

HOT SPOT

EARTH



HOT SPOT EARTH

A climate action game

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Sharing is
encouraged

Climate action meets light management and simulation elements

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In Hotspot Earth, players fight climate-driven monsters, such as droughts and floods, manage an activist movement, and influence societal and climatic changes through their choices.

Hotspot Earth **transports actionable knowledge about real needs and measures**. At the same time, it is an engaging entertainment product. It combines easy-to-learn action gameplay with near infinite combinations through its upgrades and player choices.

Brotato

Fast-paced survivors-like action



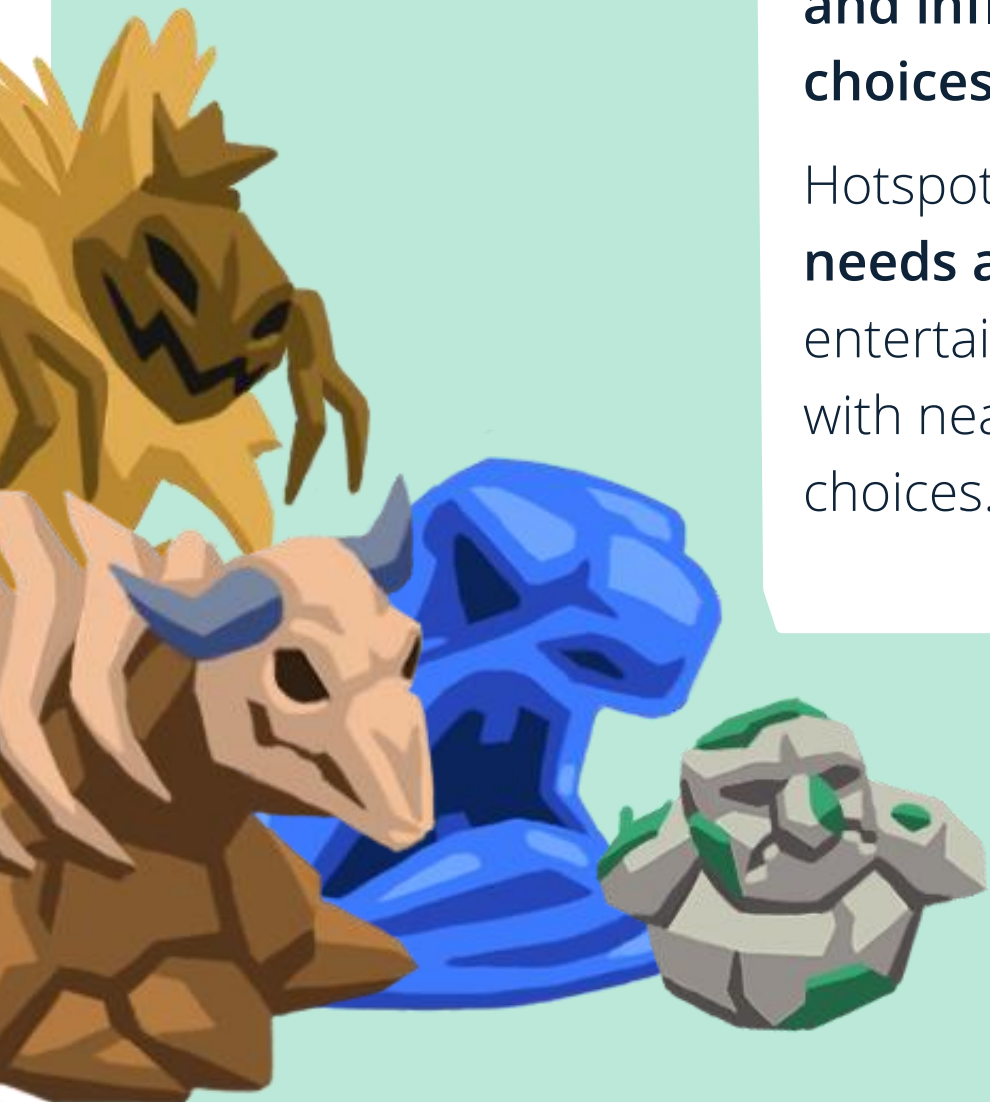
Into the Breach

Team management and a strategic campaign



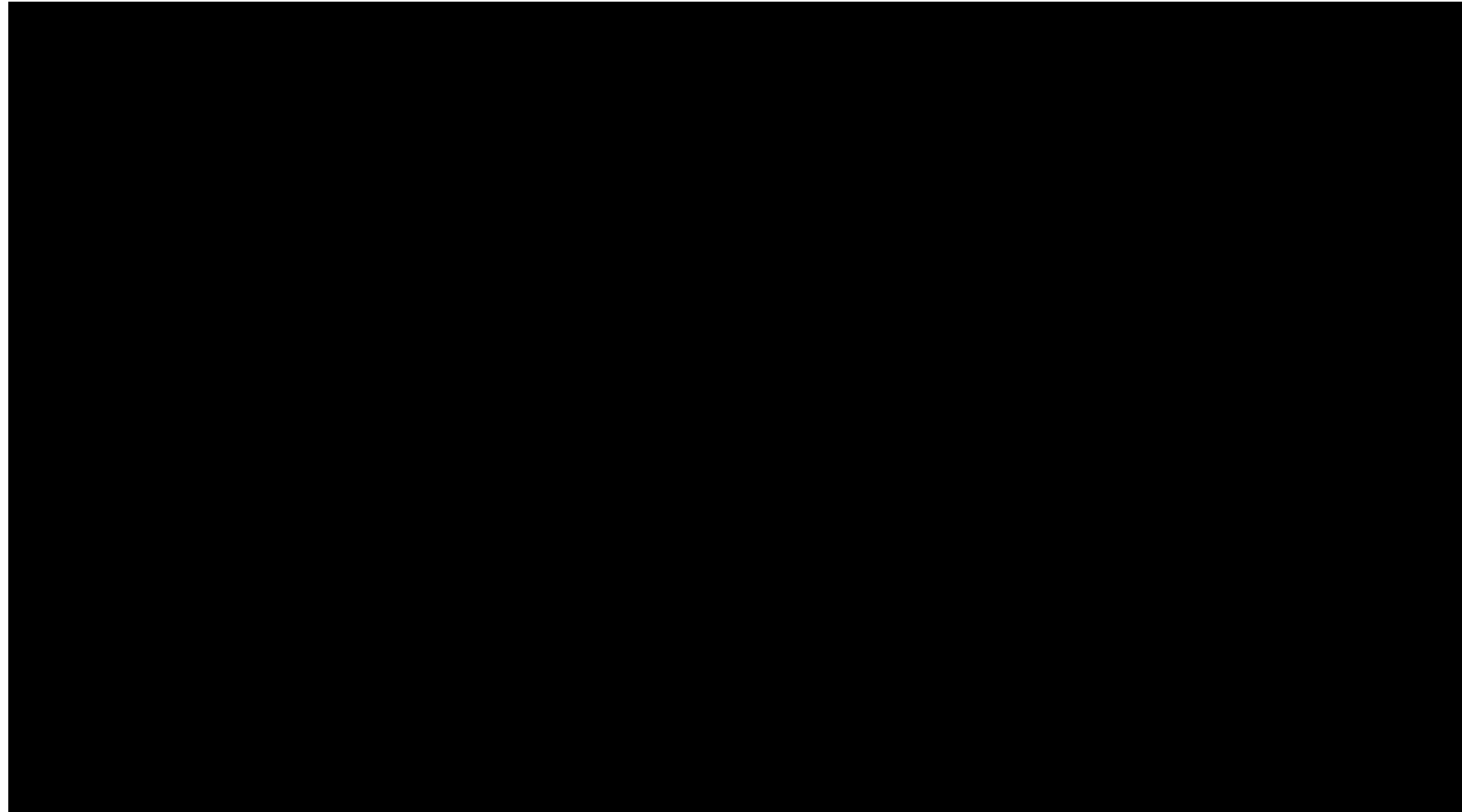
Climate Action

Real threats and measures shown in an engaging way



Core loop: Climate action around the world

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Trailer also available on [YouTube](#)

Core loop: Climate action around the world

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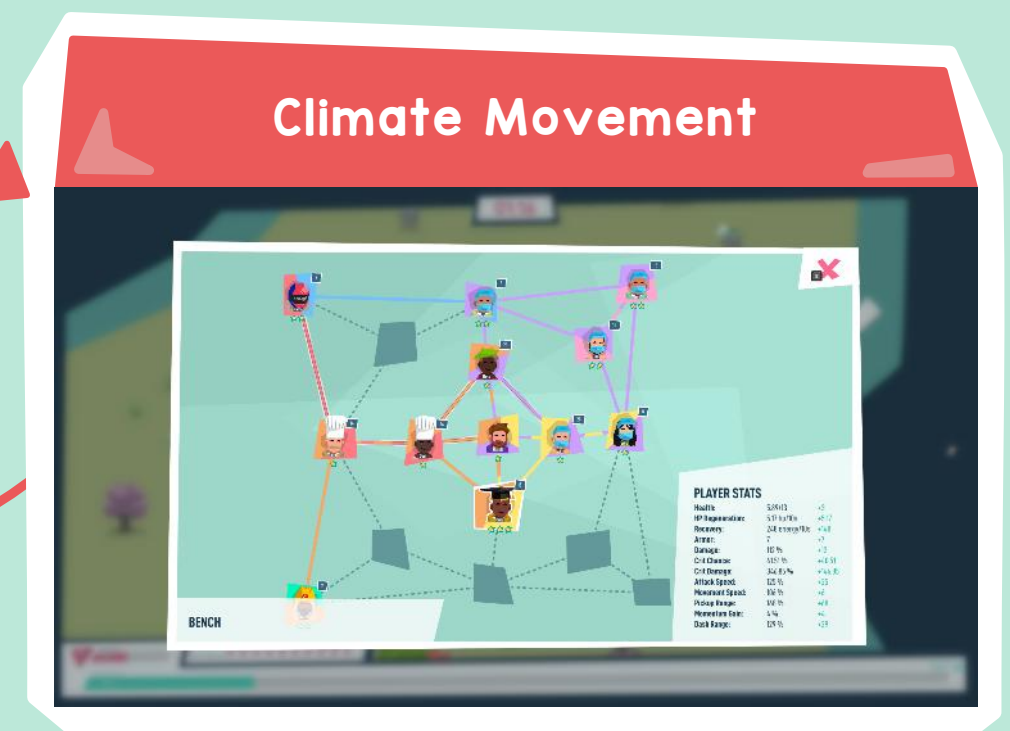
Plan your campaign and choose the next country to visit, with special challenges and rewards everywhere.



