

# Climate change from a reinsurer perspective

**NN Re**



# NN Group at a glance

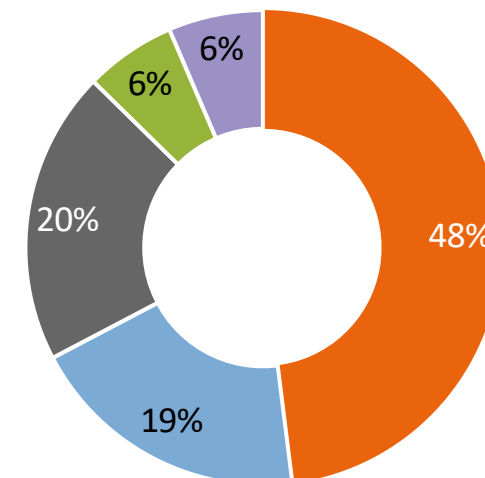
## Our company

- International financial services company, with a strong presence in Europe and Japan
- Active in 11 countries, unified international culture with shared best practices
- Approx. 20 million customers served by around 16,000 employees
- Successful IPO on Euronext Amsterdam in 2014
- Credit ratings<sup>1</sup>: A/positive (S&P), AA-/stable (Fitch)

## Our main brands



## NN Group operating capital generation<sup>2</sup>



All numbers in this presentation are as at 30 June 2023 or for 1H23, unless stated otherwise

1. Financial Strength Ratings

2. Percentages based on 1H23 operating capital generation excluding the segment Other (EUR 1,089m)

# Creating long-term value for our stakeholders

Our purpose

**We help people care for what matters most to them**

Our ambition

**We want to be an industry leader, known for our customer engagement, talented people, and contribution to society**

Our values



Care



Clear



Commit

Our brand promise

**You matter**



Our strategic commitments



**Customers and distribution**

We see our customers as the starting point of everything we do.



**Products and services**

We develop and provide attractive products and services.



**People and organisation**

We empower our colleagues to be their best.



**Financial strength**

We are financially strong and seek solid long-term returns for shareholders.

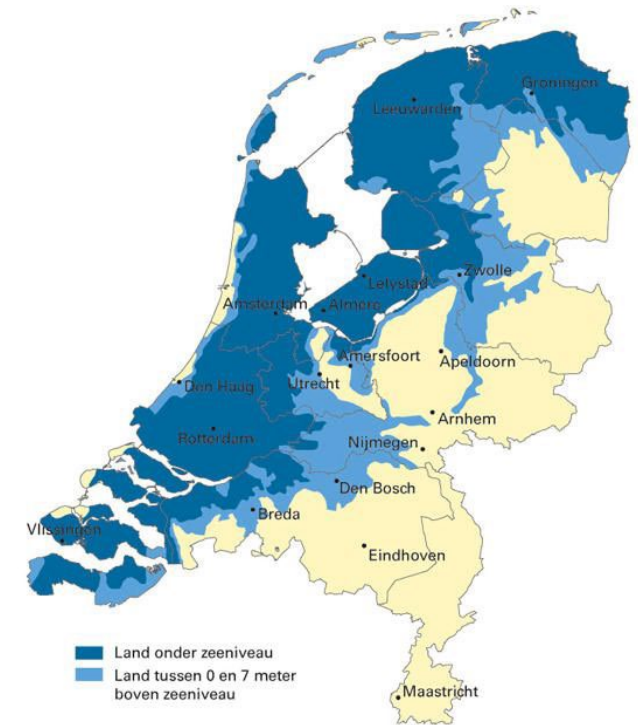


**Society**

We contribute to the well-being of people and the planet.



# The Netherlands



Kaart:  
Hans van der Maarel  
Red Geographics

# Impacts of climate change – the proverbial iceberg



## Natural catastrophes – Property & Casualty

- Loss frequency
- Secondary perils
- Unmodelled losses

## Systemic Risk

A risk that has ability to affect either many different lines of business across diverse geographies at once, or impact a single line of business profoundly,



## Long term - Mortality & morbidity

- Mortality/disability resulting from natural catastrophes
- Mortality due to heat, smog, worsening air quality, etc.
- New diseases, due to invading insects, etc.



