

Hungry EcoCities S+T+ARTS Residencies

Deliverable 5.2 – Communication and dissemination plan

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Table of Content

History of changes	2
Table of Content	3
1. Abstract	4
2. Communication and Dissemination Plan Overview	5
2.1 Overview and objective of the deliverable	5
2.2 Management of Communication and Dissemination activities	5
2.3 Communication and Dissemination Logic	6
2.4 Organization of the Deliverable	6
3. WHY: with what purpose does Hungry EcoCities communicate and disseminate project activities?	7
4. WHO: Target groups of Hungry EcoCities communication and dissemination	8
4.1 Target audience and ambitions	8
5. WHAT: Information and Results to be communicated and disseminated	10
5.1 GANTT chart of communication and dissemination activities	11
5.2 Overview of communication and dissemination actions in Hungry EcoCities	12
6. Reflections per partner	15
Partners Hungry EcoCities	18
Annex 1: Project leaflet Hungry EcoCities	19
Annex 2: Studio Vision Papers	20
Annex 3: Strategic Policy Assessment	21

1. Abstract

This deliverable articulates the communication and dissemination plan for Hungry EcoCities (HEC). It describes the strategy, tactic and operational tools and channels the consortium will put in place over the course of the project duration, and thereafter.

The communication and dissemination plan has two goals:

- ◇ Extend and raise awareness of the activities within the Hungry EcoCities project through targeted dissemination and information, including various media.
- ◇ To widely communicate the open calls when they are open for submission of the 20 art-driven experiments.

In general, the selected approach on communication and dissemination is set on the quality and news/ insights from the project, matching the outcomes and insights from the experiments. Therefore, most visibility and impact is foreseen as of summer 2024, when the first results and insights are expected. Overall, the activities vary in media, such as reports, prototype parks, videos or articles. Therefore, six different target audiences have been identified, which will each be approached based on their needs. The project has identified 17 communication/ dissemination elements, resulting in 163 outings.

2. Communication and Dissemination Plan Overview

2.1 Overview and objective of the deliverable

This deliverable articulates the communication and dissemination plan for Hungry EcoCities (HEC). HEC is a 3.5 year, Horizon Europe funded, S+T+ARTS residencies project which centers around the domain of food production, distribution and consumption involving 8 partners, 20 artists and 10 SMEs from the food industry. The purpose of the project is to think and make possible futures for the food domain and the role of digital technologies, in particular AI technologies, within this domain.

This deliverable is part of Work package 5 and describes the strategy, tactic and operational tools and channels the consortium will use to align the communication and dissemination efforts with the goals and ambitions on the experimental, project and S+T+ARTS levels.

2.2 Management of Communication and Dissemination activities

All partners are involved in the communication and dissemination activities of Hungry EcoCities. The activities are managed by In4Art, who act as Work Package leader, with close and intense support of partner Fundingbox and EatThis/Network. Furthermore, subcontracting partner GLUON is at the core of the communication and dissemination activities of the project. The other project partners, which are the universities KU Leuven, Brno University of Technology and Mendel University, as well as the studios Carlo Ratti Associati and Studio Other Spaces, have a feeding role in this Work Package – feeding the management with content and context usable for the activities as described in this deliverable and disseminating them afterwards through their appropriate channels.

The two objectives of Work Package 5, which are part of this deliverable, are:

- ◇ Extend and raise awareness of the activities within the Hungry EcoCities project through targeted dissemination and information, including various media.
- ◇ To widely communicate the open calls when they are available for submission of the 20 art-driven experiments.

The project KPIs which are part of this strategy are the following:

- 200 agri-food SMEs reached
- 10k start-ups/tech suppliers reached through FBA network
- 300 artists reached
- 200 digital innovation hubs reached
- 4 prototyping parks and academy events
- 60 matchmaking matches of artist + end-user teams
- 3 scientific publications
- 20 articles in relevant media (one per experiment)
- 3 videos (one per studio)
- regular posts/publications on S+T+ARTS channels
- visual identity
- flyers and brochures

2.3 Communication and Dissemination Logic

We make a clear distinction between communication and dissemination in this strategy. Dissemination is about addressing specific audiences with specific messages with the intent to achieve a direct result. Our dissemination activities focus on the ideas, elaborated visions in the project, experiment outcomes, innovative prototypes, artworks, scientific insights and value-creating propositions, which we intend to realize through humanizing technology experiments and the paths to progress experiments. We will start disseminating after the start of the first round of experiments, as dissemination is also needed to involve the required stakeholder, collaborators, partners and experts within the residency experiments.

Communication addresses a larger audience than dissemination. Our communication plan focuses on reaching the general public through various suited on-and offline communication tools. Therefore, our communication activities will be the target in reaching a broad audience. During one of our meetings, a partner boldly stated that we should aim to reach 100 million people with the ideas within this project. We will not commit ourselves to this number, but we will set it as our ultimate goal.

