



OPENAGRI

Zoom-in

July 2019

Skills you don't expect!

Open Badges for New Skills in Periurban
Agriculture



OPENAGRI

Open Badges— THE TOOL

An Open Badge is a digital photo of an individual skills. Like a photo which not only has a picture, but also provides information on the place and time it was shot, the Badge contains extra information – metadata – which can be read by all the applications which can read Open Badges. Metadata allow to make sure that the Badge was really assigned to an individual and to access all the descriptive contents of the Badge, hosted on the platform which issued it.



An Open Badge is a PNG image with metadata making it **personal** and **safe**. A Badge issued to a learner is a **photograph** of his/her skills or achievements.

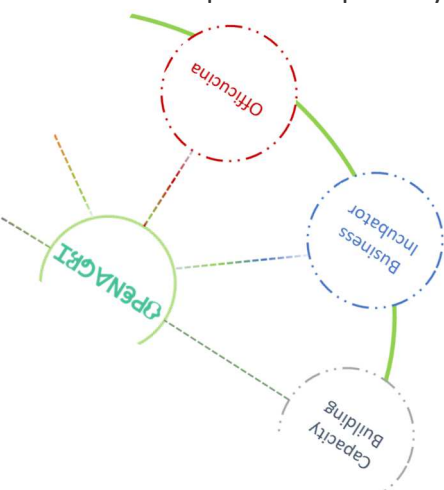
The Open Badge Infrastructure standard was launched by Mozilla in 2012, at the end of 2016 it was acquired by IMS Global and evolved by a lively international community in which Cineca participates.

.Bestr was created on 4 July 2015 and since then is constantly evolving to meet the needs of companies and individual users.

Metadata are written in the Open Badge using an open source platform. The one in use for OpenAgri is **.Bestr**, a digital platform developed by [Cineca](https://www.cineca.it/en) (<https://www.cineca.it/en>) to enhance skills and relate them to market needs and training offer. Anyone who obtains a Badge has a dedicated page, with the name, the date it was obtained and a description of the Badge.

.Bestr is integrated with ESSE3 (the student information system used by most Italian universities), which allows universities to recognize credits to students who possess Open Badges issued or approved (endorsed) by the University, managing them in a similar way to titles on ESSE3: <https://blog.bestr.it/en/2016/04/18/open-badges-are-admitted-university-careers>. An organization can define its known skills, describing them and how they can be assessed. This is the Badge content and it is published on **.Bestr** in the Badge Class page, together with the visual representation of the skill: the digital image known as Badge.

Assigning a Badge is an act of trust, by which one declares that a learner has been through an experience, developed a competency, shown an interest.



How a Badge is Created?

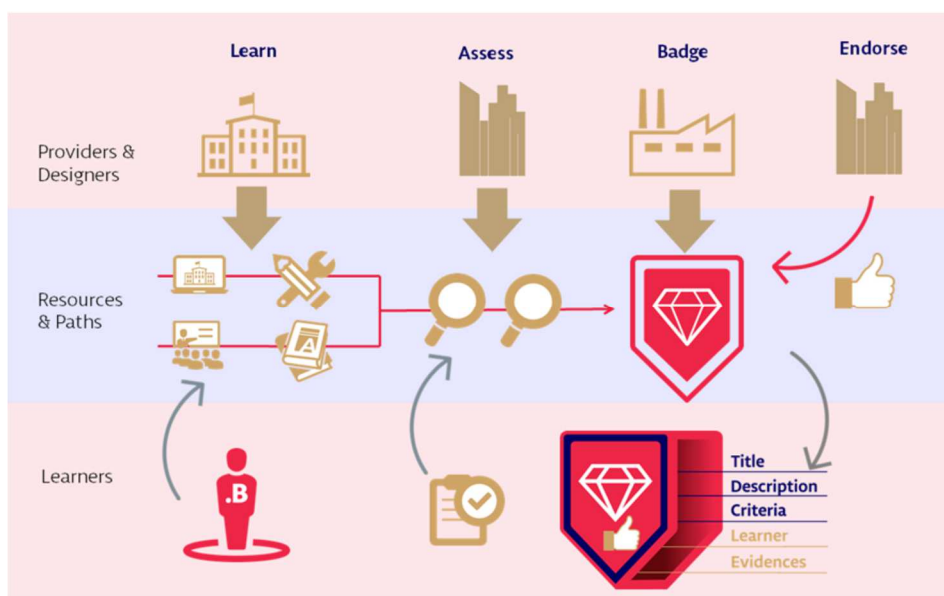
Organisations assign Badges to highlight individual qualities or experiences, which the person can then group together, building his own personal narrative of his professional profile.

