''Circuler Economy

ENGLISH ver.

``X/:--hall Circuler Economy

Every cloth is not to be thrown away but to be collected and reborn.

A new type of recycling called the Circular Economy of Textiles which circulates collected clothing.

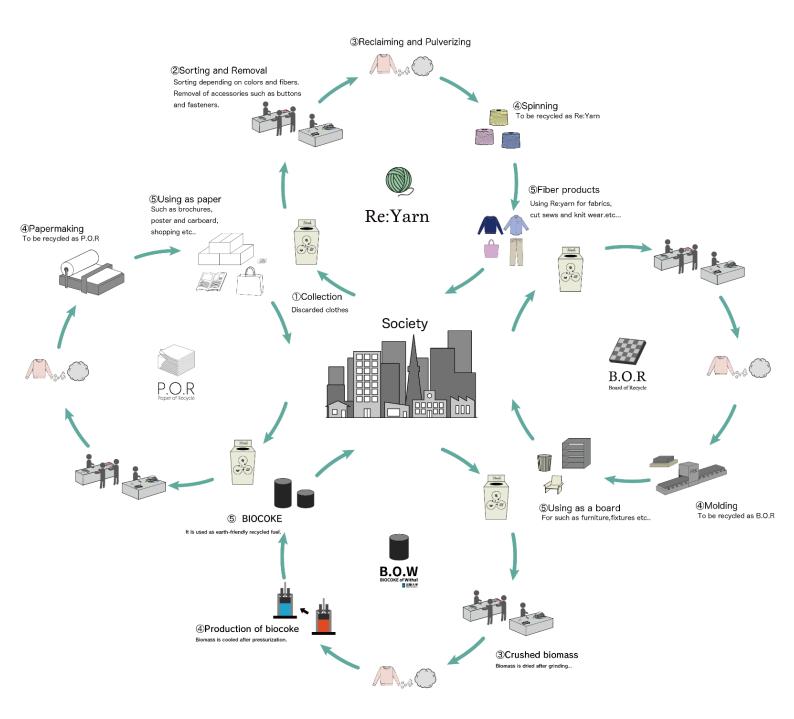
Withal is a resource recycling project that tackle global environmental issues.

Today, about 1 million tons (about 3.3 billion garments) of clothing are discarded annually in Japan. Most of the discarded clothes are disposed of daily by landfill or incineration. The greenhouse gases emitted in this process is a heavy burden on the global environment. Climate change caused by global warming is changing the way we live, and the impact is enormous.

Our wish is to create the livable earth and pass on to the future. We have started a sustainable project called Withal which contribute to solving environmental problems through the power of fashion.

It is usually said that clothes collected for recycling are difficult to recycle depending on materials. Even when collection boxes are set up, they are only for garments made of a limited kind of materials. Materials that are not eligible for collection cannot be placed in boxes in most cases. Reality is that it is difficult to take an action even if you try to support environmental project.





# What is Withal Circular Economy?

At first glance, usual circular economy may seem like a waste-free, but the reality of the textile industry is that, due to the wide variety of composition and blended materials, some can be used as part of the circular economy and some cannot.

Withal's circular economy is "to be able to recycle collected fibers without any waste," and which leads to effective use of resources and reduction of greenhouse gas emissions and is environmentally friendly..

Withal is an environment project that everyone can think familiar about the future of the earth.

#### • Re:Yarn

During the process of the garment collection and sorting, all garments made of a single material such as 100% cotton, 100% linen, 100% wool, 100% rayon, 100% silk, 100% cashmere, etc. will be distinguished as Re:Yarn. Re;Yarn will be used for woven fabrics, cut and sewn fabrics and sweaters. This is an integrated approach from garment collection to textile production.



Re:Yarn

Board of Recycle

#### • B.O.R Board of Recycle

This is fiber recycled board made of discarded clothes which are reclaimed and mixed with specific material and compressed.

It is characterized by different colors and textures depending on the fibers used, and has similar strength and workability as wood, and can be recycled and reused as new board. As a material which realizes a recyclingoriented production motel. It can be used for furniture, interior decorations, and display fixtures in a variety of spaces.







#### • P.O.R Paper of Recycle

This paper is blended with pulverized discarded clothes. The paper can be many uses such as brochures, posters and cardboard, shopping bags, business cards, and documentations.

B.O.W BIO COKE of Withal

Bio coke is a new recycled fuel alternative to fossil fuels. It is made by grinding and processing recycled clothing as raw material.