2.4 Organization of the Deliverable

This deliverable is created in month 6 of the project. The project has 42 months. We deliberately planned to develop the communication and dissemination plan early in the project because we believe it will serve us throughout the project, enabling us to have a plan to follow and assess opportunities and requests against it.

This is also how we see this deliverable: as a guiding plan containing the argumentation behind why we are communicating (section 3), whom we intend to reach through our activities and how we intend to reach them (section 4), what we expect to be able to communicate and disseminate, meaning what are going to be our communicable 'products' both on the project as well as on experiment levels, and, finally, how and where we foresee to realize this plan – our tools and channels to communicate with (section 5). The final section in our deliverables is standard reserved for reflection and learnings, a result of this plan. However, since this deliverable comes early in the project and many of the described activities have only recently been started or not yet, we extend the scope of the final section to include expectations. This will help us as a consortium to measure our development on a regular basis.

This deliverable is intended to serve as a formal project deliverable and a public document for those interested in our aims. In addition, we will use this document regularly in our consortium meetings. Any deviations or additions to the communication and dissemination plan during the course of the project will be reported upon in Deliverable 5.1, the plan for exploitation and dissemination of results, which will have four versions throughout the project lifetime (M6, M24, M36 and M42). We are open to suggestions and partnerships to learn, spread our message and diffuse our learnings and insights.

3. WHY: with what purpose does Hungry EcoCities communicate and disseminate project activities?

Hungry EcoCities is a research and innovation action (RIA). This means our action is expected to aim at establishing new knowledge and/or to explore the feasibility of new or improved technologies, products, processes, services or solutions.

Our goal is to explore the feasibility of technologies to transform food-producing and consuming practices through conceiving, building, nurturing and testing new ideas for future food systems enabled by responsible AI use. We do so through the 20 experiments that will be conducted in the framework of this project, based on three visions/ directions. The scope and set-up of the project are explained in a project leaflet (see Annex 1).

In Hungry EcoCities, we facilitate experimentation towards innovation decisions, which involves R&D uncertainty from the start. This is the case when technologies that have not or have been used differently before, are explored. During the process, we aim to make innovation decisions which involve uncertainty. However, experiments are just the beginning: value comes from analysing and diffusing the outcomes. The experiments in this project are based on questions that respond to the three directions (visions) portrayed by the studios (see Annex 2), which will be updated along the project, founded on the experiment outcomes. Based on the experiments, we can ask: What to learn and measure? What could work where? What is surprising? Better questions yield better answers.

In our vocabulary, well-executed and practical experiments can lead to any of three outcomes: insights, operational use cases, or dead ends.

- ◇ **Insights** are understandings of systems, practices, transitions, technologies, or any other aspect of the food domain which is currently overlooked, undervalued or overrated. Insights are captured and disseminated through actions, including the experiment videos, the keynotes and the prototype parks (elaborated upon in chapter 5.2)
- ◇ **Dead ends** are failed experiments. Or, put differently, experiments which led to a conclusive outcome on what is not possible, feasible, logical or in other ways further pursuable. We consider these results as success stories just as much as we do new insights or innovations. Dead ends are captured in the 'barriers' outcome(s) we intend to produce and disseminate during and after the project's end (elaborated upon in chapter 5.2).
- ◇ **Operational use cases** are the outcomes of experiments which prove functional value after the demonstration of the prototype. They are starting points for new or improved products, services, or projects to develop further and exploit. They are captured in the demonstrators, factsheets and outcome videos. They are analyzed and developed into innovation proposals In the guideline of art-driven innovation insights and the ecosystem overview map (elaborated in chapter 5.2).

Our ambition is to make sure promising outcomes get cultivated, shown and used in the most suitable ways to amplify new stories for regenerative and empowered food production and consumption in the 21st century.

Our communication and dissemination activities are designed to contribute to the above-described ambition. This means we choose **a content, quality-driven strategy** to communicate, not simply throwing things out there (quantity) but carefully deciding what message our activities carry and with whom we wish to share this message. In section 5, we describe in detail the 17 types of communication and dissemination activities we have conceived to do so.

4. WHO: Target groups of Hungry EcoCities communication and dissemination

This section maps the 6 target groups of the project's communication and dissemination activities. It describes each target audience and highlights our main ambitions per target audience. Furthermore, we describe the approach per target audience on a strategy level. Finally, the approach on an operational level is described in section 5.

4.1 Target audience and ambitions

Artists

Description: artists within the scope in Hungry EcoCities are different for both sets of experiments. For the first set of experiments, the Humanizing Technology Experiments, which will run in 2023-2024 and for which the open call will open in March 2023, the following description has been made: A fitting artist for OC1 in Hungry EcoCities is someone interested in exploring digital questions utilizing a mix of technology and art. The artist has skills as both a **creative thinker/maker** and a **technical developer**.

For the second set of experiments, the Paths to Progress Experiments, which will run in 2024 and 2025 and for which the open call will open in 2024, the following draft description has been made: A fitting artist for OC2 in Hungry EcoCities is someone who has a proven track record of exploring societal or industrial challenges through artistic research and prototyping.