A Badge represents a skill (or a skill-set) and is designed by its issuer organization. The issuer defines the Badge content - how the represented skills must be understood -, but the issuer doesn't necessarily need to be the one providing learning towards these skills or assessing them for learners.

Open Badge: an international standard

- ⇒ A digital standard, innovative and secure, to verify and certify skills.
- ⇒ Adopted all around the world by companies, universities and education institutions.
- ⇒ The tool to certify skills wherever traditional degrees can not
- ⇒ Building block of the Open Recognition architecture
- ⇒ Blockcert standard builds on Open Badges standard

The issuer could suggest or organize learning and assessment paths provided by trusted third parties. Since skills can be born and grow in a wide array of contexts, the issuer can identify multiple learning opportunities, even provided by different organizations, so that the learner will be able to choose among them, on the basis of his or her needs or preferences.



On **.Bestr** the multiplicity of ways a skill can be developed and assessed is expressed through **Learning paths** and **Assessment paths** that the issuer can associate to a Badge.

Learning paths are a selection of learning resources which help learners developing the skill represented by the Badge. It can consist of a single resource (e.g. a attendance of a course) or multiple resources, which can be acquired one after the other or combining resources such as: attending one live training and 2 online courses in sequence. A learner starting his or her path towards a Badge can choose his or her learning path among those available, and even follow it in part or not at all, based on his or her prior learning and skills.

Assessment paths is a mandatory step towards a Badge. Assessment can take many forms: an interview, presenting projects and evidence, the observation of the learner by a tutor during training, completing online a given set of actions, acquiring one or more Badges. Assessment for a Badge is described in the Criteria paragraph and can be made more explicit through actual assessment resources. This is especially useful when resources are online and accessible regardless of the learning paths.

Open Badges for OpenAgri

If a learner wants to get a Badge from OpenAgri to demonstrate his or her skills, he or she must meet the Criteria described for the Badge: completing a training experience, providing evidence, passing a test.

When the issuer has verified that the learner meets the Criteria, it will issue the Badge to the learner. As the learner claims the Badge, the Bestr platform creates both the actual Open Badge and the public webpage describing it, the Badge Award page.

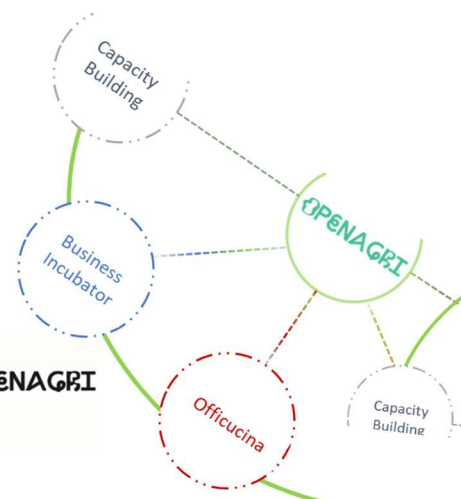
The learner now holds an OpenAgri Open Badge showing the skills, and containing his or her own data (name, email, date when the Badge was obtained) and possible evidences used to claim it, adding up to the skills description as defined by the issuer.

At OpenAgri, the selected projects for incubation receive training in the competencies they need, and share the competencies they have. Open Badges have been selected as a way to highlight competencies, whether they are the outcome of training or not (recognition!)

Pathways for Skills - A pathway leads to a macro-Badge



The 18 innovative projects selected by OpenAgri receive training in the competencies they need and share the competencies they have. The Open Badges highlight the competencies, map new skills and skillsets showing up in the project as a need or as a resource, connecting the skills in Pathways where a selection of Badges representing competencies leads to a 'macro-badge' representing the combined skillset.



OpenAgri's currently published Badges:

- ⇒ 8 Badges
- ⇒ 1 Pathway
- ⇒ Most are «management oriented» and connected to explicit learning experiences
- ⇒ [Food Alchemist LAB](#) is hands-on & domain-specific
- ⇒ Challenge: skills brought as resources and not related to explicit training are difficult to assess

OpenAgri's Badge Issuers:

- ⇒ Formaper—<https://www.formaper.it/>
- ⇒ Avanzi — <http://www.avanzi.org/>
- ⇒ Future Food Institute - <https://futurefood.network/about/>
- ⇒ IFOA— <https://www.ifo.it/en/>
- ⇒ Milan Polytechnic Foundation—<http://www.fondazionepolitecnico.it/en/>

OpenAgri's currently published Badges



Badge Name: Promised land - knowing and networking

Short Description: The owner of this Badge has enriched his wealth of knowledge regarding open innovation for sustainability, the circular economy, social innovation, care of the land and the landscape, creation of new economies in periurban agriculture, being able to contribute to a greater environmental and social sustainability of the agri-food chains.