Choose society's direction and affect the internal climate model and thus the game world and hazard monsters.



Defend yourself and points of interests against hordes of climate hazards. Collect momentum to spend in the Society & Climate Phase.



Bring new activists into your network, adding new abilities and improving your stats. Color-match them for powerful synergies.



Empower your movement.
Face the crisis.
Survive the century.

01:22

Fight climate hazards



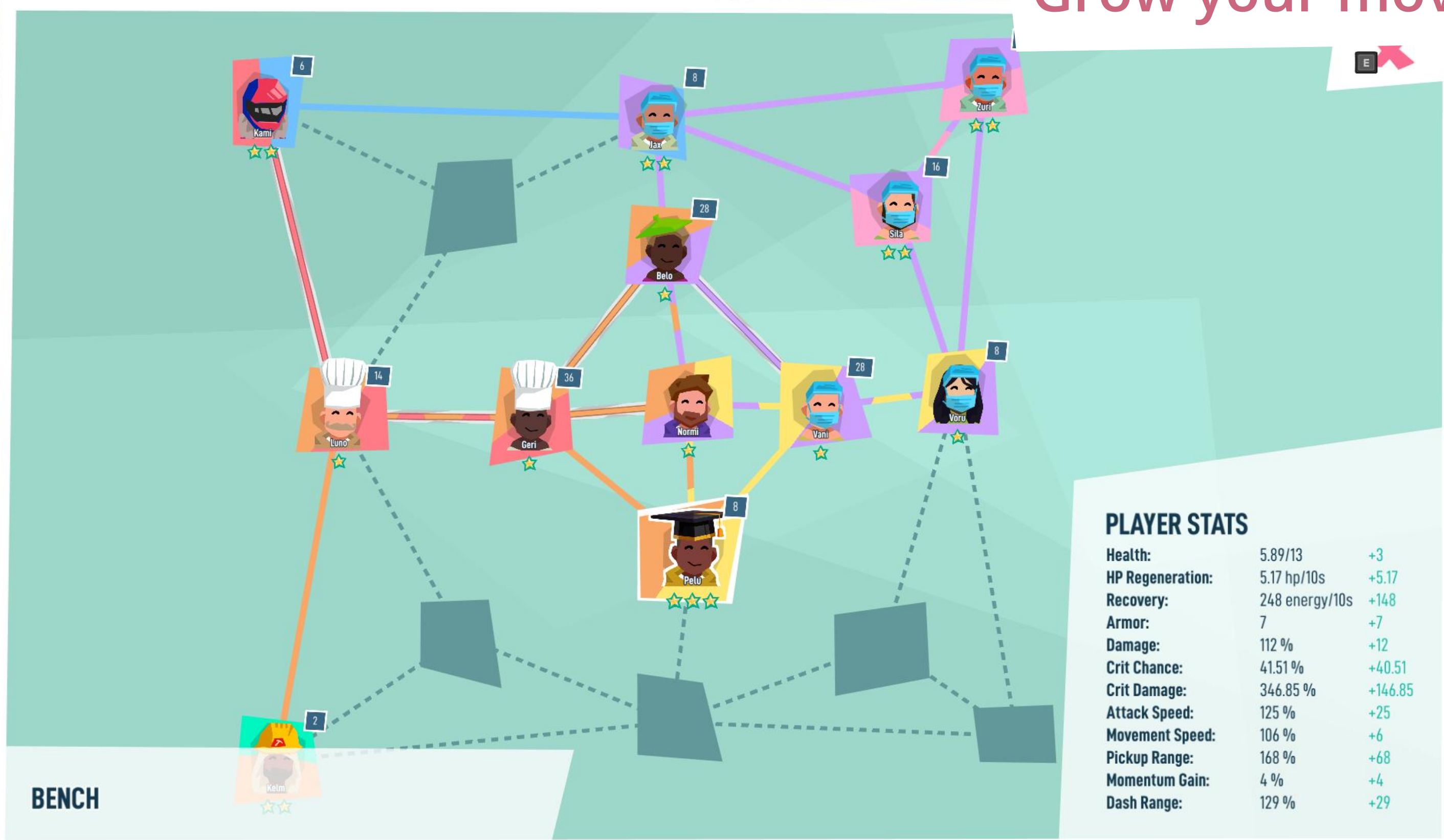
Health 10 HP

POIs Overwhelmed

Momentum 98%

314

Grow your movement



SOCIETY

You think your decisions can have any impact whatsoever on the climate? Well... you are right! I recommend investing in pond reclamation.