Ambition: To reach at least 300 artists through the open call dissemination activities, leading to at least 30 eligible and competitive proposals for OC1 and 30 matches with SMEs for OC2.

Approach: Combining networks and known artists of interest, the consortium partners create a list of potentially interesting candidates before the open call launching date. The names on this list will receive direct and personal invitations to consider submitting a proposal. Furthermore, previously pre-selected S+T+ARTS candidates will receive the identical direct mail. Additionally, relevant festivals, initiatives, and partners will be approached and requested to include the announcement in their newsletter or share it through social media. Apart from this, artists will be given the opportunity to meet various consortium members at a series of online and offline moments leading up to the OC deadlines.

SMEs & clusters/associations

Description: We decided to focus on SMEs in the food industry as a specification for the term: end-users. SMEs, ranging from start-ups to mid-caps, are the backbone of the industry and are present in every country and every angle of the market. Therefore, 10 SMEs will be part of our Paths to Progress experiments. Moreover, SMEs are part of our knowledge hubs, particularly the EatThis hub in the Netherlands.

Ambition: 200 agri-food SMEs reached & 30 eligible and competitive SME+Artist proposals

Approach: SMEs are targeted through our SME network partner EatThis (30+) and our partner FundingBox (10.000 start-ups in the network). Next, we will disseminate the open call and the proposition to SMEs widely throughout Europe through network organizations of SMEs in the food industry.

Tech suppliers

Description: Technology Suppliers in our context can be either SMEs eligible for the Path to Progress experiments (when they are developing and providing technology to the food

industry) or companies interested in incorporating a prototype solution coming from the Humanizing Technology experiments.

Ambition: 10.000 start-ups/tech suppliers reached through FBA network

Approach: Fundingbox has a large and active network of tech start-ups and tech suppliers. Apart from disseminating the open call amongst this network, we also intend to activate parts of this network to disseminate outcomes amongst and test interest for collaboration/uptake.

RTOs

Description: Research and Technology Organizations, or RTOs, are non-profit institutions or universities active in technological research and development. 3 RTOs are members of the consortium. We intend to actively involve the researchers within these institutes within the experiments and disseminate specific outcomes, when relevant, amongst the students of these, and possibly other, RTOs.

Ambition: 1 education prototyping park + 3 scientific publications

Approach: The three RTOs will be actively involved throughout each experiment as mentors, supporting the experiments with access and knowledge, and realizing an exchange of ideas. This way, we aim to achieve the active participation of researchers and increase the chances of delivering publishable input from the experiments. Additionally, we can set up academy events to disseminate specific outcomes to their students, and possibly other RTOs.

EU Institutions & Digital Innovation Hubs

Description: We have identified a number of EU institutions, like DGs, European initiatives and global players connected to the EU, to actively inform and involve in Hungry EcoCities.

Ambition: To reach at least 200 DIHs and showcase the potential of art-driven experimentation for innovation across the EU institutions and initiatives.

Approach: We have identified the most relevant institutions, initiatives and players with whom we intend to build a relationship. We will use meetings and presence/participation at events to create visibility, and awareness and establish an interaction on various levels (see Annex 3).

General public

Description: The general public are citizens throughout Europe whom we aim to inform on and inspire with the topics, ideas, insights, outcomes and implications of our work.

Ambition: To reach 100 million EU citizens with Hungry EcoCities

Approach: To reach this ambition, we need large-scale, broad platforms for our work. This must include an exhibition that either travels throughout the continent or is so big that it draws the required attention. Options we are starting to discuss are the World Expo 2025 Japan, the Triennale Milano 2025, and the Venice Biennale 2026. Rem Koolhaas, Carlo Ratti's and Sebastian Behmann/Olafur Eliasson's involvement in this ambition will make it possible to set such a high ambition. Next to that, we will organize 3 prototype parks.

5. WHAT: Information and Results to be communicated and disseminated

This section goes through the 17 elements of the Hungry EcoCities communication and dissemination strategy planned for the duration of the project. The GANTT chart plots the relevance of the actions in the time. As can be seen, the emphasis will be on the second part of the project, when the first results are expected and targeted approaches per outcome can be executed.

Action	Amount
1 Project leaflet Hungry EcoCities	1
2 Studio vision papers	3
3 Open call dissemination actions	2
4 Framework of contemporary urgencies report	1
5 Demonstrator video HTE experiments	10
6 Factsheets	10
7 Process insight articles / posts	80
8 Scientific insights articles	3
9 Outcome PPE experiment video	10
10 Press releases	2
11 Keynotes (life/ video)	3
12 Lectures/ workshops at third party events	5
13 Prototype Parks	3
14 Barriers overview	1
15 Guideline on Art-Driven Innovation insights	2
16 Ecosystem overview map	1
17 Deliverables of the project	26

Table1: Overview of the 17 elements forming the HEC communication & dissemination plan

5.2 Overview of communication and dissemination actions in Hungry EcoCities

One by one, the 17 elements of our communication and dissemination actions will be briefly introduced. The, when relevant, the timing of communication/dissemination and the intended channels/platforms are mentioned.

