

This goal of this manual is to support localization and customization of the TripleA-reno Energy Transition boardgame.

This guide will explain the different components of the game. In order to support creation of:

- other building types (residential and utility)
- other measures
- other strategies
- other chance cards

Translation of the game

For translation an Excel translation template is available [TAR Boardgame Translation Template.xlsx]

You can use it to translate all game elements. After translation you can cooperate with [ISSO](#) and our DTP service provider for implementing the translation. Typical implementation costs for a new translation are €300 VAT excluded.

	A	B	C	D	E	F	G	H	I
1	Original	TRANSLATION SL							
2	SOLAR PANELS	Sončni kolektorji							
3	ROOF INSULATION	Izolacija ostrešja							
4	VENTILATION	Prezračevanje							
5	AIRTIGHTNESS	Zrakotesnost							
6	HOT WATER	Topla sanitarna voda							
7	GLASS	Okna							
8	HEAT GENERATION	Ogrevanje							
9	HEAT (AND COLD) DISTRIBUTION	Distribucija toplote (in hladu)							
10	FACADE INSULATION	Izolacija fasade							
11	HOT WATER	Topla sanitarna voda							
12	FLOOR INSULATION	Izolacija tal							
13	MISCELLANEOUS	Razno							
14	SCENARIO	Scenarij							
15	CHANCE	Priložnost							
16	Energy Transition Game	Hiša - energetska niša							
17	THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S H2020 FRAMEWORK PROGRAMME FOR RESEARCH AND INNOVATION UNDER GRANT AGREEMENT NO. 784972.	Ta projekt je prejel sredstva iz programa Evropske unije za raziskave in inovacije Obzorje 2020, št. sporazuma 784972.							
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									
36									
37									