There are 2 major benefits of Bio-Coke.

The first is high recyclability. It is an environmentally friendly recycled fuel that leads to a recycling-oriented society.

The second is that the Bio-Coke is a substitute for conventional fossil fuel which leads to a reduction of global warming gases.



# [Clothing Collection Fee Structures]

## **International Partners**

We prepare containers for international partners at representative ports in Europe, North America and Asia.

The transportation company is called CMA CGM and the ships carrying the containers are operated on biofuel and it can reduce Co2 by 84% compared to normal transportation.

## 

 $\times$ in case of 1 shop/1 container

ABiofuel Container (€3645 x times)
BMonthly fee per shop (€15 x number of shops x 12months)

# North America A+B= Annual Fee USD4272

Xin case of 1 shop/1 container

ABiofuel Container (USD4080 x times)BMonthly fee per shop (USD16 x number of shops x 12months)

## •Asia (A)+(B)= Annual Fee USD3792

% in case of 1 shop/1 container

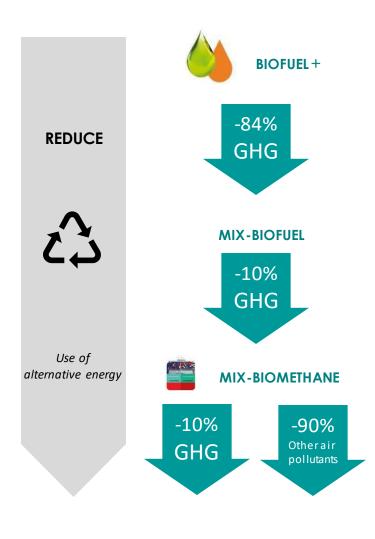
(A)Biofuel Container (USD3600 x times)(B)Monthly fee per shop (USD16 x number of shops x 12months)

•The fees can change in case of drastic currency exchange rate fluctuation.

•Additional containers available with extra sur charge.

•In case the customer is not a shop, such as factory and warehouse etc, the fees can differ from the indicated above and we discuss each time.

# How tackle your carbon footprint



•BioFuel used is UCOME, a 2nd generation biofuel derived from waste vegetable cooking oil, or Brown Grease, issued from fat waste, and can be assimilated to UCOME.

 Product is based on a mix of VLSFO fossil fuel and 2nd generation BioFuel.

• Product is based on fossil fuel LNG and Bio-Methane with Guarantee of Origin



Projects that offset 100% of your remaining emissions

Offset remaining emissions

# 1. Clothing Collection

Withal collection box or POP is available for the collection of clothes. Condition on price and sizes etc available upon request.

There is no limitation of composition or materials. Any cloth can be put into the box.

For the shipment of the collected clothes, please use any boxes you have



# 2. Sorting

Sorting collected clothes depending on colors and compositions.

And accessories such as buttons and zippers will be taken away by hands.

For the garments made of a single material such as 100% cotton, 100% linen, 100% wool, 100% rayon, 100% silk, 100% cashmere, etc. will be distinguished as Re:Yarn.







# 3. Reclaiming • Pulverizing

After removing contaminations from clothes, they are to be reclaimed and pulverized into fibers and will be used as a fiber raw material.













# 4. Spinning



# Re:Yarn Spinning and dying of reclaimed fibers

RE:Yarn is colored with mixing pigments before spinning and there is almost no water is used during the process.