1/ Project leaflet Hungry Ecocities

This project leaflet is made to inform internal and external partners on the main set-up of the project. The project leaflet is accompanied by a visual to give insight into the different components and directions of the Hungry EcoCities project. It is a basis for a referral – also for the Open Call. It is shared on the Hungry Ecocities project website on starts.eu and will be attached in press releases and direct interactions with interested third parties. The project leaflet is added as Annex to this deliverable.

2/ Studio Vision papers

As part of D1.2, the three hubs will create a vision paper, in which they elaborate on their vision and direction. In Annex 2, the first result is shared, which is part of the open call communication; the artists in the open call can select which vision fits/ intrigues them to experiment with. Together, the three different visions will lead the experiments within the HECLab. The visions will be updated throughout the project, and based on the insights from the experiments. Ultimately, the three visions will be shared and archived as reports by each of the studios and on the Hungry Ecocities project website on starts.eu.

3/ Open Call Dissemination

The open call will include a separate package of communication tools, including webinars, an online mini-site, and promoting activities. This project cherishes feedback; therefore, we will also include aftercare by thinking along and giving tailored feedback to the pre-selected candidates that have created a use-case scenario for round two, keeping a warm connection with possible future linkages to these interested parties. The specific communication and dissemination activities for OC 1 are integrated into annex 3 and serve as a reference for OC2. It will be updated accordingly.

4/ Framework of contemporary urgencies report

This is the result of deliverable D1.2 and will be created as a report, that will be accessible through the Hungry Ecocities project website on starts.eu.

5/ Demonstrator HTE experiments

Each HTE experiment will create a demonstration video of the workings of the experiment outcome. This video can be shared publicly to show the learnings, best practices and failures, and insights on how the prototypes evolved from the experiment. It also serves as a proof-of-concept and input for the next experimentation round. The video will get a generic S+T+ARTS intro and outro. This will be shared on the S+T+ARTS YouTube channel, where a separate HEC channel will be created.

6/ Factsheets Art-driven AI components

Each HTE experiment will write a factsheet with an overview of the purpose and ambitions of the art-driven AI component tested and explored in the specific HTE experiment. The factsheets form the basis for the HECLab to get access to open-source codes and platforms for future collaboration. It will be further developed and elaborated in D2.1 and D2.2. In addition, the factsheet will be shared publicly to show the learnings and insights from the experiment through the Hungry Ecocities project website on starts.eu.

7/ Process insight articles/ posts

Over the course of the project, various articles will be written and shared on the Hungry Ecocities project website on starts.eu and through the starts.eu social media channels to share process insights, outcomes and news from the project. Short announcement text referring to the articles with more in-depth knowledge will be created to make it easier for social media sharing. In addition, the partners will share a selection of these articles separately through their social media accounts. The following social media posts with underlying articles are foreseen:

- ◇ 20 x experiment intro articles– referring to the introduction article HTEs and PPEs experiments
- ◇ 20 x experiment result articles – based on the impact assessment, each experiment will have a PESETABS article analyzing the impact of the project and sharing these insights. Depending on the outcome, it can function as case studies and industrial success stories.
- ◇ 5 x open call-related posts – to announce and promote the open call.

Furthermore, posts and articles on foreseen on partner introductions, the acceptance of AI and the access to the developed tools within HEClab, Prototyping Parks, lessons learned from deliverables, relevant developments in the field of future food and responsible AI and spillovers of the project. To keep track of this, we have created a tracker. Each partner reports in this tracker the activities carried out regularly.

8/ Scientific insights articles

During the PPE experiments, the universities will work on implanting and integrating the insights and data from the HTE's experiment into the use cases. Based on this, new insights and learnings occur that would lead to meaningful insight on whether the experiment was successful with a surprising outcome or whether the experiment could decide not to pursue a certain path/ route for innovation due to failure. The universities aim to publish 3 scientific insights from the experiments. Depending on the insight, the appropriate format and medium will be selected.

9/ Outcome PPE experiment video

Each PPE experiment will create a video to document the outcomes of the experiment, including learnings, impact and future options. In addition, it will get a generic STARTS intro and outro. This will be shared on the S+T+ARTS YouTube channel, where a separate HEC channel will be created.

10/ Press release

Based on actual results, the project envisions two moments for a press release. One after the results of the HTE's experiments have been analysed, and one after the results of the PPE has been analysed and translated into the following steps and contribution to the visions of the studios on the future of food enabled by responsible AI. After that, the press releases will be sent out, in the first instance, by the studios, supported by the other partners. The aim is that the press release will lead to articles or tv momentum in popular media, sharing the impact and options of the experiments and the development of the visions of the studios.