Fusion Research 70 ▲

Fusion could solve all energy issues within the next few decades. At least that's what we've been told for the last few decades. If we research it just a little more, we might see the necessary breakthrough.

Increased Reforestation 40 ▲

Local governments want to heavily invest in reforestation programs.

Universal Healthcare 30 ▲

Medical professionals suggest making public health a priority, pushing for universal healthcare.

Temperature Increase This Period

0.1047°C

REROLL 10 ▲

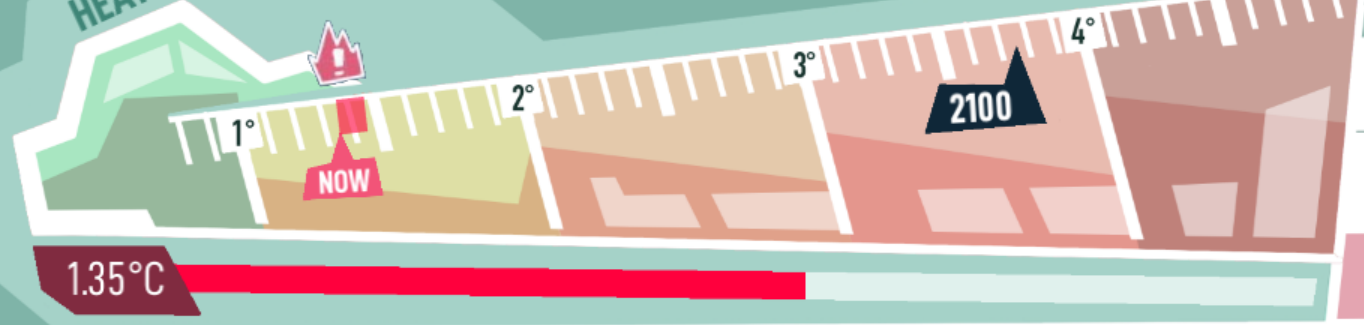
Influence society and climate

ELECTRICITY

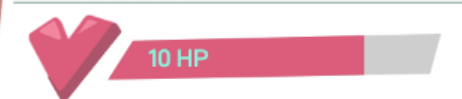
RESILIENCE



HEAT



244 ▲



CONTINUE

25 - 30 - 35 - **2040** - 

Where to go next... I hope somewhere wet with lots of ponds.



