

2020

**Rubis Mécénat**

# **NDAO HANAVAO**

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Innovation and creation laboratory  
for social design

Madagascar

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WITH VITOGAZ MADAGASCAR

# Innovation and creation laboratory for social design in Antananarivo, Madagascar

*Ndao Hanavao* (Let's Innovate) is a local initiative launched in 2018 by Rubis Mécénat in association with Vitogaz Madagascar (a Rubis Group subsidiary) in Antananarivo, Madagascar.

*Ndao Hanavao* is an innovation and creation laboratory set up by guest designers and young vocational trainees with artisans, engineers and local stakeholders. It strives to find viable long-term solutions focused on object design to the social problems facing the population in Madagascar living in insecurity.

For its first edition, *Ndao Hanavao* invited in 2018 The Polyfloss Factory, represented by French designers Christophe Machet and Émile de Visscher, to establish and develop their Polyfloss machine concept in Antananarivo, in order to set up an ongoing incubation, experimentation and training laboratory aimed at the transformation of plastic waste, a major local issue.

The Polyfloss Factory is an innovative plastic recycling process which draws its inspiration from candyfloss. It produces a flexible wool which can be used in different ways as a thermal insulator, as packaging, for decorative items, and also for textile/artisan purposes, moulding, and creating design pieces.



All year long, the *Ndao Hanavao* laboratory hosts six young Malagasy trainees from disadvantaged areas of Antananarivo in order to accompany them in the development of collaborative and commercial initiatives with local craftspeople, with the Polyfloss wool.

In addition, the project invites artists and designers interested in experimenting with the Polyfloss wool produced in the laboratory.

*Ndao Hanavao* was developed with Benjamin Loyauté, project curator. It is led locally by Carine Ratovonarivo, designer and project coordinator and Camille de Roffignac, project manager.

## SOCIAL DESIGN

Confronted by exponential growth in the object design market and dwindling global resources, a rising number of designers are exploring increasingly specialist activities. These designers are addressing environmental, political, social and humanitarian issues in order to offer a practical response to contemporary problems. They are tackling change in a globalised world by inventing new types of progress and designing forward-looking and tailored solutions to environmental challenges in particular. This process had no formal definition for some time, but has now been dubbed 'social design'.

**Benjamin Loyauté**, *Ndao Hanavao* project curator

Workshop with  
The Polyfloss Factory,  
*Ndao Hanavao*  
laboratory,  
Antananarivo, 2019

# News 2020

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## ≡ March - November 2020

### **Collaboration with American designer Nicole Stjernswärd, KAIKU Living Color**

Researches and implementation  
of a sustainable process to colour the Polyfloss wool  
with natural pigments from Madagascar

## ≡ March and November 2020

### **Workshops with The Polyfloss Factory**

With French and British designers Audrey Gaulard,  
Nick Paget, Christophe Machet and Émile de Visscher  
Conception of design objects and everyday objects  
for the local market with the Polyfloss wool

## ≡ June 2020

### **Launch of the *Ndao Hanavao* designers' company and pop-up shop at Ravinala airport Antananarivo, Madagascar**

Creation of the R'Art Plast company by the young designers  
of the project and sale of the objects designed in the  
laboratory at the new craft market of Ravinala airport

## ≡ 02 July – 31 October 2020

### **Support to the exhibition «Brise du rouge soleil» by Malagasy artist Joël Andrianomearisoa Aigues-Mortes, France**

Exhibition of the artworks made in Polyfloss wool  
and created by Joël Andrianomearisoa in collaboration  
with the *Ndao Hanavao* Lab and its young designers,  
on the occasion of his solo show presented by the Centre des  
monuments nationaux in association with Rubis Mécénat,  
within the frame of the Africa2020 Season

## ≡ September 2020

### **Workshop with French artist Benjamin Loyauté**

Design of good-luck amulets inspired by Malagasy traditions,  
to be sold on the local market

Creation of an artwork based on the artist's researches  
on Entada seeds, made with the Polyfloss wools

