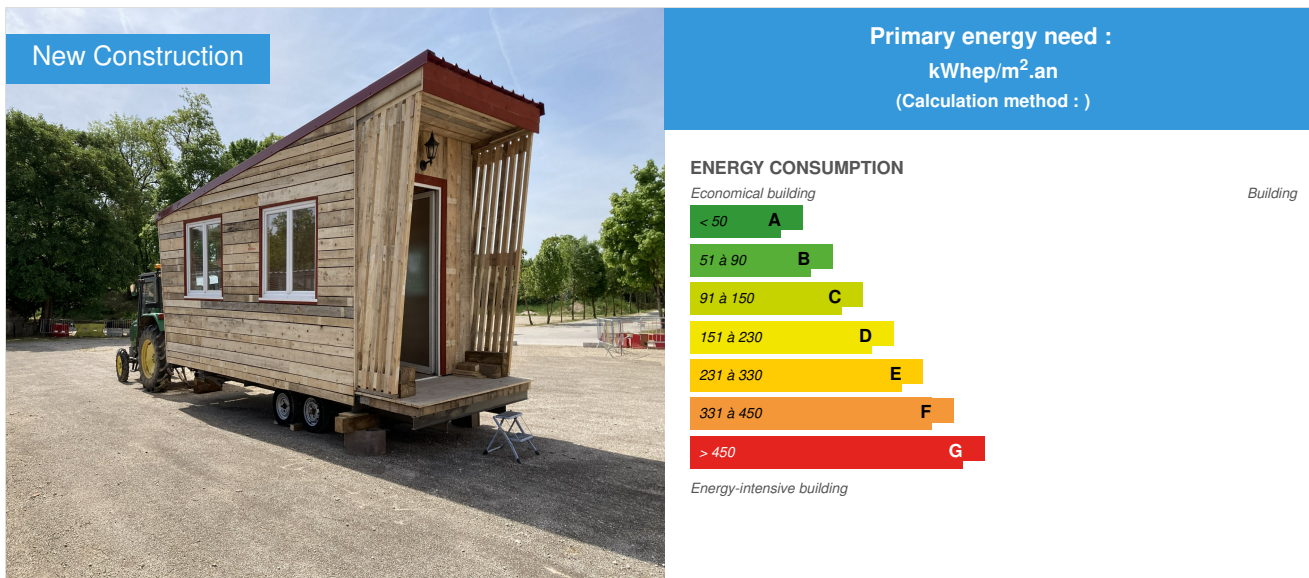


## Benoit's tiny house

by [Véronique BAILLET](#) / 2022-05-13 00:00:00 / France / 1459 / FR



**Building Type** : Other building  
**Construction Year** : 2022  
**Delivery year** : 2022  
**Address 1 - street** : Boulevard Machureau 21000 DIJON, France  
**Climate zone** : [Cfb] Marine Mild Winter, warm summer, no dry season.

**Net Floor Area** : 11 m<sup>2</sup> SHON  
**Construction/refurbishment cost** : 5 250 €  
**Number of none** : 1 none  
**Cost/m<sup>2</sup>** : 477.27 €/m<sup>2</sup>

### General information

The objective is to **build 1 Tiny house (small movable wooden house), with the participation of the future user of this house, and with a maximum of materials resulting from reuse**, available on the Emmaüs de Norges la ville site and on other other sites.

It is jointly supported by the following two partners :

- ADEFO, which is an association under the 1901 law working in the field of reception, accommodation and support for people in great social difficulty ;
- the EMMAUS De Norges la Ville community, which welcomes 130 companions on its site.

### The context

Since March 2021, following a call for expressions of interest from DIHAL, Interministerial Directorate for Housing and Access to Housing, ADEFO has opened a **housing and support service called « Grands Précaires »** .

Following the regular observations of the SIAO 115 21, the SIAO social monitoring committee identified around twenty people known to all the players in accommodation and housing, more particularly in Dijon Métropole, experiencing difficult life paths, interspersed with breakups and unable to settle permanently in housing or even accommodation. The issues identified are those related to child welfare pathways, addiction, behavioral problems and being on the street for several years, despite the various proposals / effective orientations. These are the people who are directed to the Grands Précaires service. Some of them with a

long journey on the street and wandering cannot immediately imagine living in a traditional habitat.