WORLD

SOUTH AFRICA



Temperature Increase This Period

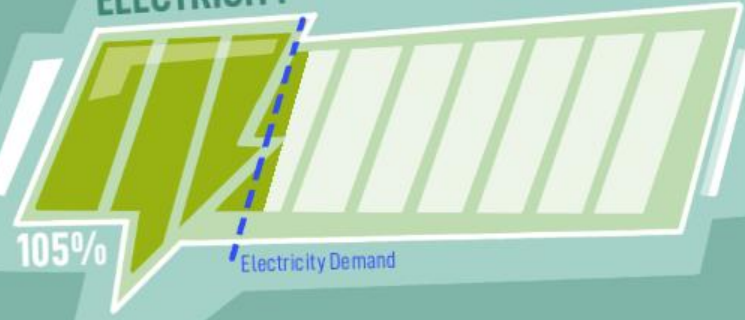
0.0581°C

JPN

AUT

FROX NEWS

ELECTRICITY






RESILIENCE



HEAT



Experience your impact  
around the world 

107 

Core loop: Climate action around the world

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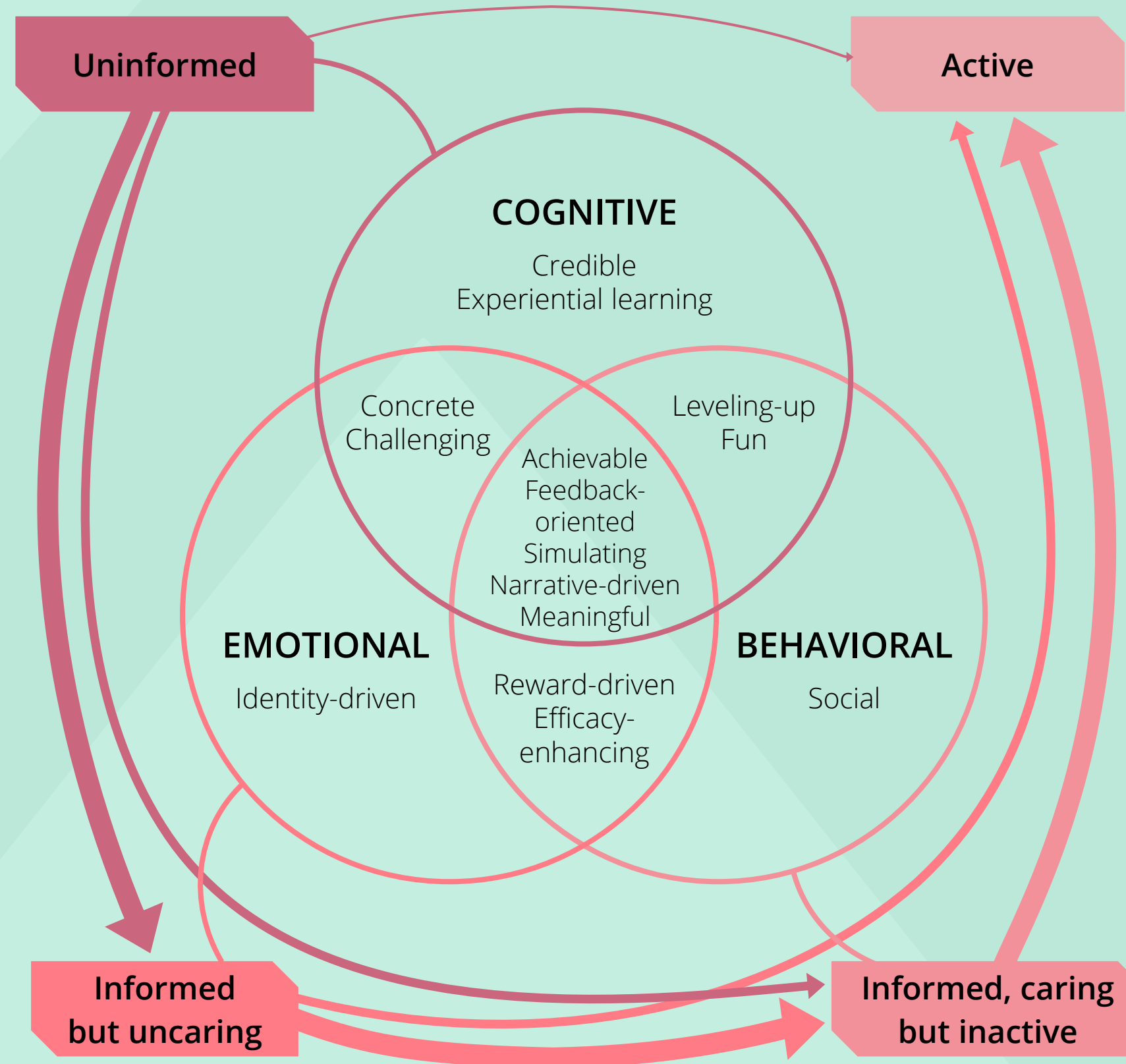


Empower your movement.
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A framework for effective climate communication

Hotspot Earth builds on a framework for climate engagement through games by Ouariachi et al.

- > Effectively engaging players requires not just **knowledge** sharing (cognitive engagement) but **emotional** and **behavioral** engagement as well.
- > They proposed 15 game attributes that support engagement through one or multiple categories.
- > Hotspot Earth aims to showcase all of the attributes in some form.





Eye in eye with the crisis

- > Players directly face a growing number of climate-driven hazards, both as monsters and emergencies affecting cultural points of interest.
- > Players dodge and fight the monsters, help with emergency relief, collect momentum, and invite spawning activists to join their movement.
- > Player weapons are inspired by various important individual actions, such as a Tofu Hammer or Wind-powered Shuriken, symbolizing low-footprint food choices or choosing green energy providers

Core message

Players directly experience how **urgent the climate crisis already is** and how much worse it can become if we, as society, don't build up momentum and decide to act decisively.



Moving the world forward

- > Players learn how the baseline shifts based on combined population and prosperity growth and they previous round's final indicators
- > They "spend" momentum to activate various societal change cards, including cultural shifts, political developments and industrial investments.
- > By combining efficient or synergizing cards, players create their individual pathways impacting the world's resilience, prosperity and climate risks.