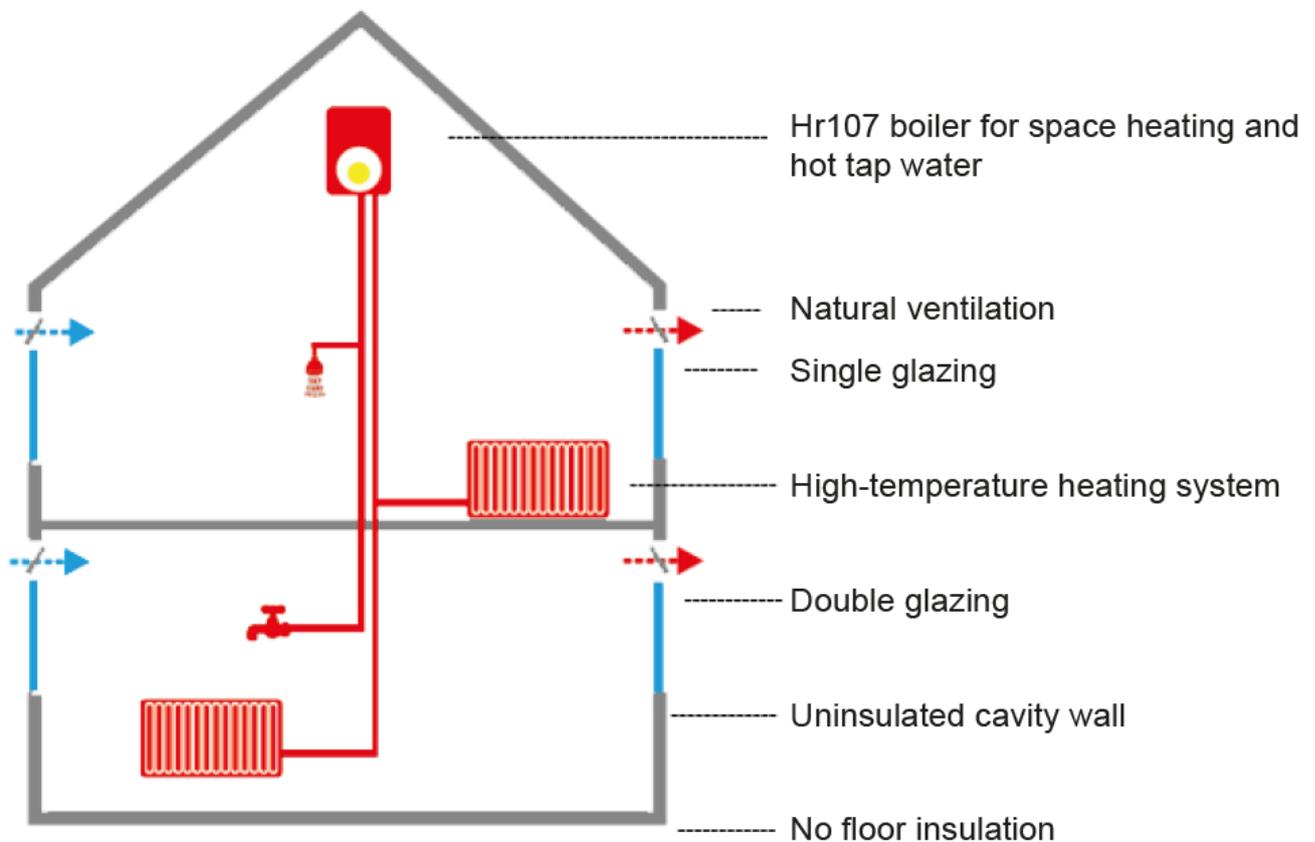
Building types

The measures, energy points and price points used in this game are based on a terraced house built in the 1970s in the Netherlands. There are many ways to make these homes more sustainable. The orientation of the roof is south / north. The south-facing section of the roof can accommodate up to 24 m² of solar panels.



TIP: You can use the [Tabula Webtool](#) for composing a version for other hometypes

The current energy use is based on the following building and installation characteristics.



In order to make the game concept work the total energy use (on the meter) is translated into 30 energypoints; 1 Energy point is approximately 500 kWh electric.

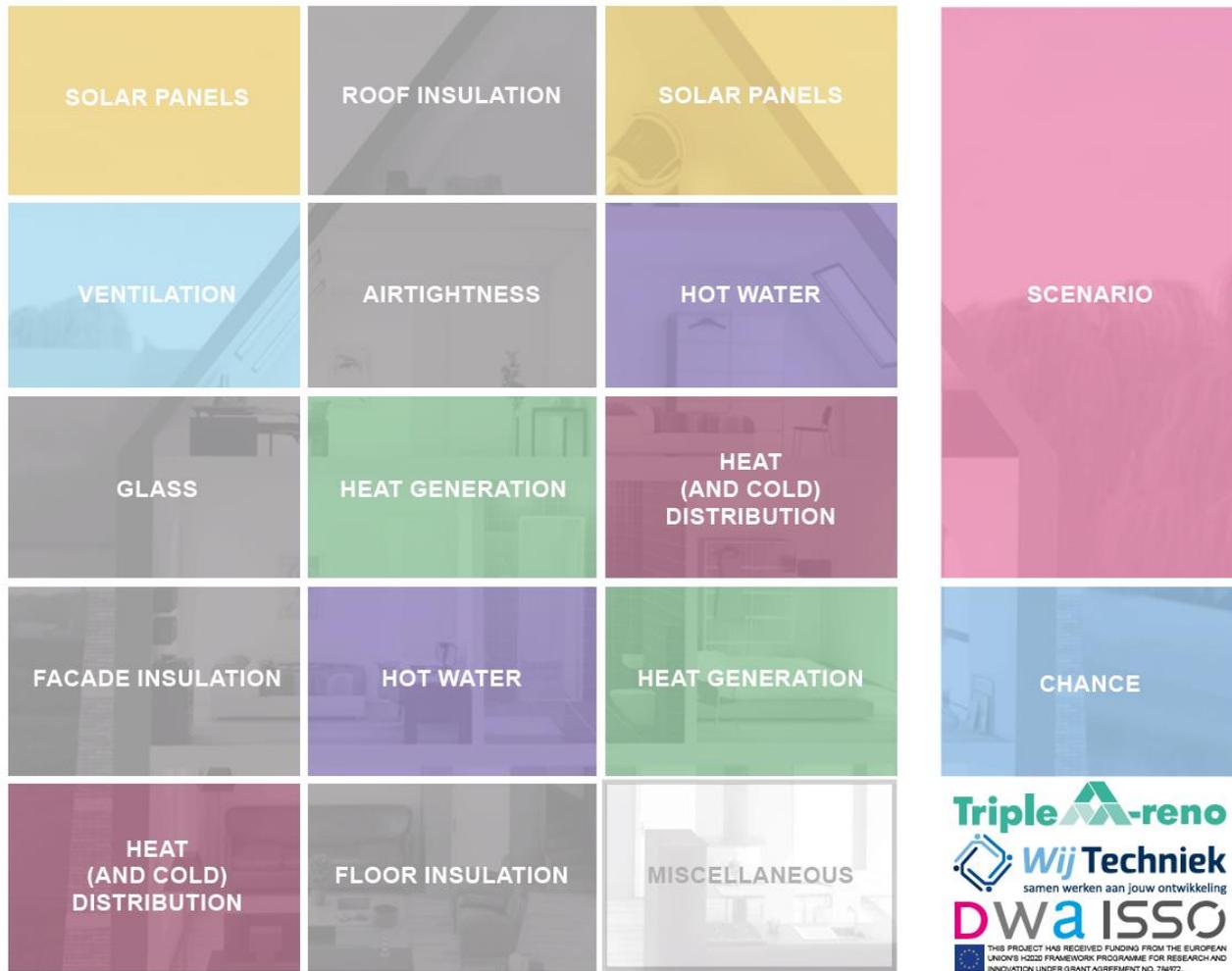
The reference dwelling used for the measure cards uses 1500 m³ gas and 1000 kWh electricity. That is divided in parts of 500 kWh electric into 30 energy points. When the reference dwelling in a customization uses less or more energy, then the division into 30 energy points need to be done again.