The accommodation offered when the Grands Précaires service opened, here called Machureau, was organized from two townhouses close to each other, made available by Dijon Métropole. They both have a garden. Depending on their particularities, **the people received can be installed inside one of the houses, alone or in pairs, also in diffused housing (elsewhere) but also today for two of them in caravans installed in the gardens .**

## The goal

Caravans are damaged, their need is still relevant and this type of habitat is still suitable for a few people. The tiny intended for Machureau is made without toilets, in order to create **a progressive airlock between the street and more traditional accommodation** for the people received who will have to use the toilets of the houses. It is **built so that it can later be moved to another site** (transport on a truck bed, then placed on simple studs on the host site). It is equipped with a simple electrical installation (light points, power outlet, 1 electric heater which are powered by a connection to the existing room).

## Building users opinion

Benoit took ownership of his future home very quickly as he took part in its construction.

## If you had to do it again?

A second tiny is already planned, this time for a companion from the Emmaus community of Norges la ville, and with his participation. ADEFO is considering with Greater Dijon the provision of other sites that would allow the installation of other tinys made according to the same principle for other people waiting for housing.

## Photo credit

Michel Perrin (for the photos)  
FR3 Burgundy (for videos)

## Stakeholders

### Contractor

Name : ADEFO Dijon  
Contact : Véronique Baillet, directrice - vbaillet[a]adefo.asso.fr  
<https://www.adefo.asso.fr/>

### Construction Manager

Name : Réalisée par 1 personne bénévole, expert construction bois avec l'aide de 3 autres bénévoles  
Contact : Michel Perrin - michelperrin57[a]gmail.com

### Stakeholders

Function : Environmental consultancy  
Communauté Emmaüs de Norges la ville

Christelle Prodnon, directrice - prodnon.christelle[a]orange.fr  
<https://www.label-emmaus.co/fr/nos-boutiques/emmaus-dijon-norges/>

provision of various reusable materials, provision of the workshop and tools, and occasional participation of a companion from the community in the construction

Function : Others  
DIJON métropole - cohésion sociale  
Fabrice CHATEL, directeur - fchatel[a]metropole-dijon.fr  
provision of the 2 houses and the Tiny reception area

Function : Others  
DDETS direction départementale de l'emploi, du travail et des solidarités  
Nicolas Nibourel , Directeur délégué départemental  
<http://www.cote-dor.gouv.fr/>  
Financing of the support and accommodation service for "great precarious people"

Function : Construction Manager

## Energy

### Energy consumption

**Breakdown for energy consumption :** Electrical energy consumption is split between 2 sources: A central light point and 3 sockets A 1000w electric heater

## Renewables & systems

### Systems

**Heating system :**

- Electric radiator

**Hot water system :**

- No domestic hot water system

**Cooling system :**

- No cooling system

**Ventilation system :**

- Natural ventilation

**Renewable systems :**

- No renewable energy systems

## Environment

### Urban environment

**Land plot area :** 1 282,00 m<sup>2</sup>

**Built-up area :** 11,00 %

Benoit's Tiny is installed on the Machureau site, made available to ADEFO by Le grand Dijon Métropole. These are two houses with an interior courtyard and a large garden

Benoit's tiny will be placed in the courtyard, near one of the houses and facing the garden.

This site is the subject of an urban planning project on the horizon of 1 to 2 years. This will require it to be moved to another site, also offered by Greater Dijon, and will allow ADEFO to continue its housing action for people in great difficulty.

## Costs

### Construction and exploitation costs

**Total cost of the building :** 5 250 €

**Subsidies :** 1 000 €

**Additional information on costs :**

New materials for 1850€:

- 1 carpentry
- Biofib hemp insulation
- vapor and rain barrier films
- interior paneling
- hardware
- silicone sealant
- paint for roof steel decks

Reused materials for 3400€

Structural and structural wood  
4 PVC exterior carpentry  
Cover steel tanks  
Metallic IPN for the manufacture of the trailer  
2 axles of scrap caravans

## Circular Economy

### Reuse : same function or different function

#### Batches concerned by reuse :

- Structural framework
- Roofing
- Facades
- Locksmithing-Metalwork
- Outdoor joineries
- Floorings
- Electricity

#### For each batch : Reused Materials / Products / Equipments :

**Framework and low floor:** timber frame from used pallets 11 m<sup>2</sup> of low floor and 17m<sup>2</sup> of framework.