11/ Keynotes

To create general awareness of the experiments, outcome, collaborations and contribution of Hungry EcoCities to the domains of responsible AI and Future food, 3 public keynotes will be created, one by each of the studios on how the experiments contributed to the vision and what the outcome is after 4 years of Hungry EcoCities. This Keynote will preferably be given by the main artistic lead from the studio and recorded as video to have a lasting visual project documentation. This will be shared on the S+T+ARTS YouTube channel, where a separate HEC channel will be created. At the same time, the keynote will be part of the prototype park exhibition and possibly connected to a larger event to reach a large audience.

12/ Lectures/ Workshops

To spread the insights and connect to various networks, a strategic policy assessment will be created and updated throughout the project (see Annex 3). It identifies different events where Hungry EcoCities will participate/ contribute to the program. This is to ensure the uptake and spread of the projects insight at the different DG's of the European Commission, and the MP's in parliament, and to connect to other Horizon projects, EDIHs and EIT initiatives to facilitate the future uptake/ collaboration for the partners in the experiments. Our goal is to contribute/ participate in 2 events per year.

13/ Prototype Park

The Prototype Park will be either a seminar/ exhibition/ conference/ or other form of gathering at each of the studios, hence taking place in Italy, Germany and the Netherlands at the end of 2025 or the start of 2026. Additionally, one prototype park will take place in Brussels, Belgium – to enlarge the spill over to other EU initiatives, policies, and programs. Each location will create a different program based on the vision and can include Academy events. This will be further elaborated on in D5.4.

In addition, the consortium partners all wish to realize an overarching event or exhibition format at a high level to showcase the prototypes and the visions. Due to budget constraints, this is not a formal part of this project. Yet we intend to seek additional funding / partners throughout the project execution to make this possible.

14/ Barriers Overview

Hungry EcoCities is an experimental lab setting where over the course of 4 years, 20 experiments will be executed. As is the nature of experiments, not all experiments will be implementable. However, a failure can also be a success, since it gives clear insight into which paths not to pursue and what type of barriers the innovation/ experiment from happening. We see this as an important part of the experimental project, and therefore, we will create a barriers overview as a conclusion from all the failed experiments.

15/ Guideline on Art-Driven Innovation insights

Based on the insights from deliverable D4.4, D4.5 and D5.6, we will write a guideline on how the process and insights of the experiments to support future art-driven innovation experiments and spill overs can be used in future projects.

16/ Ecosystem Overview Map

The Hungry EcoCities experiment will occur in collaborative teams, reaching out to the knowledge hub, additional experts and potential partners. To show the reach and impact of all those involved in the Hungry EcoCities project, an ecosystem overview map will be created at the end of the project. This map can be used as a standalone or integrated with other communication outings described in this list.

17/ Deliverables of the project

Most of the deliverables that are part of the project are publicly available. To make it more interesting to share publicly, we created a dedicated section in each deliverable- the chapter containing: 'Reflections and lessons learned'. When applicable, this part will be written. The deliverables will be shared on a dedicated environment within the Hungry Ecocities starts.eu subpage once they have been approved.

[Every 6 months, this section will be updated.]

Initial strategy: 03-2023
Update: 09-2023
Update: 03-2024
Update: 09-2024
Update: 03-2025
Update: 09-2025
Update: 02-2026

6. Reflections per partner

As a reflection on our dissemination and communication plan, all partners have written down their ambition within the project. This supports mutual understanding within the consortium but is also useful for the communication and understanding of the involvement of the partners.

Outcome ambitions from project partners:

Partner	Ambition
Brno University of Technology	As a technical university, our ambition with the HEC project is to “humanize” our research and development results through cooperation with artists – individual creative coders, and consortium of artists and SMEs. Also, collaborating with one of the most influential art studios that participate in the project consortium and will be involved in adapting our technology into the experiments significantly increases our chances to attract new students that bring fresh views on the rigid technological development.
In4Art	In4Art’s mission is to make art-driven innovation, resulting from artistic experimentation, a valuable addition to responsible innovation processes. We need success cases and continuously learning how this works in practice to do so. To achieve responsible innovation , we need to go through a funnel process. The experiments in HEC will give us future opportunities. Out of the 20 experiments, we expect at least 10 to be successful, in the sense that the outcome is surprising, leading to at least 5 innovation spillover proposal trajectories after Hungry EcoCities.
KU Leuven	Leuven.AI aims to foster more interdisciplinary and applied AI research to increase the socioeconomic impact of the wide variety of AI expertise at KU Leuven. The Hungry EcoCities project is an opportunity to work towards this mission in multiple ways: (1) it established a new interdisciplinary collaboration within KU Leuven, that can act as a seed for future projects; (2) it has created a novel channel for the transfer of AI expertise, via artistic projects, to address common sustainability goals; (3) the perspectives gained from interactions within the HEC consortium and the artists, provide new use cases that can be integrated in the corresponding educational activities of the involved PIs.
Mendel University	Our main emphasis is on popularizing novel agricultural and food production approaches. Developing digital prototypes with innovative attributes could help shape a more sustainable future while enhancing public attention would aid this achievement beyond the extent of the current project. Interconnection of the institutions throughout Europe is another great added value of the project and is envisioned as a

