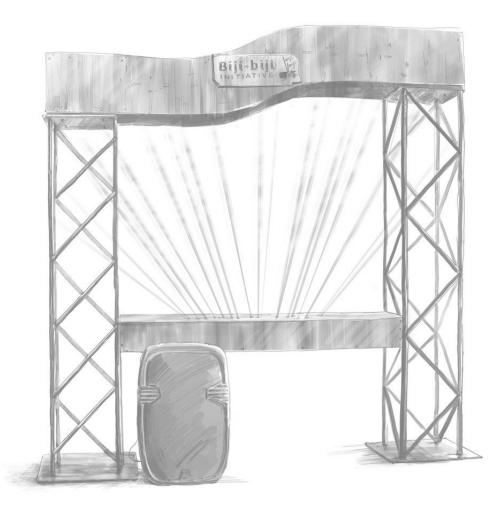
# ENERGY PLAYGROUND CATALOGUE

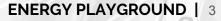




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# **BIJI-BIJI INITIATIVE**

We are a community of makers, prototypers, developers and innovators. We are constantly keeping up with the latest developments in sustainability, yet at the same time challenging ourselves to stay ahead of the game. We aim to inspire businesses to think and act sustainably, collaboratively and constructively.



# **OUR MISSION**

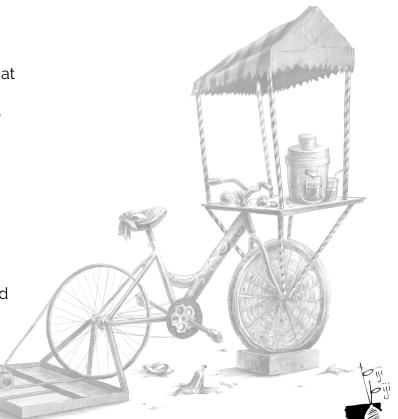
We want to change the way people do business. We want to change the way people think about waste. We want to change the world for a better future.

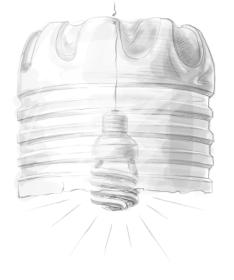
Let's move towards a smarter and more responsible future together.

# Energy Playground

Our aim is to create engaging, educational and fun playgrounds that tackle energy challenges through education. Our Energy Playground transports people into the 21st century's digital age by integrating power generation, interactivity and connectivity.

The modular generator-device architecture of our Energy Playground means we can propose a wide range of interactive installations to challenge participants and introduce them to alternative energy, sustainability and healthy lifestyles. The installations can become phone charging stations, chill out-areas, alternative energy systems, solar powered street lights, games and electronic displays.





# **HOW DOES IT WORK?**

Unlike classic playgrounds, our Energy Playground items are integrated with electrical generators and sensors that generate energy signals to power devices.



# **HOW DOES IT WORK?**

The Energy playground is based on around Generator - Device Architecture



Generator

The generator powers the device or acts as a controller to trigger devices with effects (light and sound) and games to add more fun and interactivity.



Device

Devices are connected to generators of various shapes and sizes. Devices are powered or triggered by generators and can also harvest energy into batteries (to create a charging station).



### Modularity

Like Lego, the devices and generators can be interchanged to create a wide range of installations. Generators can be connected to one or several devices and some devices can be connected to several generators.



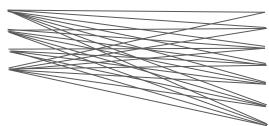
## **MIX & MATCH**

Generators can be connected to one or several devices and some devices can be connected to several generators. Mix and match as you want!



Generator

Bicycle Hamster wheel Merry-go-round Customised Generator





Device

Blender Phone Charger Music Amplifier Pixel Tower Internet of Things (IoT) Lights Customised Installation



**ENERGY PLAYGROUND** | 9

## The Team



Matthieu Head of Technology Technology enthusiast and sales guru, Matt is leading the team to always push their boundaries and further explore their creativity.



Electronic engineer Ash's unexpected and innovative electronic creations add the element of surprise to our installations.



Hamadi

Production manager

Hamadi specialises in metalworking and drawing 3D designs which he then utilizes by putting it through to our water jet cutter machine.



### Syahmie Mechanical engineer

Syahmie is an up and coming builder with a knack for picking up new things. Enthusiastic and driven, he has the potential for many great things ahead of him.



### Rohan Lead developer

Rohan is a creative technologist with a passion for travel and sustainable development. He's ability to talk to machines adds extra magic to our installations.



### William Head of Creative building

An upcyclist and a maker from a very young age, this talented man is able to fix and make everything work from anything.



### Nicholas Designer

Nick's skills and knowledge in 3D modelling, drafting and in graphics plays a very important part in our department. He will bring your wildest dreams to reality.



Alex

### Community Manager

Alex is a talented videographer and storyteller who helps us tell our story like no other. She is passionate about sharing issues of global relevance, like sustainability





### **Bicycle** Generator Dimension 2m (L) x 0.5 (W) x 1.2m (H)

### Description

Our very first generator, developed 3 years ago by Ashvin and Matthieu, is well-associated with the Biji-biji brand. Our best-selling, easy-to-set-up Bicycle Generator is available in two sizes (kid and adult). It's a great item for people to challenge each other!

### **Compatible Devices**

Phone Charger, Music Amplifier, Pixel Tower, IoT Connectivity, Lights, Customised Installation.