## ≡ September 2020

### **Workshop with French designer Laureline Galliot**

Design of a carpet made with the Polyfloss wool,  
based on the researches carried out by the designer during  
her first visit at the *Ndao Hanavao* Lab in 2019

## ≡ October 2020

### **Workshop with Malagasy eco-designer Carine Ratovonarivo**

Design of objects related to local issues and researches  
on the link between collective memory and Malagasy  
traditional craftsmanship

## ≡ December 2020

### **Events, exhibitions and launch of the book 'Ndao Hanavao'**

#### **Antananarivo, Madagascar**

Pop-up shops, sale of objects made with the Polyfloss wool,  
panel discussions, presentation of the Lab's activities

Launch of the book 'Ndao Hanavao'  
published by Rubis Mécénat

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### ≡ Throughout the year

The six participants receive professional training and introduction to design courses with Carine Ratovonarivo, Malagasy eco-designer, remedial classes in French with the Alliance française and entrepreneurship training with the Madagascar Entreprise Développement programme offered by the IECD (European Institute for Cooperation and Development)

In parallel, the trainees are encouraged to develop the Polyfloss process at the Lab and to experiment with the wool produced on site. There are accompanied each week by Carine Ratovonarivo and a workshop manager in charge of the production of the Polyfloss wool, and are assisted by life coach Mash Manjaka

In 2020, new trainings are offered in partnership with the IECD to strengthen the young designers' ability to complete their commercial structure and launch the distribution of the Polyfloss wool and objects on the local market in a sustainable way



Opposite:  
Workshop with  
Laureline Galliot  
Ndao Hanavao  
laboratory,  
Antananarivo, 2019

Workshop  
with The Polyfloss  
Factory,  
Ndao Hanavao  
laboratory,  
Antananarivo, 2019

# Context

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## **NDAO HANAVALO, AN ONGOING SOCIO-CULTURAL PROGRAMME UNDERTAKEN BY RUBIS MÉCÉNAT**

Within the context of its support to contemporary art, Rubis Mécénat aims to develop lasting social art initiatives with the Group's subsidiaries as a way of getting involved in the local communities and positioning itself as a social and cultural player in addition to the economic role the company plays within the countries.

Three socio-cultural programmes exist today: the photography project *Of Soul and Joy*, in South Africa (since 2012), the *InPulse* Art Project in Jamaica (since 2015) and the social design project *Ndao Hanavao*, an innovation and creation laboratory for social design in Madagascar (since 2018).

These educational programmes work as creative platforms at the heart of local communities by offering to young people in reintegration workshops led by recognised artists and general educational support so that they can acquire academic and artistic skills.

Rubis Mécénat's commitment creates strong links of solidarity and trust. By going as close as possible towards those that are the furthest away from contemporary art, Rubis Mécénat reaffirms its belief in its educational and societal virtues. It does not only reach out to students, it also encourages the local community to enter into an active discourse around the visual arts and design.

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*In Madagascar, over 1.5 million children are not in education, or left school after the first three years. In order to mitigate inequality, a number of third sector associations and NGOs are working to get them back into the classroom or into employment. The Rubis Group, and its subsidiaries Vitogaz Madagascar and Galana, are already working in the country, supporting the Graines de Bitume association in Antananarivo and the Toamasina primary school in Tamatave. In order to provide more active support, Rubis Mécénat decided in 2018, along with Vitogaz Madagascar, to set up a social design training programme for young Malagasy adults.*

Lorraine Gobin, Managing Director, Rubis Mécénat

FOR ITS 1<sup>ST</sup> EDITION, *NDAO HANAVALO* INVITES THE POLYFLOSS FACTORY TO IMPLEMENT ITS INNOVATIVE PLASTIC RECYCLING PROCESS IN MADAGASCAR

## The Polyfloss Factory

The Polyfloss Factory project was developed at the Royal College of Art in London in 2011. The team, composed of Audrey Gaulard (textile and robotic designer), Nick Paget (industrial designer), Christophe Machet (mechanical systems engineer and designer) and Émile De Visscher (materials science engineer and designer), was exploring ecological issues and decided to devise a process for recycling plastic at a local level. After conducting various tests, the designers discovered that one of the interesting features of plastic was that it could form foam – a property which is difficult to achieve with any other everyday material. They therefore decided to produce foam from recycled plastic using a method similar to candy floss making.