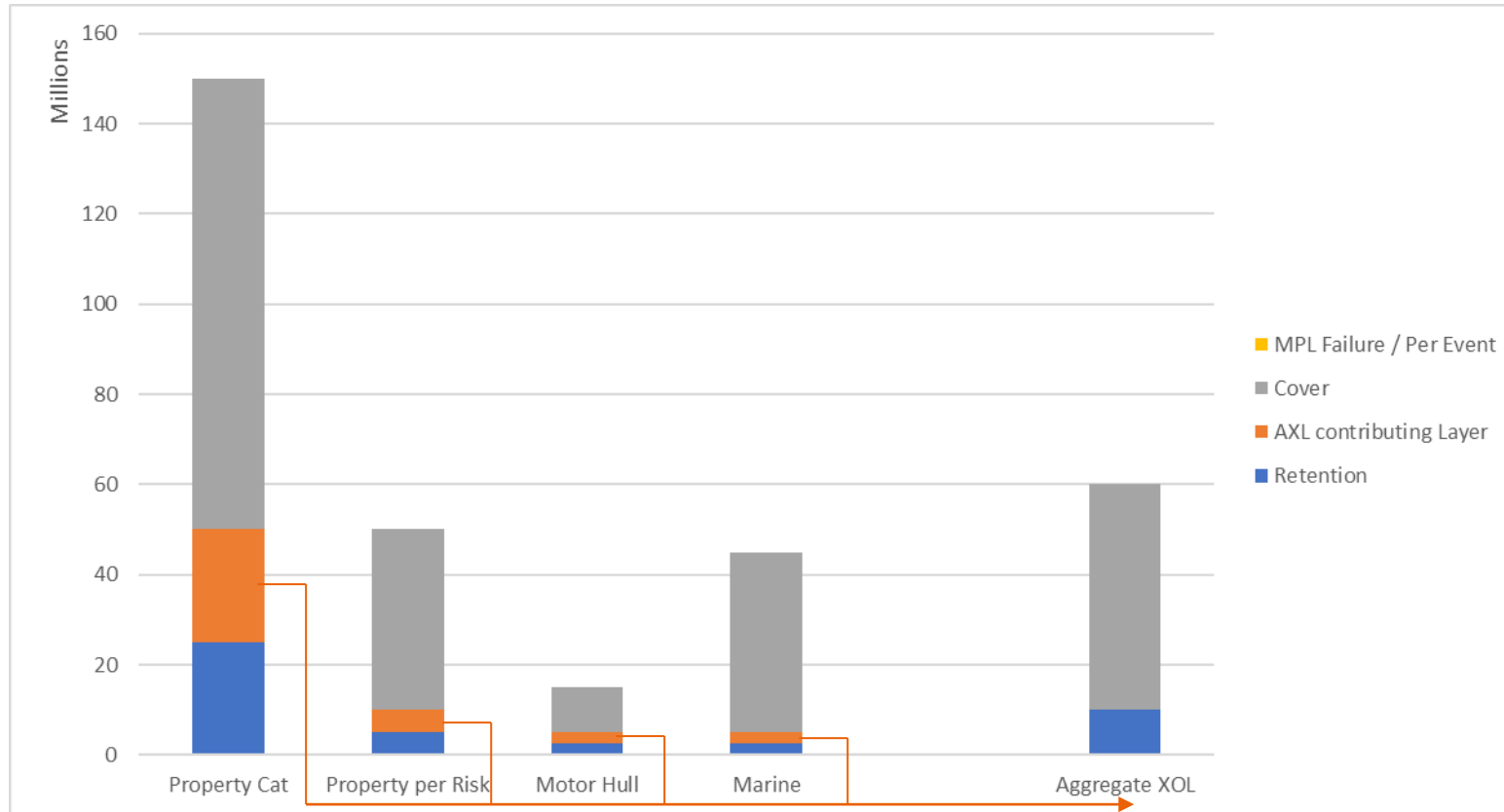
# So, what can we do as the internal reinsurer of NN Group?