## B.O.R Molding the reclaimed and pulverized fiber





 $1. \hspace{0.1in} \text{Blend special material with fiber} \\$ 



3. Apply a pressure to cool after heating.



2. Make them felted and pour into a compressor



4. The board is made.



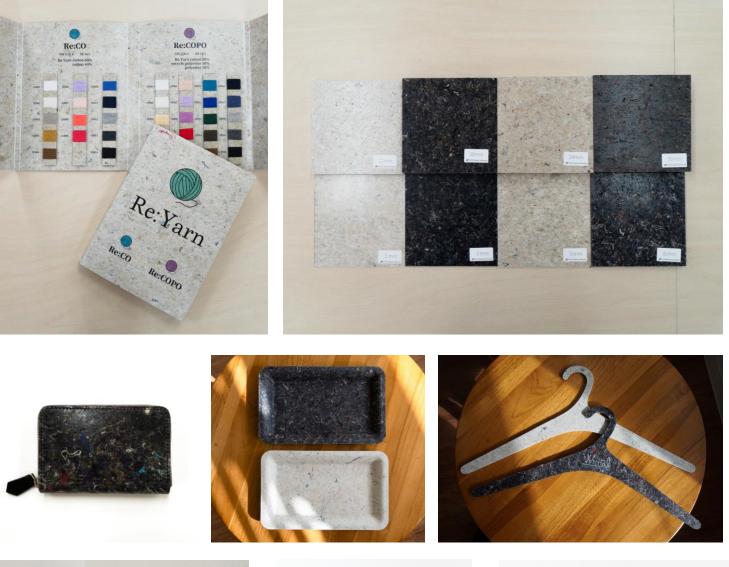






















Book racks in a waiting room in front of the CEO room of TSI Holding Co.,Ltd



And wander POPUP SHOP

Floor and desks at Atsu-Labo factory owned by AMIAZ









JUTE 70% COFFEE 30% POYESTER 100%

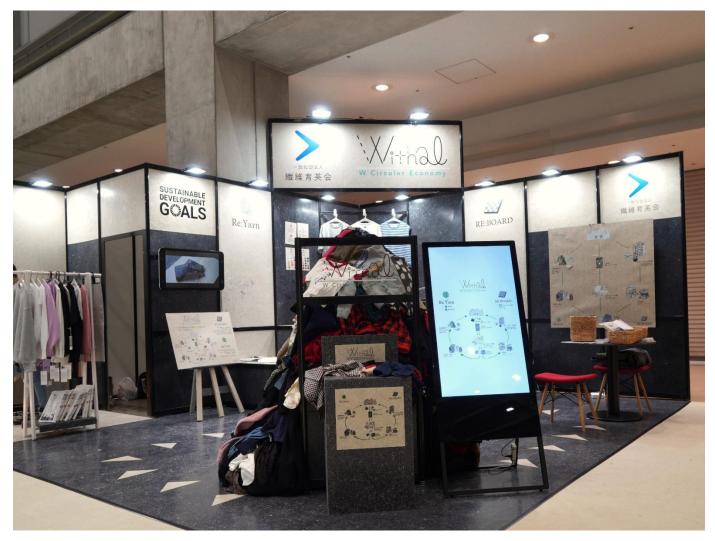
COTTON 50% COFFEE 50%

COTTON 100%

JUTE 100%



#### Sustainable booth at the Fashion World Tokyo Spring 2023.

















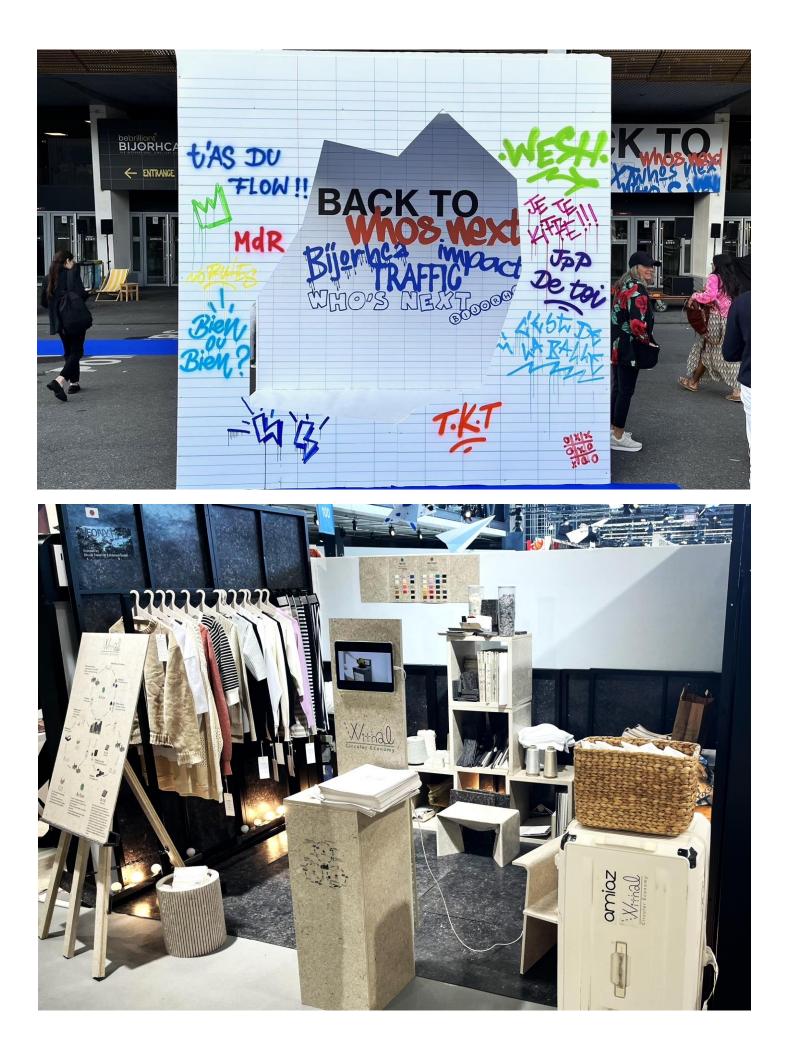
### At Nakatsugawa THE SOLAR BUDOUKAN 2023 held solely on solar power







