

CATCH ACTION PLAN Garden Battle IN STEPS

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1 The game

The idea behind the Garden Battle is a kind of SIM City game that takes place in the Digital Twin City of Zwolle. When playing the game residents are challenged to green their own garden, neighborhood and city and give more space to water. In the online Garden Battle, a serious game, you enter the Digital Twin City of Zwolle. There you will find your own private garden and can come into action immediately. There are several additional options in the game, such as making a design for a neighborhood square or another part of public space.

The assignment is: "redesign your own garden and discover how you can make it as climate-proof as possible. You can also redesign parts of a street/sidewalk/plot. Because this is public space these designs can be shared on the special Facebook page to collect as many likes as possible, to add the competition element.

The game gives scores for the degree of climate resilience, nature friendliness and maintenance at the level of garden, street and neighborhood. These scores can be seen during the adjustments that are made to the garden. In addition, a separate simulation can be done for extreme showers, extreme drought and heat. In these simulations tips are given to make the garden more resistant to these extreme conditions.

People are more likely to play a game if there are prizes to be won. Think about the rules of the game and when prizes can be won. Involve companies from the climate network to make these prizes available. In return, those companies can be featured in the recruitment and in the game. In the game's catalog, there is the possibility to click through to the website of the respective companies for certain products.

The 2021 game rules and prizes are included as an example in Appendix 1.

2. Define playing period and area

In order to entice players to put the knowledge they have gained into practice, it was decided to play the game in spring. In the Netherlands springtime is when most people do work in their gardens.

In 2021 the game was played for 6 weeks in April and May in the pilot areas Stadshagen and Wipstrik. Two different areas and with inhabitants with very different lifestyles.

Subsequently, a post-measurement playing round was done for all inhabitants of Zwolle.

3. Adjusting Garden Battle game to area and special desires

With game designer Grendel Games, the Garden Battle must be made ready for the campaign. This includes:

- Loading areas into the ESRI platform
- Adding price providers to the game catalog
- Check the rules of the game and adjust them if necessary
- Prepare customer journey from start to competing for prizes

For a roll-out within Overijssel, the following agreements have already been made with Grendel Games: The start-up costs for a roll-out of the Garden Battle outside Zwolle amounts to €25.000,- with an additional charge of €1.520,- for each participating town. A Garden Battle campaign lasts a maximum of three months. No new functionalities will be added to the game within the campaign. Marketing and activation of end-user is the responsibility of the participating cities, and Grendel Games can offer a supporting role if necessary.

This makes it possible to have towns playing against each other, whether or not in combination with something like the national campaign NK Tegelwippen.

Adjustments of theme, game element, catalog or scoring are also possible. For this, separate agreements must be made with Grendel Games about the costs of these adjustments.

4. Recruiting

Date	Action	Details	Implementation
	Pre-inform stakeholders (eg. District managers, companies, resident groups)	Create notice with picture, leaflet and call for action, including QR-code/url	
	Define playing area (chapter 3)		
	Produce press release (example in annex 2]	Press release for local and regional media, including url to webpage.	
	Contact games design company Grendel Games to discuss in-game info		
	(Landing)webpage on own website with call for action and information (example on https://www.climate-campus.nl/Gardenbattle/)	Create webpage link and e-mail form.	
	Prepare social media updates and send to stakeholders.	Create Facebook ads campaign with 3 different posts Selection of target group / define period of active recruiting (examples in annex 3)	
	Call for action in local media		
	Prepare for playing period.	Prepare email for response to registration	
		Email message + questionnaire	
	Towards the end press releases, mailing and social media posts about prize giving ceremony.	Ask jury members and prepare prize giving. Adjust webpage	

5. Survey

Together with Grendel Games and the University of Groningen, research was conducted in 2021 into the effectiveness of this serious game. This has now given us preliminary results, but unfortunately there were not enough participants to draw final conclusions. Participants were asked to fill in questionnaires (see Appendix 4) and to draw their own garden twice: once before the start of the game and afterwards. By collecting data again at new rounds of play, the research can be continued by the University of Groningen.

In preparation, it is wise to discuss with Grendel Games whether they will cooperate in collecting additional research data.

Annex 1: prize giving ceremony June 2021

Assessment of winning garden designs:

When assessing the (saved) garden designs, a panel of judges will consider whether they believe the garden meets the following criteria:

- A good ratio of greenery to pavement and garden area
- Peace and privacy
- Generally acceptable amount of garden work
- Age-friendly garden (garden for all ages)
- Realizable (a garden that can be created without extreme effort or investment)

Prizes

The gardens with the highest scores in the Garden Battle will be submitted to the jury, who will judge them on the above criteria. The following prizes will be distributed for the garden designs that the judges feel meet these criteria.