Core message

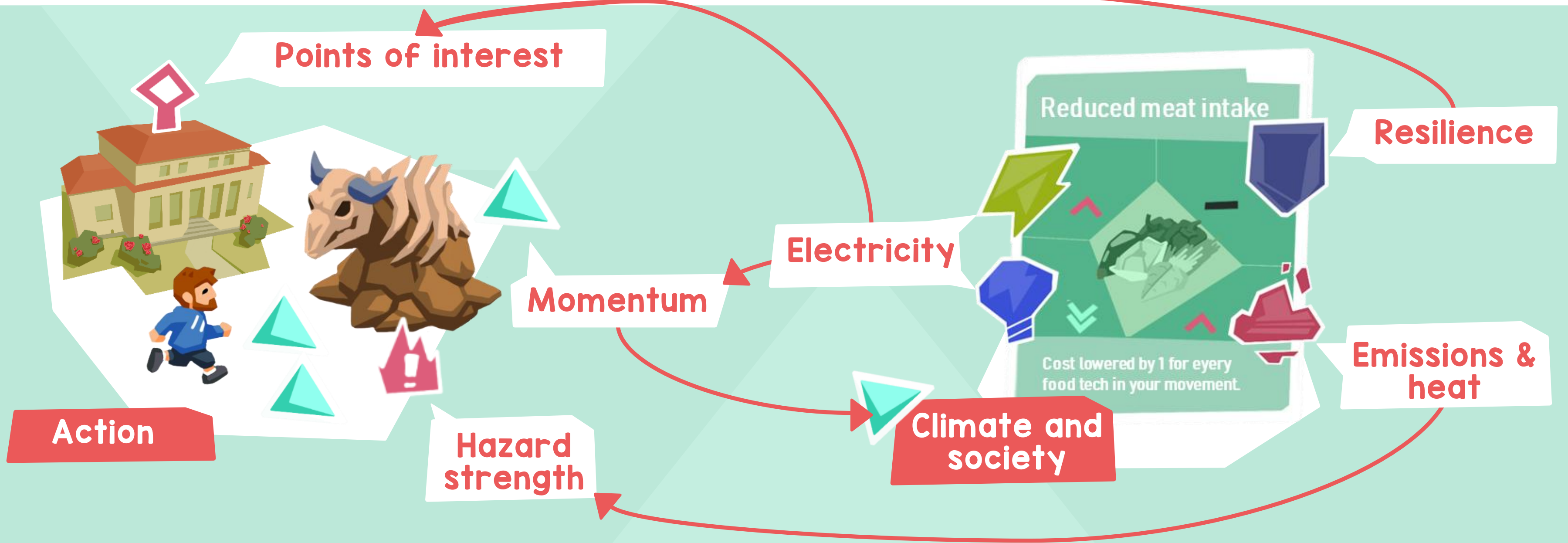
Correctly balancing various societal priorities is a difficult challenge. But **we have countless measures in our toolkit**. Some are more efficient than others, synergize well with some or block others, or carry co-benefits for, for example, health or biodiversity.

Underlying data

Population growth is based on SSP projections, baseline electricity demand on IEA data. Card effects are rough indicators of relative effect strength collected from various data bases and assessments. Collection is still ongoing.