Example 1000 m³ gas and 1500 kWh means $((1000 \times 9,769 \text{ kWh}) + 1500 \text{ kWh}) / 30 = 325 \text{ kWh}$ for each Energy point.

The playing board

The playing board can be customized by adding a background image reflecting the building type.

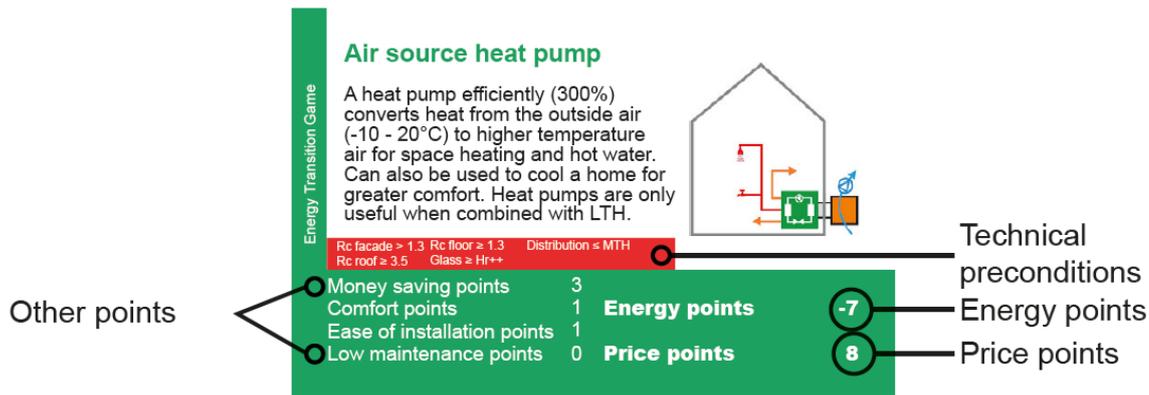
If needed the measure cardholders can be moved to more appropriate spots.



Energy Transition Game

Logos can be customized as long as the reference to TripleA-reno and the EU disclaimer stays intact.

Measure cards



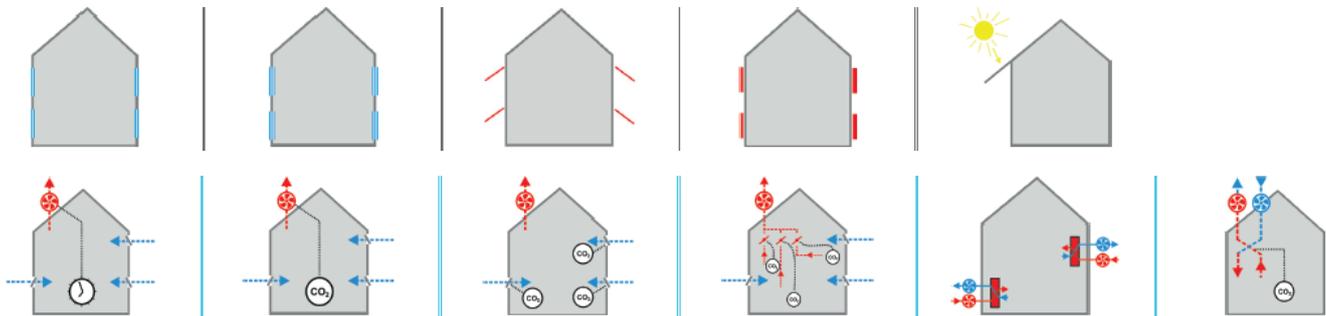
In order to add a measure card the following input is needed:

1. A technical image representing the measure
2. A clear and short title
3. When there are technical preconditions and overview of them
4. Points:
 - a. Energy points: 1 Energy point is approximately 500 kWh
 - b. Price points: 1 Price point is about € 1.000
 - c. Money saving points Points are distributed 1 to 3, 1 for low money saving, 3 for high money saving. Points are highly dependable of energy tariffs and energy taxes. You are free to use a broader scope.
 - d. Comfort points Points are distributed 1 to 3, 1 for low comfort, 3 for high comfort
 - e. Ease of installation points Ease of installation in effort and impact for the resident
2 if easy to install, 1 if installation effort is normal, 0 if installation effort is high
 - f. Low maintenance points 2 if low in maintenance, 1 if maintenance is normal, 0 if maintenance is high