- **Grand prize**
For the winning design a garden make-over worth 2500 euros, made available by
- **Encouragement prize**
A Rainwinner rainwater fence worth 495 euros will be made available by for the garden design with the highest score on preventing flooding in combination with the above criteria.
- **Voucher worth 25 euro**
Seven garden designs will be rewarded with a garden voucher made available by
- **15 WOPS (rainwater disconnection sets) wordt 25 euro**
15 garden designs will be rewarded met Rawinso WOPs, available at ..

Prizes for designs of public space

- **8 garden vouchers from ... worth 25 euros each for public space designs**
For the selection of the winning designs for public space, the number of likes and the feasibility of the designs are decisive. The feasibility of the designs will be assessed by a specialist jury member.

Rules of play prize competition – Garden Battle

- When incomplete and/or incorrect (personal) data are entered during participation, the municipality of Zwolle has the right to exclude the participation from further competition and may decide to forfeit the right to the prize to be won.
- The duration of the competition is indicated in the description of the game promotion.
- To be eligible to participate, a participant must be at least 16 years of age and must reside at the address in Stadshagen or Wipstrik in Zwolle whose garden is claimed in the game. All other participants are excluded from participation.
- The method of drawing the winners is indicated below.
- Prizes cannot be exchanged for money or other goods.
- Employees of the municipality of Zwolle and Grendel Games are excluded from participation.
- Winners must respond within 2 weeks of the announcement of the winners, otherwise new winners will be chosen by the municipality of Zwolle.
- Design images of the winning gardens will be kept for promotional and publication purposes.

- The personal data obtained within the framework of the win actions will only be used by the municipality of Zwolle for the Garden Battle win action and will not be provided to third parties. The obtained data will not be kept by gemeente Zwolle and will always be removed.
- These terms and conditions are governed by Dutch law.

Annex 2: example of press release

Press release Garden Battle campaign

A climate-proof dream garden for Stadshagen and Wipstrikkers residents.

Starting this week, the Garden Battle 2.0 is online and in the app stores of Google and Apple. With this serious game, residents of Stadshagen and Wipstrik can (once again) design their garden online in the digital twin city of Zwolle. This time with great prizes in prospect, including the main prize: a garden make-over worth 2,500 euros, from sustainable landscaping companies Stip from Elspeet and Stadshovenier Zwolle.

To play Garden Battle 2.0, residents of Stadshagen and Wipstrik can register at www.climate.campus.nl/gardenbattle or download the game on the Apple or Google playstore. The game is intended for laptop/desktop or tablet but can be played on mobile if necessary.

Until June 1

In the Garden Battle 2.0 a player competes against his neighbors, but working as a team in your neighborhood is also possible. Will the Stadshagen residents win from the Wipstrikkers or vice versa? The resident with a garden design that scores high on climate resistance and meets the criteria for quality of life will win the garden makeover. The designs will be judged by a jury under the chairmanship of climate alderman Ed Anker. Participants have until 1 June to design their dream garden, after which the jury's assessment and the prize-giving ceremony will take place. Schools (pupils and teachers) and companies (employees) can also participate or use the game to easily design a beautiful garden. The Garden Battle helps them to find out how they can make the outdoor space climate proof and attractive to bees and butterflies.

Unique

Already, the 2.0 version of the Garden Battle has been supplemented with fun extras. An unique addition is that some garden centers, affiliated with the Climate Campus network have come forward with their offerings. Players can now click from the game catalog to their web shops to view the products on offer, and order directly. Other garden centers in the Zwolle region can also sign up if they are interested in displaying their products in future expansions of the game. One condition is that the range contributes to increasing climate resilience and biodiversity.

An example is the Rainwinner rainwater fence, which collects rainwater just like a rain barrel but in larger quantities. This rainwater can be reused in dry times. Another example is a rainwater disconnection set, available at garden centers in Zwolle. These are climate measures that residents can take to make their garden more climate proof.

Designs for public spaces

At the end of April the game will have another fun addition: residents will also be able to make designs for public spaces in Wipstrik and Stadshagen. Interested parties from all neighbourhoods can also do their bit by participating in the NK Tegelwippen in the derby against the municipality of Deventer.

Winning pioneers in Wipstrik and Stadshagen

The pilot version of the serious game Garden Battle was released in mid-March to attract pioneers from the two districts. Some 80 pioneers registered and gave feedback on the game via a questionnaire. This allowed the game to be improved and expanded into the Garden Battle 2.0.

Two pioneers of the pilot from Wipstrik and Stadshagen received their prize this week, a set of Living Pavement tiles to frame plants.