	possibility to enhance creativity and competitiveness in the long term.
Carlo Ratti Associati	CRA-Carlo Ratti Associati aims to explore ways urban farming can bring the natural environment back to the city. Our research will delve into several food production scenarios, touching upon ways in which new technologies, big data, local and international food cultures, urbanism, art and design can allow for stronger relations to be enhanced in cities across the European Union. Furthermore, we will work collaboratively with artists in residence to develop innovative experiments on the topic, some of which will fail and others that might succeed. Our goal throughout the project is three-fold: (1) new collaborations with artists; (2) new knowledge; (3) sharing process and results with a broader team.
NethWork/ EatThis	EatThis wants to connect horticulture closer to society and vice versa. We invite outsiders to take a deep dive into the world of CEA so they may better understand what the production of healthy food is all about, but we also challenge them to work with us towards a future food system in which health is key. At the same time, we think that the sector itself should be more visible and more proactive in connecting to society and influential decision-makers. We find that in Hungry EcoCities these elements come together, and we can jointly work on new ideas for a healthy future of food.
Funding Box	As a go-to funding platform, FundingBox aims at growing champions and disseminating success stories across its network of partners, SMEs, DIHs, start-ups, and entrepreneurs. With HEC, this portfolio of champions becomes enriched and diversified as artists actively participate in experimentation. The results will lead to new synergies and outreach to a broader audience making cascade funding visible and attainable for a wider group of potential recipients. This will translate into a larger, more varied community on the funding platform and an enhanced range of best practices.
Studios Other Spaces	The work of Studio Other Spaces (SOS) is collaborative at its core. Our research considers spatial, historical, ecological, social, cultural, and emotional aspects of a project, a site and its users. SOS projects foreground the atmospheric and intangible qualities of their specific locations and local conditions; with a research- and experiment-based approach, which emphasize not only physical movement as a means to shape space; as well as conscious awareness and innovative practice as a means to explore and generate new ways of thinking for a more sustainable future and radical change. With Hungry EcoCities, Studio Other space's ambition is to focus on making visible and

	<p>communicating the challenges surrounding industrialized food production and the viable alternatives that we want to see grow; on public learning as a means to understand food heritages and create changes in food systems and food cultures; and on the storytelling and best-practice examples needed to change habits and expectations around food consumption, and enjoyment, in European contexts.</p> <p>Studio Other Spaces wishes to support projects that align with our values; our fields of interest for investigation, and projects that think critically about the potential of AI and take a holistic approach to assess where AI can offer solutions.</p> <p>While some of the insights and solutions that SOS hope to generate through Hungry EcoCities may have global application, other best-practice cases and prototypes for innovation concerning food will be different across cities located in various geographies, climates, population densities, and cultural contexts; in food, systems defined by differing food policies and political ideals.</p>
Gluon	<p>For many years Gluon has facilitated and intervened in cross-sectoral collaborations that bring together artists and researchers in art-driven research into more balanced relationships between humans, their technology and the natural environment. HEC aligns with Gluon's ambitions to break down complex challenges and make them tangible with the aid of the cultural and artistic community through an approach that integrates high-level research, critical narratives and artistic outputs developed by artists that empower its participants to take action themselves.</p>

Table2 : Outcome ambitions from project partners

Partners Hungry EcoCities



Horizon Europe Research and Innovation Action – This Hungry EcoCities project has received funding from the European Union’s Horizon Europe research and innovation programme under grant agreement 101069990. It is part of the S+T+ARTS programme. S+T+ARTS is an initiative of the European Commission to bring out new forms of innovation at the nexus of arts, science and technology.

Annex 1: Project leaflet Hungry EcoCities

To support the communication on the project, we have created a project leaflet. This leaflet is accessible through the starts.eu/hungryecocities, as well as stand alone. Click [here to download](#) it.

HUNGRY ECOCITIES

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HUNGRY ECOCITIES

A S+T+ARTS RESIDENCIES PROJECT

TOWARDS A MORE HEALTHY, SUSTAINABLE, RESPONSIBLE AND AFFORDABLE AGRIFOOD SYSTEM ENABLED BY AI

Food is a phenomenon shaped by the cultures we live in and an expression of millennia of experimentation, innovation, and refinement. Everybody should have access to healthy, sustainable and affordable food. At the same time, we are all aware of the fact that our food systems are broken and the many challenges we are faced with as a result of this.

Putting on a climate lens, food production and distribution uses too much energy, soils get degraded, valuable nutrients are lost and biodiversity threatened. Looking through an equity lens, distribution chains fail and much food goes to waste. Putting on a health lens, production tends to increase while obesity and malnutrition are increasing and the gaps between people and their food have grown.

There is also hope, in the form of regenerative farming, organic growing, ecological farming methods, soil management practices and the creative assessment and responsible uses of technologies to support food production, food consumption and food cultures at smaller and larger scales.

Whatever way we look at food and all of its elements, the coherent fact is that we must use up less resources to become truly sustainable. How can we do that? How can increased awareness and technological tools impact a future where we use resources responsibly to produce and consume food?