## The Polyfloss Factory in Madagascar

In 2018, *Ndao Hanavao* invited The Polyfloss Factory, represented by French designers Christophe Machet and Émile de Visscher, to establish and develop their Polyfloss machine concept in Antananarivo, in order to set up an ongoing incubation, experimentation and training laboratory aimed at the transformation of plastic waste, a major local issue. In 2019, Audrey Gaulard and Nick Paget joined the adventure.

*Madagascar is one of the countries with the most abundant raw materials. And yet, it would appear that its inhabitants no longer have access to them. They are sold overseas. Plastic, on the other hand, comes into the country and never leaves. Madagascar is being emptied of all of its wealth and filled with plastics. What can we do to change the situation? How can this material be turned into a new resource that fits in with craft skills and the Malagasy identity? This is what the Ndao Hanavao project sets out to achieve.*

Émile de Visscher, designer, The Polyfloss Factory



Opposite:  
Setting up  
of the plastic  
collection  
network with The  
Polyfloss Factory,  
Antananarivo, 2018

Below:  
Turning plastic  
into wool with  
the Polyfloss  
machine, *Ndao  
Hanavao* laboratory,  
Antananarivo, 2019



Above:  
Production of the  
Polyfloss wool,  
*Ndao Hanavao*  
laboratory,  
Antananarivo, 2019

Opposite:  
Spinning  
of the Polyfloss wool,  
*Ndao Hanavao*  
laboratory,  
Antananarivo, 2019



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Plastic waste collected from the waste dumps of Antananarivo and sorted by a network of collectors then enters the production phase in the workshop set up by the two guest designers and young trainees, where the recycled plastic is transformed into finished products such as design pieces and staple items. The plastic is also sold in the form of panels, wool, rolls of felt, etc. as a building material and as a raw material for local crafts.

*By inviting two inventors to transplant and adapt their Polyfloss Factory, which offers a new recycling process for plastics on a human scale, Rubis Mécénat aims to provide the starting point for the project Ndao Hanavao. From dream to tangible initiative, from initial resolve to powerful reality, the project designs waste recycling solutions for making essential commodities and creative items, offering ‘a short economic cycle aimed at and led by Malagasy people, which is sustainable for the long-term’. Émile De Visscher and Christophe Machet are addressing the issue of tools for emancipation. The Ndao Hanavao laboratory is hosting The Polyfloss Factory to launch an approach to fabrication based on the premise that waste is a significant resource in the city and that it is essential to treat it locally.*

**Benjamin Loyauté**, Ndao Hanavao project curator

Excerpt from the text ‘The Power of Initiative’, 2019

[Read the whole text here](#)

Opposite:  
The Polyfloss  
Factory team,  
from left to right: Nick  
Paget, Audrey Gaulard,  
Émile de Visscher,  
Christophe Machet,  
Antananarivo, 2019



**Nick Paget** is an industrial designer and the creative director of Instrument Industries and one of the founders of the Polyfloss Factory. He is also a visiting lecturer at the Royal College of Art IDE program and Central Saint Martins, where he teaches Industrial Design for enterprise, working with students to develop creative ideas, and develop a strategy for getting those ideas to market.

**Audrey Gaulard** is a hybrid designer. She has been able to seamlessly adapt her skills to completely different disciplines and groups of people, having always something in common, the creation of innovative concepts, products and ideas. From her experiences in fashion ‘haute couture’ and with The Polyfloss Factory, she has been developing a strong expertise in several fields: sustainability, technology, design, fashion, engineering and management.

**Émile de Visscher** is an engineer (Université de Technologie de Compiègne, 2009) and designer (Royal College of Art, 2012), and holds a PhD in design (Paris Sciences et Lettres, 2018). He works in the fabrication and new materials field, exploring alternative production environments involving cooperative working, skills development, short-cycle manufacturing, and ecological awareness. He is also founder and editor of an independent design journal, *Obliquite*.