## Mitigate the consequences

- Adapt reinsurance structures
- Use alternative risk transfer solutions
  - Parametric covers
  - Pools
- Be sharp on wordings (event definitions)
- Spread Risks
- And .... be a responsible actor and an active contributor for a positive change

# Example of Aggregate XL structure

## Example of short tail Aggregate XL



- Aggregate covers can be a solution for higher frequency of losses across business lines
- Remains significant additional cost for insurance company

# Find alternative risk transfer solutions (1)

## Parametric covers

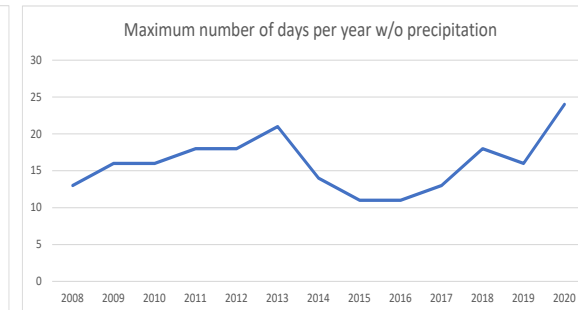
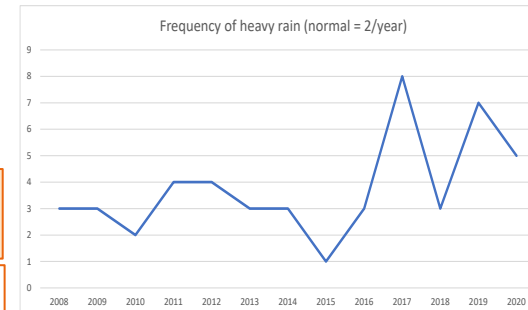
### How does it work ?

A parametric cover triggers a payment in case of pre-defined parameters. For example:

- $x$  EUR per excess mm of precipitation above  $y$  in a defined area over a defined time-period;
- $c$  EUR for an earthquake of at least magnitude  $d$  in a defined area;
- $e$  EUR for  $f\%$  of excess mortality for a country during a defined period

### How can it help to mitigate impact of climate change ?

#### Example precipitation parametric cover



	Traditional (re)insurance	Parametric covers
Trigger and loss payment	Actual portfolio is modelled, and claim is paid out, based on the actual loss. Requires assessment of the loss and claims investigation. Therefore, recovery might take long(er).	Sharing of detailed underlying portfolio information with the (re)insurer is not needed (GDPR benefit). The use of external (independent) triggers or indices makes payment and settlement fast and transparent.
Modelling and basis risk <sup>1</sup>	Events and expected development of events need to be modelled (in detail) to understand the impact on the portfolio and design and price the appropriate cover. Indemnity based - basis risk limited - leading to SII capital relief.	Correlation between the parametric trigger and the pay-out is crucial for capital relief. Even with high correlations between trigger and pay-out, basis risk cannot be fully eliminated. Thus, SII capital relief might not be allowed.