This guiding question will be explored in three directions for experimentation, each initiated and led by one of the creative knowledge hubs in Hungry EcoCities.

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WHAT WILL WE DO?

In the project Hungry EcoCities, we choose to contribute to new studies of food production and consumption which support paths to innovation rooted in resources regeneration and human empowerment. Supported by Horizon Europe through S+T+ARTS, Hungry EcoCities will be an experimental lab for 21st century food production and consumption, involving a two-staged approach with **art-driven experiments**.

IGNITING QUESTION
 "How can increased awareness and technological tools impact a future where we use resources responsibly to produce and consume food?"

In **stage 1**, 18 residency experiments, called **Incubating Technology Experiments**, will focus on the role digital technologies can play in growing healthy, sustainable food, testing, capable of exploring digital questions addressing a mix of technology and art, will be selected after the first call 1 process is complete (2024). Based on their artistic experimentation plans, they will collaborate with the Hungry EcoCities technological research experts to develop digital prototypes, art-driven AI components and artistic artworks within one of the three creative knowledge hubs. The outcomes of stage 1 will be made accessible through an open-source assessment (OAS) tool and made available for testing during the second stage of the project and beyond.

In **stage 2** the following 12 residency experiments, called **Artistic Experiments**, will be selected through the Open Call 2 process for teams of artists and digital AI summer 2024. The teams will be formed through a match-making process and will collaborate with the Hungry EcoCities researchers to develop and produce demonstrators and programs and artistic works within the scope of the project. In addition, each team will implement and test a number of the digital prototypes from stage 1.

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OUR APPROACH: ART-DRIVEN INNOVATION

When it comes to defining choices about the future, artistic experimentation is a relevant source for analysis, guidance and innovative creation.

In Hungry EcoCities, the art-driven innovation method developed by In4Art will be followed to create the conditions for artistic experiments; a course of action tentatively adopted without being sure of the outcome.

These "experiments" give an opportunity to think differently, to bridge perspectives, to give a voice to unheard actors. Experimentation is a form of expanding the envelope of possibilities, as mediated artistic experimentation leads to a more responsible and ethical approach for testing ideas without judging them from the start.

The learning and outcome will offer another visual, tangible, experience informing the decision-making process for the guiding question we tackle.

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THREE DIRECTIONS FOR EXPERIMENTATION:

1 MESA SCALE

Experimentation to be implemented on: the **Central Experimental Farm** in Giffith, Stephen Pirraman and Ben Kuhlmann founder of OMA, choose the direction of mesa scale based on a geographical environment dominated by controlled environmental agriculture. The research area is the hub explores what the next phase of scale could be, where do we go from the additional food we need with respect for nature, farmers, and culture? What would it mean to a city to sustain itself? Would it require a digital factory for food production? How will such an integrated system look like? What will it grant? How could technological scaling be combined with alternative growing techniques? What should we grow in a weather-proof?

2 LOCAL CONDITIONS

Experimentation to be implemented on: led by Studio Other Spaces, founded by Stefano Bertman and Orlan Dissanayake, choose the direction of local conditions based on local conditions. Focusing on the potential of local environments to create local food chains, food systems are irrevocably intertwined with food culture. What will local conditions drive what we grow, what we eat, when we eat with whom we eat? These systems and culture touch-points have already even die, often without us noticing. Via the food culture perspective, OAS will engage people to increase awareness of how we interact with the world of what we eat and why, and of how food systems and cultures are entangled with local and global economies, with knowledge systems and community bonds, with histories and traditions, and with education.

3 CITYFARMING SYNTHESIS

Experimentation to be implemented on: led by Carlo Ratti Assisted partners Monica Lilar and Daniela Bellini, choose the direction of synthesis between the built environment and food production. How can we use farming to accelerate the convergence between living and technological systems? Can farming contribute to territorial regeneration in urban and peri-urban areas? Can we integrate farming into urban architecture? How can we enhance both efficiency and social relations in food production? Can we bring new farming techniques to the smart market or to the neighborhood?

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WHAT TECHNICAL EXPERTISE DO WE HAVE?

In Hungry EcoCities we intend to merge art with digital technologies, in particular AI. AI is believed to have the potential to offer insights and tools on how we can grow and provide food for a growing global population, while minimizing our dependence on fossil fuels and increasing the wellbeing of local environments and people.

All S+T+ARTS residency experiments will use digital technology in their development in close collaboration and with support of the technological research experts in the project team, coming from three universities: **In4Art** (JRC, RWTH University of Technology and RWTH University of Applied Sciences).

The universities provide access to an impressive digital toolbox consisting of available knowledge, programs, solutions and equipment to support the development. This toolbox is divided into three groups: AI tools, Biotech tools, and Digital tools.

The AI tools include explainable AI, frameworks to assess the toxicity of AI, algorithmic driven supply chains, advanced learning and data analysis (ML, satellite data processing).

The Biotech tools include "open" outdoor biotechnology, algae and plant cultivation, gene sequencing and systems, CR analysis.