**Christophe Machet** is a designer and engineer. He is graduated from ECAL (Lausanne University of Art and Design) and the Royal College of Art (MA 2012). He set up his own studio in 2014 and co-founded The Polyfloss Factory in 2012. He soon became aware of climate change and adopted a cross-cutting approach to design, using technology to offer solutions to environmental challenges while constantly striving to introduce a note of fun and positivity.



Prototype bag made with Polyfloss wool dyed with curry powder, *Ndao Hanavao* laboratory, Antananarivo, 2019



Opposite top: Workshop with Laureline Galliot, *Ndao Hanavao* laboratory, Antananarivo, 2019

Bottom: Workshop with The Polyfloss Factory, *Ndao Hanavao* laboratory, Antananarivo, 2019



# Collaborations with guest artists and designers

## Joël Andrianomearisoa 2019 - 2020

### Malagasy artist

In 2019 and 2020, Joël Andrianomearisoa led several workshops with the *Ndao Hanavao* young trainees and created original artworks with the Polyfloss wool produced on site. These artworks will be presented for the first time at the exhibition «Brise du rouge soleil» in Aigues-Mortes, France, from 02 July to 31 October 2020, through an installation of 4 pieces made with the Polyfloss wool, of which 3 were acquired by Rubis Mécénat for its collection.

Born in 1977 in Antananarivo, Madagascar, Joël Andrianomearisoa lives and works between Paris and Antananarivo. He is a graduate from the École Spéciale d'Architecture in Paris, and his work explores many disciplines, from fashion to design, video to photography, scenography to architecture, installations to visual arts. Andrianomearisoa's work has been shown, among others, at the Maxxi in Roma, the Hamburger Bahnhof in Berlin, the Smithsonian in Washington and the Centre Pompidou in Paris. In 2019, he represents the first Madagascar Pavilion at the Venice Biennial, with support from Rubis Mécénat. He is represented by galleries Sabrina Amrani (Madrid), Primo Marella (Milan) and Rx (Paris).



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## Laureline Galliot 2019 - 2020

### French designer

In 2019, Rubis Mécénat commissioned Laureline Galliot to create a triptych of digital paintings documenting the steps preceding the production of the Polyfloss wool. The triptych depicts scenes specific to the recovering of plastic waste practiced by locals in Antananarivo's neighborhoods: collection, cleaning, shelving. In 2020, she is invited anew to lead a workshop with *Ndao Hanavao* in order to create a model of rug evoking articles of straw and the traditional stripes of the 'lambas' (emblematic item of the Malagasy traditional costume).

After studying fashion design at ENSAAMA (School of Arts and Design), Laureline Galliot graduates in product design from ENSCI - Les Ateliers in 2012. Influenced by her own digital paintings, she experiments with modelling and virtual coloration and explores new formal possibilities for objects using iPad as a touch screen interface to re-connect design process with hand gesture. She is laureate of the Villa Noailles in 2013 and her work has been shown at various art centers and public institutions such as the Swiss Institute of New York, the Mudam in Luxembourg, the SEEDS Gallery in London, the Madd in Bordeaux, the Centre Pompidou and the MAD in Paris.



Left:  
Workshop with  
Laureline Galliot,  
*Ndao Hanavao*  
laboratory,  
Antananarivo, 2019

Opposite:  
Laureline Galliot,  
series of digital  
paintings realised  
within the frame of the  
*Ndao Hanavao*, project,  
Antananarivo, 2019



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## Benjamin Loyauté 2020

French artist and *Ndao Hanavao* project curator

In 2020, *Ndao Hanavao* invites Benjamin Loyauté to conduct a workshop at the Lab. In collaboration with the young trainees, he will design good-luck amulets inspired by Malagasy traditions, to be sold on the local market. The artist will also create an artwork based on his researches on Entada seeds, made with the Polyfloss wool.