Current issue

The Garden Battle touches on a topical issue. New weather extremes, such as prolonged heat and drought alternating with enormous rainfall, are becoming more frequent. It is therefore important that everyone takes more climate measures on their own property. With the Garden Battle, participants learn in a playful manner what kind of measures they can take to score high on climate resilience. The expectation is that people will more easily take other, more climate-resistant measures in the design of their garden.

The Garden Battle was commissioned by Zwolle and developed by Grendel Games, a game company that focuses on serious games on social issues. The game was co-financed by CATCH, a European Interreg project in which seven European cities are participating. Zwolle is participating in the European project in order to make residents aware of this issue and to let them experience how they can prevent damage by taking the right measures.



Annex 3 examples of social media posts

Highest scores per area:

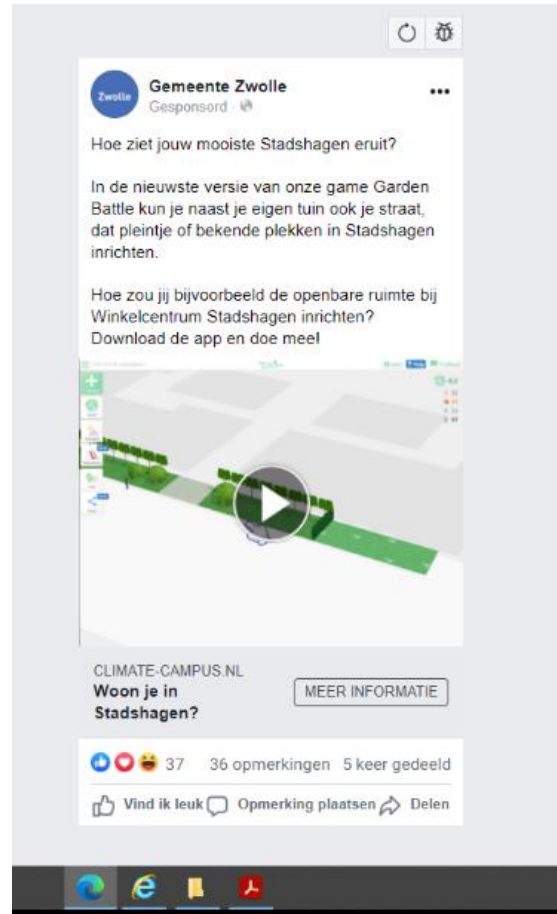
Stadshagen InGame Video (public space): <https://fb.me/1FRxa6MtwAGmrKC>
Wipstrik InGame Video (public space): <https://fb.me/a3gW7Lo9RV8MfF>

Second best score per area:

Stadshagen InGame Video (garden): <https://fb.me/1JSwsn3I7aPIDi>
Wipstrik Carrousel: <https://fb.me/1SYF0AHoDjzEchj>

Least scoring:

Wipstrik GIF: <https://fb.me/1F8X7AlzR2p9Rok>
Stadshagen
GIF: <https://fb.me/1PK5gDZDvkk9neQ>
Stadshagen
Carrousel: <https://fb.me/1PV9CubP4QezSq5>
Wipstrik InGame Video (Tuin): <https://fb.me/1JOKpIHZfLfM6jz>



For each of these ads, there are multiple text variants that Facebook dynamically displays to the target audience. (On which the algorithm expects the most clicks per person).

Annex 4: Questionnaire

Perceptions of climate change (4 items)

1. Climate change will have serious negative consequences
2. Climate change will affect my environment
3. It will be a long time before the effects of climate change are felt
4. I am concerned about climate change

Response scale: 1 = do not agree at all, 2 = do not agree, 3 = partly disagree, 4 = don't agree, don't disagree, 5 = partly agree, 6 = agree, 7 = totally agree.

Risk perception (4 items)

1. I believe that damage to my home, garden, property and immediate environment caused by extreme weather ...
2. I believe that negative impacts on my health and well-being, or the health and well-being of my family member caused by extreme weather, ...

Very unlikely 1 2 3 4 5 6 7 *Very likely*

Not serious 1 2 3 4 5 6 7 *Very serious*

Adjusting to climate change (4 items)

1. I believe I am capable of taking measures to prevent or reduce the effects of extreme weather
2. If I take action, it is effective in preventing or reducing the effects of extreme weather
3. I have the necessary knowledge to take action to prevent or reduce the effects of extreme weather
4. I plan to take action to prevent or reduce the effects of extreme weather.

Response scale: 1 = do not agree at all, 2 = do not agree, 3 = partly disagree, 4 = don't agree, don't disagree, 5 = partly agree, 6 = agree, 7 = totally agree.