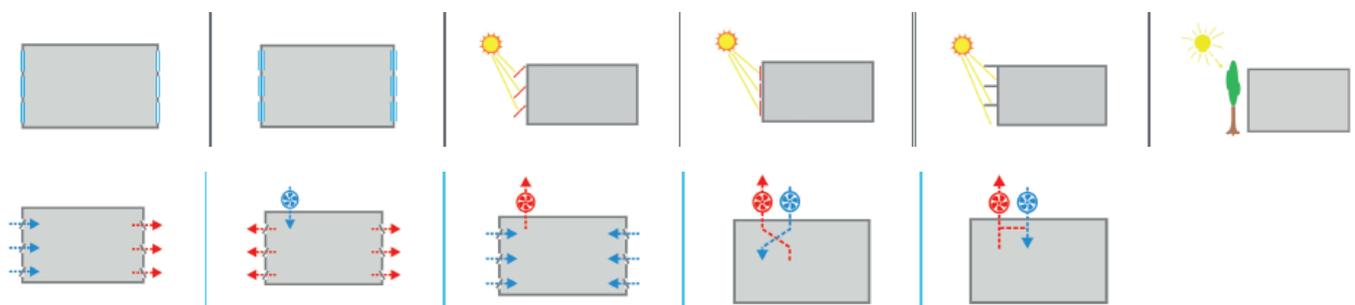
Images

Images can be sketched with a few lines and symbols in an empty building. On request ISSO can add these to the library of measure images.

Examples for residential buildings



Examples for Utility buildings



Chance cards

Can be extended with positive and negative events that can occur on local, regional or national level.

For example storage of rainwater can become popular if regional regulation is requesting it (in order to prepare for dry periods).

	COLLECTIVE PURCHASING
Chances	<p>Collective purchasing with the entire neighbourhood gets you a 20% discount on your Price points. Write this measure down last and calculate your total discount at the end of the round.</p>

Scenario cards

SCENARIO 1

An energy-efficient home for the landlord

From the landlord's point of view, relatively cheap, but highly effective measures are the most interesting. Select measures to reduce energy consumption to a maximum of 20 Energy Points for as few Price points as possible.

Objective: Energy-efficient home optimised with up to 20 Energy points for landlords

Write down the name of the scenario on the form. Start with the 30 Energy points for the basic home and deduct the Energy points you can save by implementing measures. Select the best measures and write them on the Score sheet with their Energy points and Price points.

INSIGHT QUESTIONS

When you've completed your design, answer the following questions. You can update your design based on new insights.

1. Which measure offers the biggest savings for its price?
2. Which measure offers the most comfort?
3. Is this design interesting for tenants?
4. Did other players choose the same measures and do they share your opinion and insights?

Number

Title

Short story

Point(s) related objective(s)

Default text

Set of questions that lead to insight / eye-openers

In order to create a scenario you fill in the elements mentioned above. In order to find out the value it is advised to play a scenario at least 3 times with different players. In order to find out if the points related objective is playable and what insight questions need to be added.

How to produce a localized version.

Rights: With regards to the rights it works quite simple.

1. There are many possibilities



Subject to the following conditions:

Attribution: You are free to:

share, copy, distribute and transmit the work through any medium or file format, remix, modify and create derivative works, including for commercial purposes.

2. Please share your creations with us! in order to stimulate co-creation and learning

The Energy Transition Game was co-created by TripleA-reno, ISSO, WijTechniek and DWA. Idea and design by DWA 2020, Rik Altena. For more information and to share your new scenarios and suggestions: altena@dwa.nl

Please sent always a CC to j.cromwijk@isso.nl

3. Always attribute!



Attribution: The user must identify the creator of the work, link to the license, and indicate whether the work has been modified. You may do so reasonably, but not in such a way as to create the impression that the licensor is consenting to the edits or your use of the work.

DTP and production

ISSO can connect you with the Dutch DTP company that published the original version.

This for DTP and production work.

- ✓ Publishing a translated game: in general costs around €300,- VAT excluded.
- ✓ Publishing a modified game: a transparent pricing offer based on the number of changes you want to implement.
- ✓ Producing a game: This company can also take care of production and shipment. When produced in a badge of 50 games the average game price is around €20,- this means around €1000,- for 50 sets VAT excluded. Smaller numbers can be produced with custom pricing (on request and after agreement)