Benjamin Loyauté (born in 1979 in France) lives and works between Brussels and Beirut. His work combines films, sculptures, public events and immersive installations. He takes his inspiration from literature, film, archaeology, and the history of technology, geography and geopolitics. Since 2014, he has been gradually building up a work like a book made up of chapters. This work-in-progress takes a multidisciplinary approach that draws on poetics, the supernatural and documentary. Solo exhibitions and installations of his work have been held at the MAMC (Saint-Etienne); the MUDAM (Luxembourg); the Palazzo Clerici & Del Stellite (Milan); the MAD and the KANAL-Centre Pompidou (Brussels); the Power Station of Art (Shanghai); Somerset House (London); the Parco Archeologico Di Selinunte (Sicilia); the Palais de la Porte Dorée (Paris), etc.



Benjamin Loyauté,  
*untitled*, 2019,  
wood, bronze,  
varied techniques

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## Carine Ratovonarivo 2020

Malagasy eco-designer and *Ndao Hanavao* project coordinator

In 2020, Carine Ratovonarivo will conduct a workshop centered on local issues. In that aim, she will experiment on the link between collective memory reactivated by different places, encounters, and Malagasy traditional craftsmanship. From that basis will derive design objects combining the Polyfloss wool, form and function.

Carine Ratovonarivo was born in Madagascar. After graduating in Applied Arts in 2009, she funds Carine H.C.R éco-design. Her designs follow the fundamental rules of eco-design: Reduce, Reuse, Recycle. Driven by an exacerbated ecological approach, each object emanating from her travelling workshops sublimates banality and tries to propose the right combination between matter, form and function. Her offerings reveal a strong preservation of the Malagasy intangible heritage, combining recycling and craftsmanship.



Workshop with  
The Polyfloss Factory,  
*Ndao Hanavao*  
laboratory,  
Antananarivo, 2019

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## Nicole Stjernswärd 2020

American designer and founder of KAIKU Living Colors

In 2020, *Ndao Hanavao* is collaborating with Nicole Stjernswärd for researches around the coloration of the Polyfloss wool with natural pigments from Madagascar.

Nicole Stjernswärd is a London-based multidisciplinary designer and the founder of KAIKU Living Colors, which creates sustainable colorants made from agricultural waste. She holds an MSc/MA in Innovation Design Engineering from Imperial College London and the Royal College of Art, and a BDes in Architecture from the University of Minnesota. Her experience extends across the fields of design, engineering, and architecture, with a focus on sustainable innovation.



Sample of plant pigments made using KAIKU's mechanical system

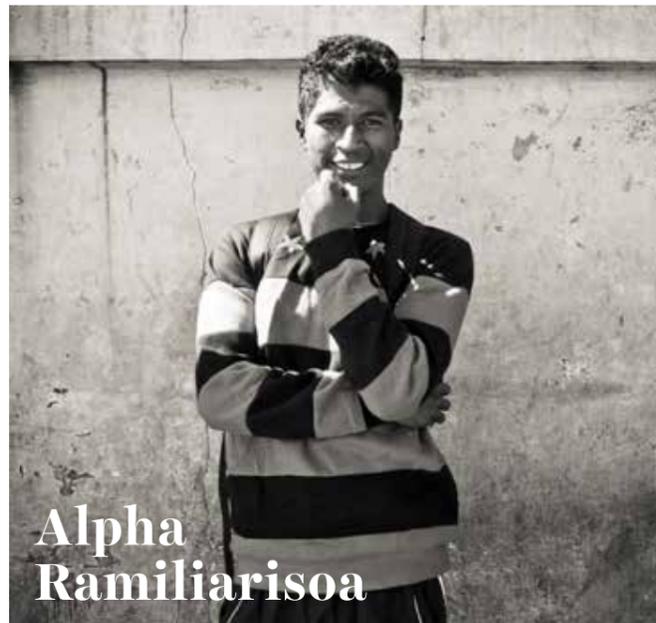


Prototypes in Polyfloss wool developed with The Polyfloss Factory, *Ndao Hanavao* laboratory, Antananarivo, 2019

Wallet made in Polyfloss wool developed with The Polyfloss Factory, *Ndao Hanavao* laboratory, Antananarivo, 2019



Spinning of the Polyfloss wool, *Ndao Hanavao* laboratory, Antananarivo, 2019



# Actors

## THE DESIGNERS OF THE *NDAO HANAVALO* LABORATORY

The project hosts six young Malagasy trainees aged between 17 and 21, from disadvantaged areas of Antananarivo, current or former beneficiaries of non-profit associations which help people to re-enter the workforce, such as Enda, Manda, and Graines de Bitume.