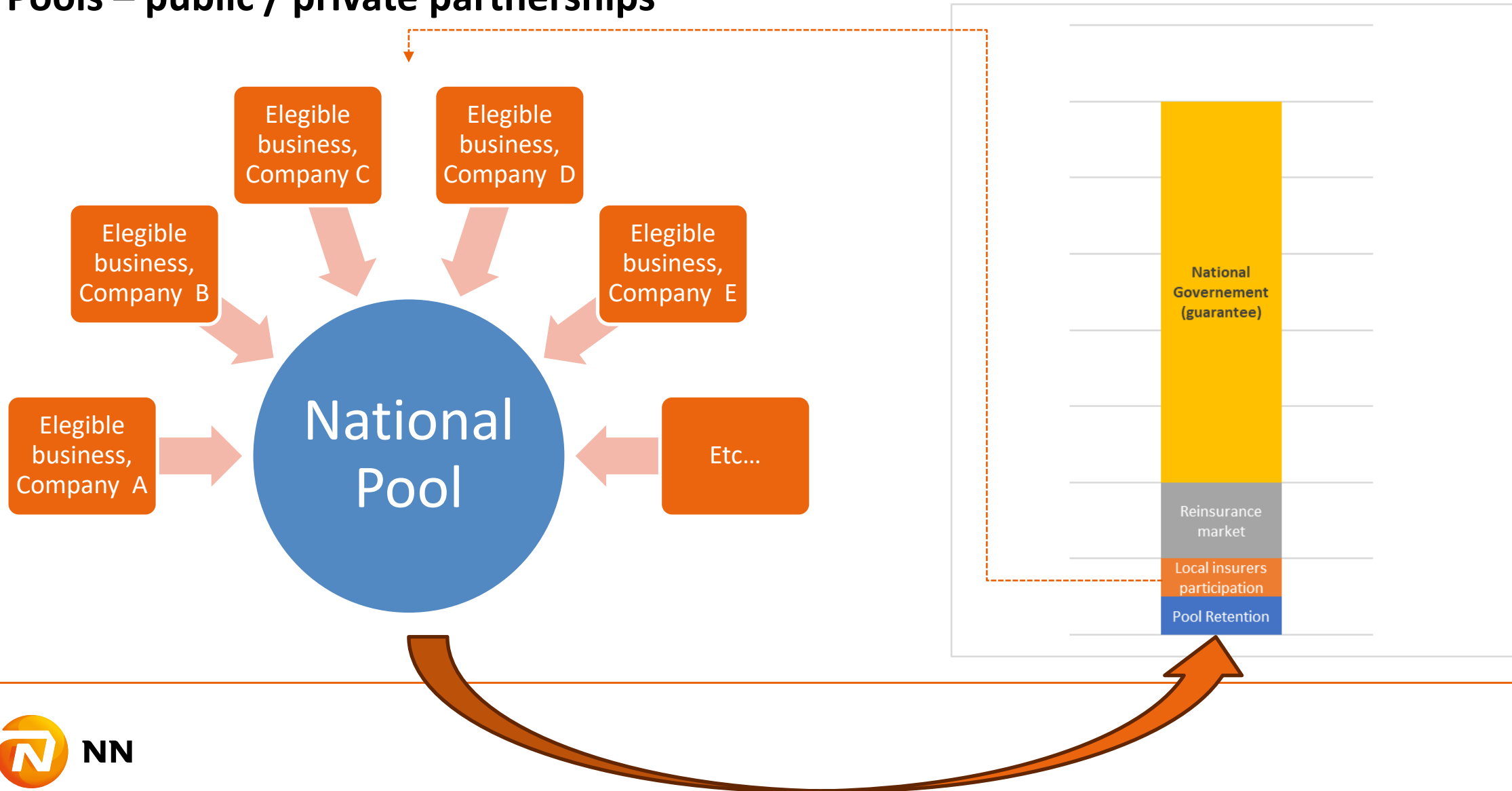
- One specific measure station (in this case Assendelft in the NL)
- Heavy rain defined as > 25mm on a single day;
- A parametric (re)insurance cover can be defined to pay out, in case of a higher frequency than  $x$  of heavy rain during a pre-defined period;
- As climate change is expected to lead to a higher frequency of severe precipitation, this could impact properties, crops etc. Without having to model the potential damage or having to assess the damage on site, the parametric cover pays out based on independent measuring (in this case KNMI);
- Alternatively, a parametric cover can be designed to pay out in case of a lack of precipitation (note: maximum number of days w/o precipitation in the past 18 years in the Netherlands was 49 days).

1) Art 1 (25) Delegated Regulation: 'basis risk' means the risk resulting from the situation in which the exposure covered by the risk-mitigation technique does not correspond to the risk exposure of the insurance or reinsurance undertaking. In case of material basis risk, no capital relief is allowed



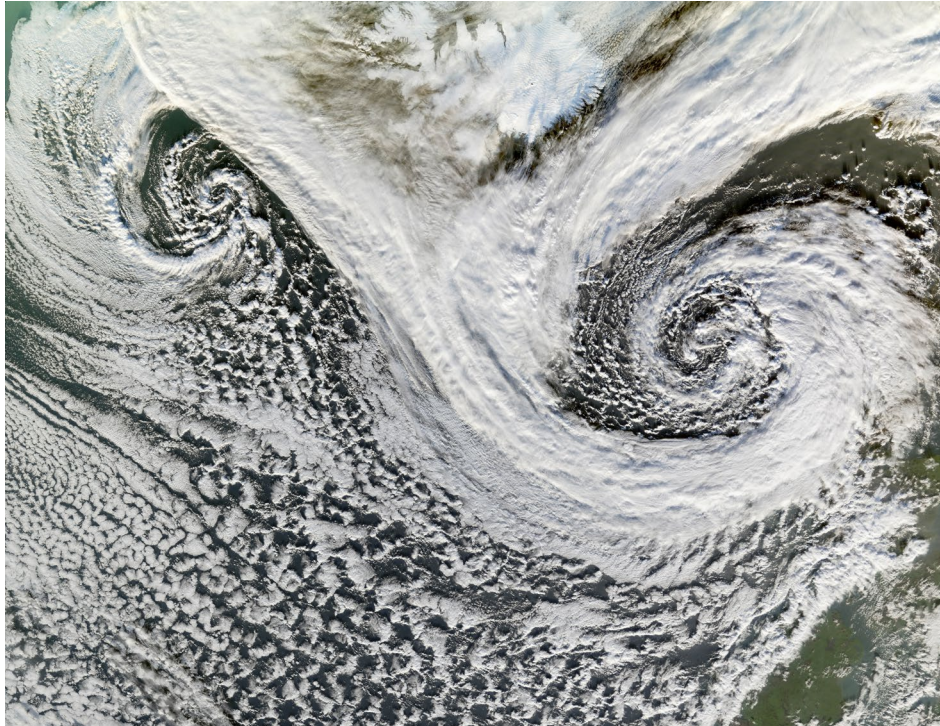
# Find alternative risk transfer solutions (2)