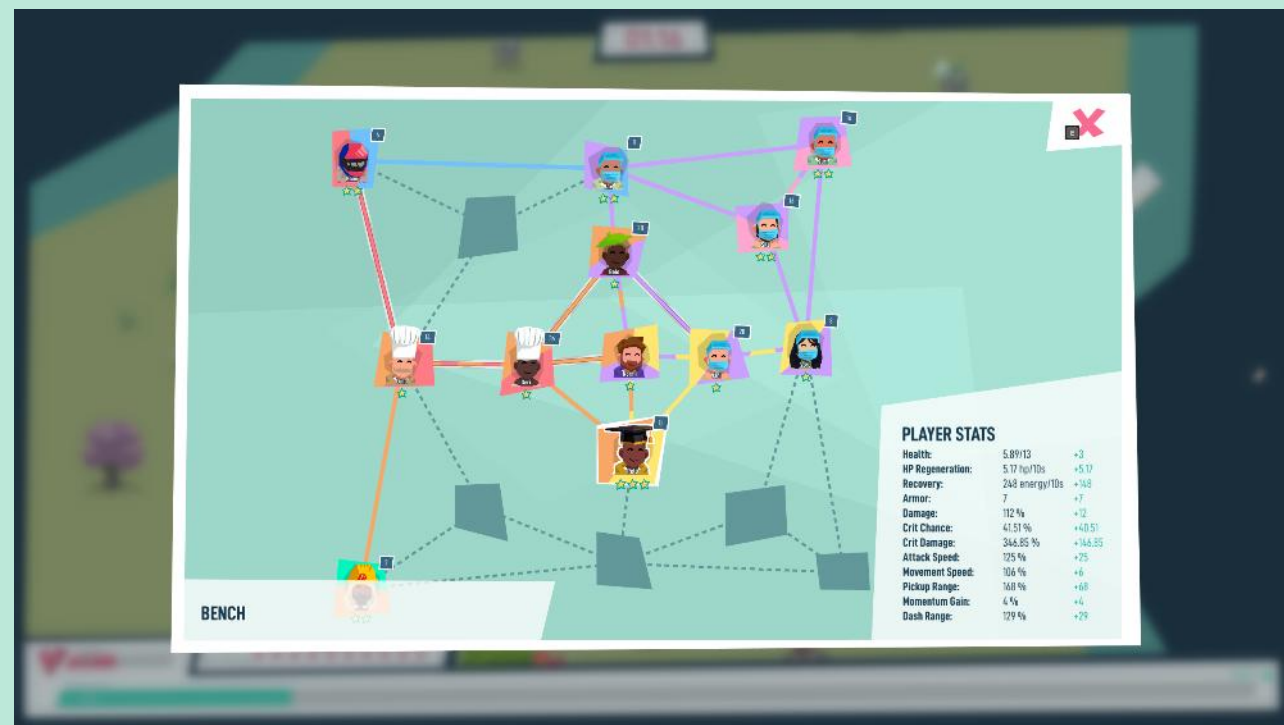
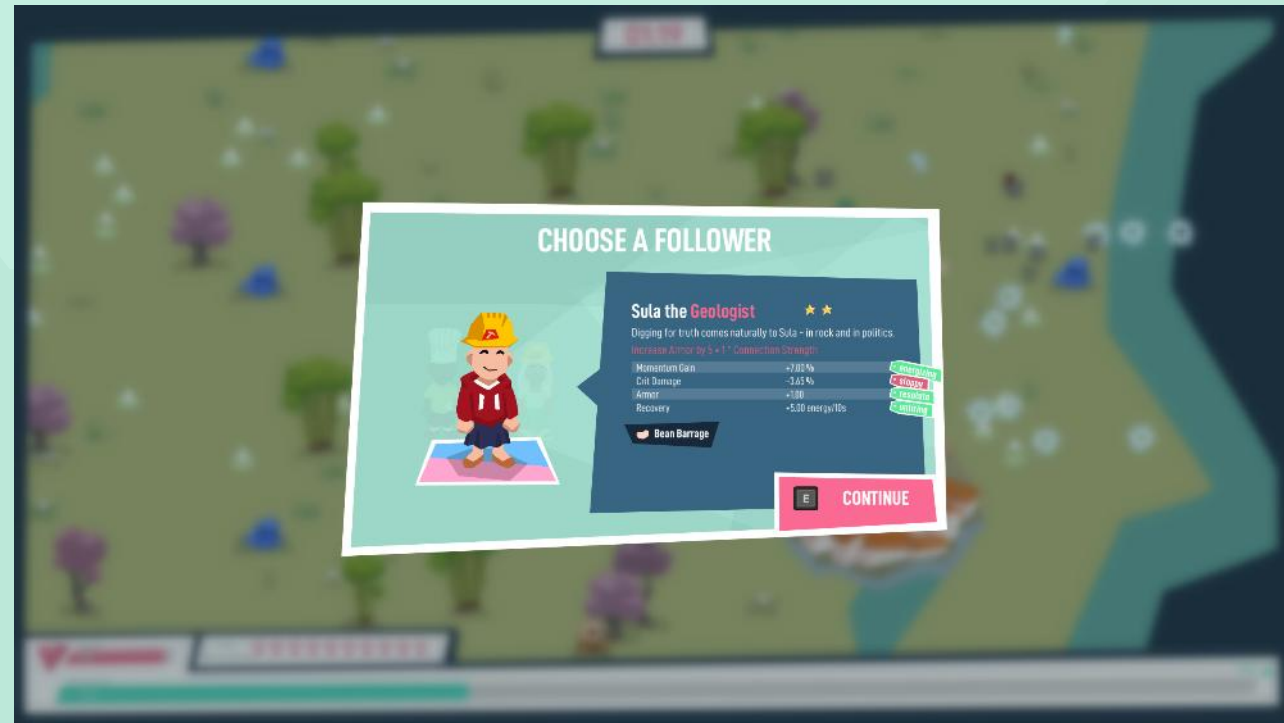
Action-society-climate link

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At Hotspot Earth's core sits a **simple climate model** that links the two main phases of the game. Players collect momentum during the Action phase, then spend it during the Climate & Society phase to **change the course of the world**. Their choices shift emissions, the modelled temperature and thus how dangerous the hazard monsters and emergency events will become.

At the same time, players need to invest in adaptation measures to make the points of interests more resilient and keep an eye on societal needs (electricity) to avoid negative impacts on both resilience and momentum.



Player actions

- > Players meet a large and diverse cast of activists, who expand and empower the movement.
- > Besides a base skill shared across their respective profession, they are individuals adding random traits and weapons to the network. Even if they have negative traits, they are a net-gain for the network.
- > Matching activists well with neighbours makes the network vastly stronger, lets them form long-term relationships and can create “game-breaking” synergies.

Core message

Every movement needs organizers and leaders at its core, like the player characters in Hotspot Earth. But it is the shared purpose and a diverse network that give any movement its true power. **Every single person can become part of a larger lever for change** and small individual actions add up.