## *NDAO HANAVALO* TEAM

### Permanent team

Lorraine Gobin, project director,  
Rubis Mécénat managing director

Juliette Le Bihan,  
Rubis Mécénat project manager

Benjamin Loyauté, project curator

### Local team in Madagascar

Camille de Roffignac, project manager

Carine Ratovonarivo, designer and project coordinator

Lova Randriamparany, workshop manager

Mash Manjaka, life coach

Graines de Bitume,  
association in charge of the young trainees

Rijasolo and Rafalia Henitsoa,  
project's photographers

Vitogaz Madagascar represented by Vincent Fleury,  
general administrator, assisted by Harilala Rasolondraibe,  
Patrick Rakotomalala, administrative director  
and Rova Rakotobe, accountant

### *Ndao Hanavao* laboratory

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## **RUBIS MÉCÉNAT**

### **RUBIS GROUP ENDOWMENT FUND FOR COMMITTED SOCIAL AND ARTISTIC PROJECTS**

#### ***NDAO HANAVAO* FOUNDER**

Since 2011, Rubis Mécénat, the Rubis group's endowment fund, has been promoting artistic creation throughout the countries where the Group operates. The fund develops long-term social art initiatives by establishing educational artistic programmes based on the visual arts and design for young adults from disadvantaged communities in some of the countries where the Rubis is active. At the same time, it supports artists in France and abroad by commissioning works for specific places as well as for the Group's industrial sites, in collaboration with cultural institutions. For each commission, Rubis Mécénat helps to produce the artwork and accompanies the artist throughout the artistic process. The fund also supports the artist in a longer term by purchasing art works and editing publications and artist videos.

*Art should be universal, humble and accessible to all  
in order to serve and contribute to social cohesion.*

**John Ruskin**

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## **VITOGAZ MADAGASCAR**

### **RUBIS GROUP SUBSIDIARY**

#### ***NDAO HANAVAO* PARTNER**

When it was decided to privatise SOLIMA, a former state-owned oil company, Rubis Group subsidiary Vitogaz set up a full-service chain in Madagascar to import, store, process and distribute Liquefied Petroleum Gas (LPG), which has been operational since March 2001.

In Madagascar, which is the fourth poorest country in the world and has the fifth largest population of non-school-attending children, 90% of the population lives below the poverty line and three-quarters of the population live on less than two euros a day.

Since 2016, Vitogaz Madagascar has been actively supporting the Graines de Bitume association, which helps children living in the street or in the very poor districts of the capital city, Antananarivo, find their rightful place in society.

In addition to funding learning days and other events, and organising tours of its gas depots as part of a youth employment programme, the Vitogaz subsidiary and the Rubis Group have, over the past three years, been providing financial support to the Graines de Bitume association so that it can operate its three existing centres, which are attended by nearly 300 young people every day.

The launch in 2018 of the societal and environmental project *Ndao Hanavao* strengthens the civic footprint of Vitogaz in Madagascar. This initiative implies an ongoing commitment of Vitogaz on the field, affirming its responsibility as a committed company and taking part in the social landscape of Madagascar. Vitogaz encourages its employees to contribute to the *Ndao Hanavao* project by providing a team of volunteers who take part in the various administrative and logistical tasks related to the programme. The creation by the subsidiary of an eponymous non-profit organisation to facilitate the project's management also means a strong connection to the region and a will to engage in a long-term commitment.

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Cover:  
Workshop with  
Laureline Galliot,  
*Ndao Hanavao* laboratory,  
Antananarivo, 2019

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