- Political and economic stability: a fast growing economy based diversification (industrial, financial and tourism), modern IT infrastructures and tax benefits.

## II. Roadmap: 6 phases

#### 1) The Spaceland City

SpaceLand starts with building a green "Smart City" hosting Space-related, high-tech R&D and test activities. Built along the post-COVID-19 Work&Live concept, using bio-solutions for eco-sustainable Near-Zero-Energy-Buildings (NZEB), the City will host labs, offices, restaurants and living spaces for Space-tech operators and Microgravity STEM (Science, Tech, Engineering, Medicine) users; designed by Italian architects with the same Space-Habitat ISRU technologies (In-Situ-Resources-Utilization) planned for Mars and the Moon, applicable to new habitations in Africa.

#### 2) The SpaceLand Centre

Aside the SpaceLand City, a complex will be built on the model of NASA's first human settlement on Mars. It will cover two acres, offering dozens of ad-hoc facilities for STEM education, aerospace tourism and astronaut training. Visitors can experience a fully fledged astronaut-like "day package", or even obtain flight qualification after a course. With a capacity for over 150,000 visitors/year, up to 200,000 in peak periods, its users can enjoy a pleasant family experience all year long, at affordable prices.

#### 3) Professional Training

The centre hosts installations for zero-gravity STEM innovators and professional astronaut training. For over 20 years SpaceLand's senior staff have been preparing hardware and crew on behalf of ESA and scientific institutes, including Nobel-Prize-winners, and will continue doing so in all their centres. Invited to characterize a local university with courses in Space Engineering, Astronautics, Zero-G STEM, it opens opportunities for Mauritian students seeking a career in such fields.

#### 4) Microgravity Flights

SpaceLand will offer the general public, professional astronauts and research scientists, the opportunity of flying in microgravity, including zero-G, Lunar and Mars simulated gravity. The flights will be operated on specially modified jetliners, on wet lease from the US, once or twice monthly, depending on demand. They will also prepare payloads for United Nations flight opportunities.

#### 5) Suborbital and Space flights

Several companies are working at providing spacecrafts aimed at bringing ordinary people and STEM innovators into space. As soon as such spaceplanes become available, within a couple of years, SpaceLand will organize flight opportunities for space tourism, science research and training, as well as commercial activities such as satellite launching/retrieval, space station services and so on.

#### 6) From Airport to Spaceport

In order to qualify for landing spacecrafts, Mauritius must convert the airport into a spaceport. This conversion is merely a techno-administrative procedure, hinging on SSR Int'l already featuring most of the required technical and logistic capabilities. SpaceLand has already been granted a license by the USA Government to proceed with the spaceport certification process.











# III. Social impact in Mauritius

### Increasing Mauritian economy dynamics, diversifying its portfolio and unique image

- Estimated to attract at least 110,000 more tourists per year, contributing to GDP
- According to Florida's statistics on similar past events, the spaceport will double the number of tourists
- Create directly and indirectly more than 4,000 jobs
- Diversifying the Mauritian skills set with newly acquired know-how in STEM and Aerospace

### IV. Attract additional developments

 Adjacent developments of villas, commercial centers and amenities based on newly designed ISRU (In-Situ-Resources-Utilization) Near-Zero-Energy Buildings, for an unprecedented Circular Bio-Economy inspired by future colonies on Mars and adapting planetary exploration technologies. Maximum utilization of sugar cane by-products and waste, local ferricrite and pozzolan soils.

# V. A dedicated and experienced "Space-oriented" team with international recognition

– **Carlo Vibert**i (Carlo Viberti (iafastro.org))

NASA/ESA weightless research flight veteran, Italian Space Agency's nominee for first sub-orbital research mission

– Xie Gengxin

Deputy President of Center of Space Exploration - Ministry of Education of the People's Republic of China, Chief Designer of first biological experiment on the dark side of the Moon (space mission Chang'e 4 - 2019)

- Silvano De Gennaro

Former Creative Director of CERN (Geneva, CH), headed several international techno-science research and outreach programs.

– Nandu Goswami

Professor at the Institute of Physiology, Medical University of Graz (Austria), Head of research on similarities between astronauts and elderly in the areas of cardiovascular physiology and cerebral autoregulation

– Marco Brizio

Aeronautical and business development expert

– Celeste Petraroli

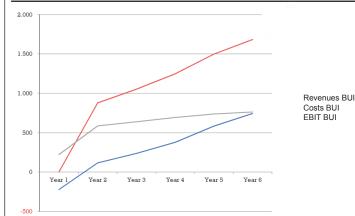
Project architect, frm. Design Supervisor of buildings for all international mass media at the Olympic Games, Member of State Architects Council – *Walter Ceretto* 

Professor of Structural Engineering, Polytechnical University of Torino, Lead designer of high-tech projects e.g. Jesus Christ's Holy Shroud Chapel

## VI. Investment timeline

First installment +	-6 months +6 r	nonths April 2	April 2024	
PHASE 1	PHASE 2	PHASE 3	PHASE 4	
SL Centre € 10 M	Microgravity flights €2 M	SL City € 32 M	Spaceport operations	

## VII. Financial highlights



ROI at 6 years: 400%



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