World map: climate action everywhere

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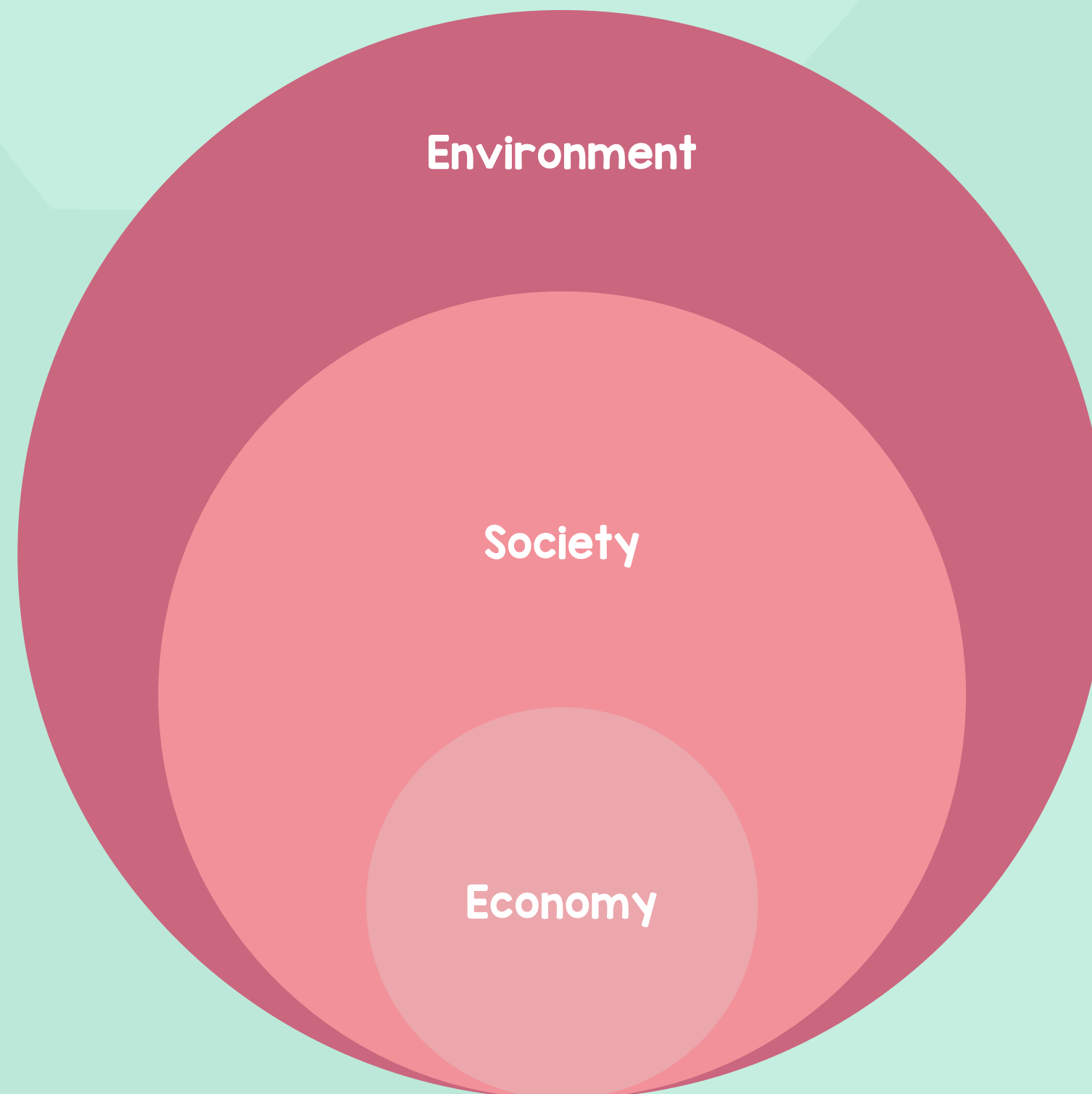


Player actions

- > Players select the next level from a list of real-world countries.
- > To help them decide, they see geographic information, such as the shape and size of the level, but also the type of hazards they are most likely to face as well as additional challenges and rewards

Core message

The crisis will be — and is already — everywhere, affecting everyone around the world. Impacts are much harder or felt much more strongly in some countries compared to others.



Giddings, Hopwood & O'Brien (2002)

Player actions

- > At the end of a run, players receive a score evaluating their relative success
- > This score is based on various variable sustainability indicators, foremost the achieved temperature reduction below the base-line projection, but also collected co-benefit markers
- > The various sub-scores (e.g., per co-benefit count) are not just added up but multiplied, incentivizing a broad co-benefit portfolio over solely focusing on a single benefit

Core message

While the climate crisis is a pressing issue, it is important and valuable to consider side effects of measures as well. Each of them has its merits, but **none should be neglected while the others are expanded.**

Let's put the Action back into Climate Action

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International Institute for Applied Systems Analysis



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BOKU
UNIVERSITY

FWF Austrian Science Fund

Hotspot Earth's development is still ongoing. The project is currently in its Vertical Slice stage. Implementations are still being refined and the data shown are mostly still placeholders.

If you are interested in future updates, make sure to **wishlist on Steam!** And please share your feedback and input with us.



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