The Digital tools include IoT enabled systems and agents, virtual reality, autonomous robotic systems.

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WHAT IS OUR AMBITION?

The aim of Hungry EcoCities is to define a series of art-driven innovation outcomes: **innovated prototypes**, **art-driven AI components**, as well as **artistic works of high quality**.

Throughout the project, innovation prototypes will emerge, ranging from narrowly focused prototyped solutions to broadly distributable learnings. It is our ambition to make sure those outcomes that are promising get cultivated, shown and used in the most suitable ways to amplify new stories for regenerative and empowered food production and consumption in the 21st century.

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Annex 2: Studio Vision Papers

The content base of the project and the residencies in Hungry EcoCities are the vision papers and consequent fields of investigation developed by the three hosting creative studios in the project: Studio Other Spaces from Berlin, Carlo Ratti Associati from Turin and EatThis from the Netherlands. The full booklet can be found on starts.eu/hungryecocities. Below an image of the first page:



This booklet is a joint creation by the 3 studios, their extended networks and the project partners and will be updated on a continuous basis throughout the project lifetime with new insights and residency outcomes. The form this will take towards the end of the project is not defined at the moment – it could become a joint book or otherwise.

Annex 3: Strategic Policy Assessment

The Hungry Ecocities consortium will research different possibilities for future outreach events and long term collaborations with other partners within Creative Europe or Horizon Europe. We will do this by a permanent scanning of relevant events, opportunities and making contacts with relevant stakeholders. We have selected 4 different directions to find those entities that have an overlap with the Hungry EcoCities interests and ambitions. These four categories are:

- 1) Directorate Generals
- 2) Global players connected to the EU/ Brussels
- 3) Corresponding European projects & initiatives
- 4) The Panel for the Future of Science and Technology (STOA)

Within each category, we will make a scan and selection of which suits best and when. Here we already share the first overview and directions:

Directorate Generals

From the 33 Directorate Generals, we have selected 4 to actively involve and engage in the project:

DG RESEARCH & INNOVATION

Each year DG Research & Innovation organize the Research and Innovation Days in Brussels. These mostly happen in September. They show all the innovations within Europe and present a perfect networking opportunity for the HEC Consortium.

DG INTPA - DG for International Partnerships

The Commission's Directorate-General for International Partnerships is responsible for formulating the EU's international partnership and development policy, with the ultimate goal to reduce poverty, ensure sustainable development, and promote democracy, human rights, and the rule of law across the world. We can link to: >> [Knowledge Center for Global Food & Nutrition Security](#)

DG HEALTH and food safety (DG SAnte)

From the aims of this DG, which is also the lead in the Farm to Fork Strategy for sustainable food, we see strong linkages with:

- ensure Europe's food is sustainable and safe
- protect the health of crops and forests

We will contact them to get insight in their activities to find synergies.

DG EEAS – Diplomatic Service of the European Union

The European External Action Service (EEAS) is the European Union's diplomatic service. Since 2011, the EEAS carries out the EU's Common Foreign and Security Policy to promote peace, prosperity, security, and the interests of Europeans across the globe. We see possibilities to reach a broader audience in this European dimension by investigating links to events/ expo's. An option to highlight outcomes of the experiments might be European Pavillion World Expo - Osaka, Kansai, Japan between 13 April and 13 October 2025.

2) Global players connected to the EU/ Brussels

Different multinational organizations have presence within Europe and conduct activities. We can find linkages with the following: World Health Organization (WHO), UN-Habitat, United Nations World Food Programme, UN agencies UNESCO = heritage – food, Food and Agriculture Organization (FAO), headquarters in Rome. NATO, with emphasis on production of local food.

3) Corresponding European projects & initiatives

The European Commission has different initiatives, which has a strong overlap with our project interest. In this we have selected the following to assure synergies and knowledge sharing:

- > THE EUROPEAN NEW BAUHAUS, in combination with the JRC (Joint Research Center)
- > CROSS EIT-KIC PROJECTS, linkages with EIT Food, EIT Culture and EIT Digital
- > EDIHs – European Digital Innovation Hubs

[European Digital Innovation Hubs \(EDIHs\)](#) are one-stop shops supporting companies to respond to digital challenges and become more competitive. Facilitating creation with and by the arts to ensure acceptance of digital technologies is an important part within Hungry Ecocities and an approach that should be communicated towards the various EDIHs active throughout Europe. Throughout the project, we will seek further collaboration with EDIH initiatives and aim to disseminate relevant results of our project through their channels.

4) The Panel for the Future of Science and Technology (STOA)

STOA is a Panel of Members of the European Parliament (MEPs), established in 1987, with a mission to provide independent expert assessment of scientific and technological developments and related policy options for informed political decision-making in the European Parliament (EP). STOA carries out Technology Assessment and Scientific Foresight projects and organises events such as workshops and presentations. These are intended as discussion forums between MEPs, experts and the public. Our goal is to organize a networking event or symposium supported by STOA in the European Parliament.