Who's Next, Impact, Bijorhca, Traffic & Neonyt Paris.2-3 September 2023



We have a small factory called Atsu-Labo in Shibuya Tokyo. We have specialized sewing machines that can sew woven and cut-and-sew fabrics, and WHOLEGARMENT that can make knitwear. We are confident in the careful workmanship and high quality workmanship by our highly skilled and experienced staff. We are also flexible to meet detailed specifications and accept custom-made products to meet customers' needs. We would be happy to share your idea at our factory which is committed to reliability and quality. Clothes made in Atsu-Labo can be commercialized as MADE IN TOKYO/MADE IN SHIBUYA.



# SAMPLE LABO MADE IN SHIBUYA MADE IN TOKYO

Knit/Wholegarment Cut&sew Fabric clothes Leather etc...

# WHOLEGARMENT

JUK

الالتحاد

000000000000000

MACH2®S 8S/12S/14S/16S/18S MACH2XS 8G/12G/15L/18L SWG-X 8G/12G/15G SWG-061N2

Les.

SEWING MACHINE

DDL-9000BSE52-133MDLN-9010A-SSVC2700-156MDU-141H-7-0BLBH-1790ANHY-10W

Atsu-Labo is a factory located in Shibuya Tokyo, the central city of Japan. We have various sewing machines and WHOLEGARMENT machines to create cut and sewn, woven, and knit fabrics.

#### 1.Business

- Sample production
- Production for small quantity.
- Wholegarment. Design data creation.
- Custom made for shops
- Sawing etc

#### 2.Items

Atsu-Labo is a small factory but it can do many things. The factory is equipped with wholegarment knitting machines and various sawing machines.

We can produce various items such as the followings.

knitwear •cut and sawing•skirt•leather items•accessories
and more

3.How to order

Please contact us by email

atsu-labo@amiaz.tokyo

If you provide us with specifications, etc., we will confirm and contact you. We can also ship products overseas via OCS or DHL or designated forwarder by customers.

#### 4.Production

Since Atsu-Labo is a small factory there is no minimum order quantity. We produce even when an order is 1 piece. When the quantity of the order excess our capacity we use our satellite factories all over the world.





Atsu-Labo is equipped with 3 units of wholegarment knitting machines of 18L, 15Lxs, 12S, and the small wholegarment in 15G.

We can produce the final sample from the 1st sample at Atsu-Lab and mass production can be done by wholegarments in Japan, Italy, and China by using the data.





## Cut&sew,Fabric clothes,Leather,etc...

Atsulabo has a variety of sewing machines, enabling integrated production from cutting to sewing. We also have press machines and needle-inspection machines, so we can handle mass production shipments.



#### B.O.R (Bord Of Recycle) used in Atsu-Labo

B.O.R Board Of Recycle, a board made of fiber, is used on the floor, some walls, sewing machines, desks and shelves in the Atsu-Labo



Some of sewing machines are powered by solar electricity.

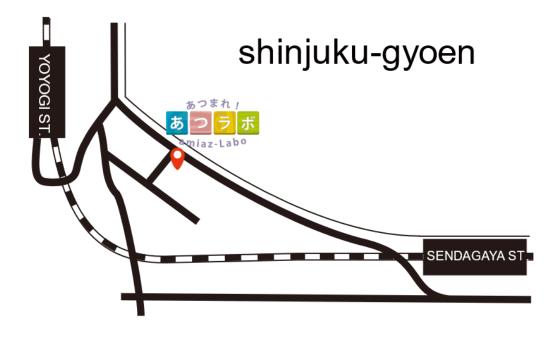


#### Individual live viewing of WHOLEGARMENT production

You can see how the wholegarment operating via live viewing from anywhere in the world.



# Access



5 minutes walk from Yoyogi Station 8 minutes walk from Sendagaya Station

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