## Pools – public / private partnerships



# Importance of event definitions in wording

## Hour clauses, named storms, etc.



### Definition of "Loss Occurrence"

The term "Loss Occurrence" shall mean all individual insured losses arising out of and directly occasioned by one event, provided always that the losses concerned shall have the same direct cause, occur during the same period of time and in the same area. Such cause is understood to be the peril which directly occasioned the losses. Where there are several perils which, in an unbroken chain of causation, have occasioned the losses, such cause is understood to be the peril which triggered the chain of causation.

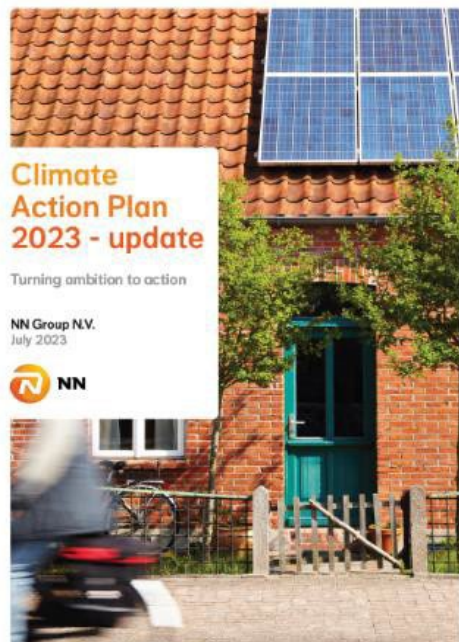
However, the duration and extent of any Loss Occurrence so defined shall be limited to:-

- (a) 72 consecutive hours as regards a named storm or unnamed storm or storms including hurricane, typhoon, windstorm, rainstorm, hailstorm and/or tornado.

In circumstances where a storm is named by a meteorological institute each named storm shall constitute a single **Loss Occurrence**. However, if a named storm should exceed a period of 72 consecutive hours, the Reinsured may divide such named storm into two or more Loss Occurrences, provided no two periods overlap and provided no period commences earlier than the date and time of the happening of the first recorded individual loss to the Reinsured in that named storm. Furthermore, where a storm is assigned different names by applicable meteorological institutes, it shall nevertheless be treated as one and the same Loss Occurrence.

# At last

## Be an active contributor to a positive change



### Contributing to the SDGs

#### Healthy living



#### Sustainable planet



#### Inclusive economy



### Competition

## Plant a tree challenge

There are many initiatives for planting trees. Cooling down the planet, exchange concrete for green in your garden and trees that you can sponsor. Here, we're going to create a competition. Everyone will receive a (small) tree. The challenge is to plant your tree in the best spot, cherish it, feed it and make sure it gets enough water. The one that does the best and achieves the highest growth in a year will win a prize. But the ultimate winner is the climate.

- 📅 As of September 2022
  - 🕒 One year (until September 2023)
  - 🏠 At home
- Pick up tree package: 1 September 2022 at HP G.02

### Sustainability at NN Group

[NN Group - Sustainability \(nn-group.com\)](https://nn-group.com)

[NN Group - Taking climate action \(nn-group.com\)](https://nn-group.com)

[NN Group - Responsible investment \(nn-group.com\)](https://nn-group.com)



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