## Hamster Wheel

Generator

### Dimensions

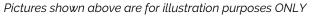
2.6m (L) x 1.2m (W) x 2.6m (H)

### Description

The Hamster Wheel is a crowd magnet! Imagine running inside this massive hamster wheel and powering lights and sound - you really get to feel the power of your legs!

### **Compatible Devices**

Phone Charger, Music Amplifier, Pixel Tower, IoT Connectivity, Lights, Customised Installation.





## Merry-go-round

Generator

## Dimensions

2.5m (L)  $\times$  2.5m (W)  $\times$  1.5m (H)

### Description

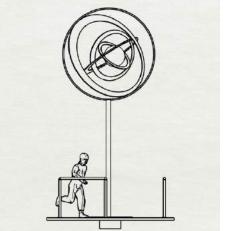
An all time favourite with kids - they just love to get spinning on this! Who needs ipads or phones to keep kids distracted? The merry-go-round does the job!

### Compatible device:

Music Amplifier, Pixel Tower, IoT Connectivity, Lights, Customised Installation.







## **Customised Generator**

Generator

Dimensions

You decide!

### Description

Our generators can be pimped-up and modified to your taste. We can change the shape, color or material and add your company branding.

### Customisable generators:

Bicycle , Hamster Wheel and Merry-go round





## Blender

### Device

### Dimensions

0.2m (L) x 0.2m (W) x 0.5m (H)

### Description

12V DC blender was initially developed to be powered by car batteries. We hacked them to fit our generators so participants can blend fresh juice while exercising - for sure, it's the best juice they've ever tasted!

### **Compatible Generator** Bicycle

Video: https://youtu.be/YImjmeztcbk



## **Phone Charger**

### Device

### Dimensions

0.3m (L) x 0.15m (W) x 0.12m (H)

### Description

Using a fast-charging battery system, we developed a device that can charge phones with a ratio from 1:10: exercising for 1 min generates enough energy to charge your phone for 10 mins. Definitely the best motivation to get people exercising!

### **Compatible Generator**

Bicycle, Hamster Wheel

### Video: https://youtu.be/s5gbjMSZ45A



## **Music Amplifier**

Device

### Dimensions

0.5m (L) x 0.4m (W) x 0.75m (H)

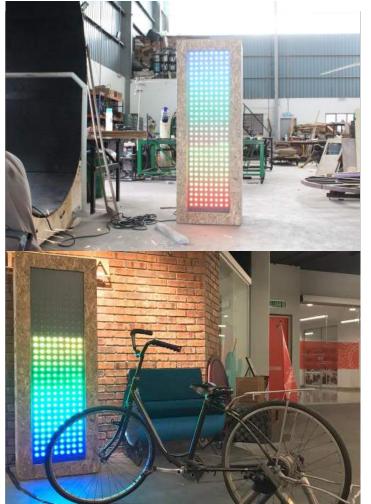
### Description

Oh, the power of music! Pick your favourite tune, plug in your phone and let your legs power the beat as you check out the crowd enjoying the vibe. Everyone loves music and this installation is the best way to share the sounds you like.

#### **Compatible Generator**

Bicycle, Hamster Wheel, Merry-go-round





## **Pixel Tower**

Device

Dimensions

6' H x 2' L x 2' W

### Description

The Pixel Tower is our latest device. With a 8px x 30px resolution, we can design and develop old-school type arcade games where players get to catch a moving pixel, race against each other and much more. Our team of software developers can program games that will fit your theme!

### **Compatible Generator**

Bicycle, Hamster Wheel, Merry-go-round





### Customised Installations Device

#### Description

Want to have a customised branded backdrop? Do you have a specific shape in mind? Would you like to combine devices into a single centerpiece? Are you looking for a unique launch gimmick? Our team of designers, builders and engineers will create the installation of your dream. Since we like to explore new things and push our limits, don't hesitate to challenge us!

### **Compatible Generator** Bicycle, Hamster Wheel, Merry-go-round





## Internet of Things (IoT) Connectivity Device

#### Description

Our installations can be connected to the internet to share information such as the amount of energy generated, battery level or a game's top scorers. Our devices also respond to online input. For example, liking a Facebook page can trigger various light and sound effects. An IoT connected installation can be used to promote social media campaigns and provide users with real-world, physical interaction from digital devices such as phones, tablets, computers.

#### **Compatible Devices**

Blender, Phone Charger, Music Amplifier, Pixel tower, Lights







#### Description

The generators can power or trigger lights mounted on existing devices. All lights effects are programmable.

#### **Compatible Devices**

Blender, phone charger, Music amplifier, Pixel tower





### **Design Workshops** Design & build workshop

#### Description

Additionally to a customised installation, we can provide design and building workshops in collaboration with Me.reka Makerspace. At these workshops, participants will be introduced to design, energy, electronics, IT, prototyping and building. They will use their creativity to create the best installation that fits the brief they were provided with.





## Energy Playground Challenge Secondary Device

#### Description

Create a competition or marketing campaign using the Energy Playground Challenge. Participants are required to input their data into the device before participating in the challenge. Participants are then challenged to create the loudest music, brightest lights or get their LED to the top of the pixel tower. All the while, the device monitors and displays the amount of energy generated to decide who gets the highest score!



# Tell us what you want!

Interested to rent out one of our installations to boost your space or event? Drop us an email at <u>collaborate@biji-biji.com</u> with the following details:



- Rental location
- Rental details
- Generators and devices you are interested in
- Add-ons if any
- Specifications for customised installation (size/ gimmick)
- Staff requirements

Our team will quickly revert back to you with detailed quotation.



# **THANK YOU!**

We look forward to working together with you!

### **Matthleu Mertens**

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