**Coverage:** 17.5 m<sup>2</sup> of recovered steel bins.

**Facades:** 40m<sup>2</sup> made up of frame uprights from dismantled pallets and fir planks.

**Exterior woodwork:** 1 door and 3 PVC windows recovered from the demolition of a low-rent housing building.

**Flooring:** 11m<sup>2</sup> of parquet from end of stock.

**Locksmithing - metalwork:** manufacture of a trailer with 2 caravan axles from a scrapyard and the frame structure with profiles from the dismantling of a metal frame.

#### Field of use and material origin :

**Facades with wooden frame, frame and low floor, exterior cladding :** wood from the dismantling of pallets and packing crates, recovered and packaged by the companions of Emmaus.

**Exterior woodwork:** salvaged from the Emmaus site and from a demolition company in Champagnole, following the deconstruction of an HLM building.

**Flooring:** end of stock offered by a trader at Emmaus.

**Locksmith metalwork:** IPN bars recovered from the dismantling of a metal shed by Emmaus and 2 caravan axles recovered from a car scrapyard.

### Environmental assessment

#### Impacts avoided : water, waste, CO2 :

Categories	Avoided CO2 (kg)	Avoided water consumption (m3)	Avoided waste (kg)
Outdoor facilities	0	0	0
Exterior fittings / Locksmithing - Metalwork	0	0	0
Carpentry	3198.683333	25.10065	723.2076365
Partitions	0	0	0
Coverage	0	0	0
Roofing / Exterior fittings	0	0	0
Lighting	9.959978333	0.052697832	9.889425754
Safety lights	0	0	0
Climatic engineering equipment	0	0	0
Electrical equipment	0	0	0
Facades	396.130991	113.5613523	348.7186127
False ceilings	0	0	0
False floors	0	0	0
False ceilings	0	0	0
Structural work	0	0	0
Sanitary installations	0	0	0
Insulation	0	0	0

Exterior carpentry	450.7448	15.562367943	1362.3048481
Interior carpentry	0	0	0
Furniture	0	0	0
Paint	0	0	0
Plumbing	0	0	0
Floor coverings	53.79	1.63515	34.2090749
Floor and wall coverings	0	0	0
Wall coverings	0	0	0
Building security	0	0	0
Locksmithing - metalwork	0	0	0
VRD	0	0	0

	Avoided CO2 (kg)	Avoided water consumption (m3)	Avoided waste (kg)
TOTAL	4109.309103	145.9122181	1478.329598

The re-use operation saved the equivalent of 32874 kilometers driven by a small car, or 37 trips from Paris to Nice, 973 rectangular bathtubs filled with water and 3 years of household waste of a French person.

## Economic assessment

Total cost of reuse : 3 400 €

Cost of reuse in percentage of the operation : 65 %

## Social economy

Social economy and professional integration :

ADEFO Dijon and the Emmaüs community of Norges, the city on the Côte d'Or. The participation of Benoit for the whole of the construction and of Aurélien (for the electricity) was a source of a first return to activity, which could subsequently promote a process of integration through work.

## Contest

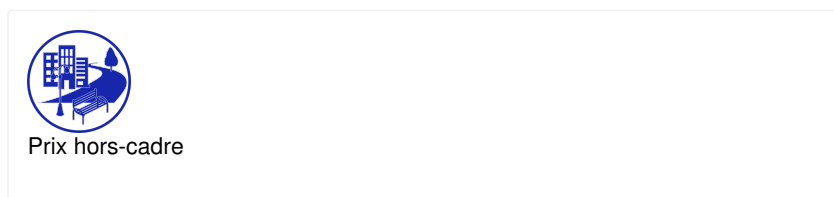
## Reasons for participating in the competition(s)

When circular economy and social and solidarity economy go hand in hand, it's a Tiny house built from reused materials, collected by the companions of the Emmaüs community of Norges la ville.

This Tiny is built with and for people in great precariousness and without fixed accommodation, today hosted by the Association Dijonnaise ADEFO .

The strength of this type of housing: it can be moved to where the housing need is.

## Building candidate in the category





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