Expertise and Knowledge: Ability to build a network of relations useful for business development in the field of peri-urban agriculture.

- ⇒ Open innovation for sustainability and circular economy;
- ⇒ Social innovation — Care of the land and the landscape;
- ⇒ Creation of new economies in the field of peri-urban agriculture;
- ⇒ Communication of agricultural experiences and sustainable agrifood projects

Issued by: OpenAgri



Badge Name: Food Alchemist Lab

Short Description: Food is Healing. Food is Life. In the Food Alchemist Lab science and cuisine coexist in symbiosis by creating a new ecosystem. Nutraceutical properties from raw materials are enhanced techniques like fermentation and; suggesting a circular economy model where the word “waste” is reinvented. The fermentation bar is going to be one of the project run by this lab. It is focused on innovation and research, in all aspects to fermentation, trend that has revolutionized the gastronomy sector during the last years, for the consumers who are always searching healthy foods and the (re) discoverers all over the world. Yoghurt, kefir, tempeh (fermented soy), kombucha tea, miso, vinegar, sourdough starter bread and kimchi are just some of the products that the fermentation lab focuses on.

At the end of the training, participants will be able to create fermented beverages, use fruits and vegetables, giving new value to waste, and will also learn some basic molecular cooking techniques. All activities with a great potential also in terms of the market in Italy.

The course is structured in five consecutive days of 8 hours each:

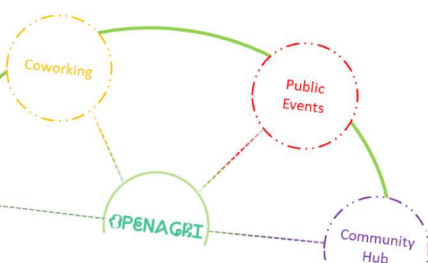
DAY 1: Introduction to innovation in the agri-food sector, introduction to fermentation and raw materials; DAY 2: Vegetables in the world of fermentation, techniques and use of raw materials to avoid waste; DAY 3: Uses and production; DAY 4: The world of vinegars and shrubs; DAY 5: Innovative techniques in the kitchen: molecular cooking and 3D printing in the food world.

Expertise and Knowledge:

- ⇒ General knowledge of food, good nutrition and food waste management
- ⇒ Ability to work in a group.
- ⇒ Basic knowledge of fermentation, with particular reference to kombucha and vinegars, bases of molecular cooking, use and cultivation of sprouts.

⇒ Manual skills with innovative tools.

Issued by: Future Food Institute



OpenAgri's currently published Badges



Badge Name: Periurban agriculture - Economic and financial planning

Short Description: The owner of the badge get training on introduction to basic financial planning concepts of agri-food business. The topics cover financial projections, savings and investments, budgeting, financial risk, borrowing

and credit.

Expertise and Knowledge:

The owner of this Badge, by participating in the Periurban Agriculture - Economic and Financial Planning workshop, acquire or deepen the following knowledge:

- ⇒ Income statement: the cost and revenue plan in the income statement;
- ⇒ Economic forecasts and break-even turnover;
- ⇒ Financial sustainability and cash budget (cash flow);
- ⇒ Sources of financing: choice of sources and financial balance;
- ⇒ Practical Exercise on Excel for economic and financial planning.

Issued by: Formaper



Badge Name: Periurban agriculture - Start up: requirements and funding
Short description

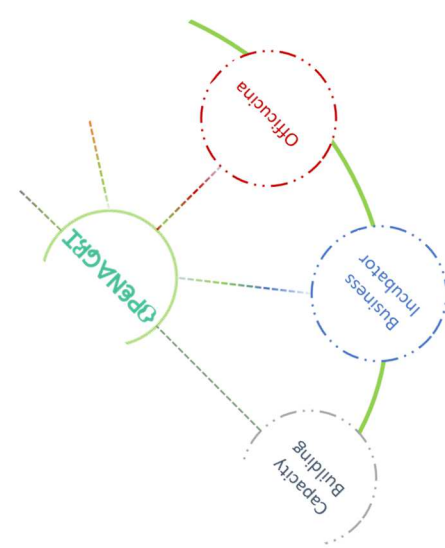
Short Description: The owner of the Badge get training on the creation of an agriculture startup in terms of legal and administrative aspects and information about regional and national funding schemes dedicated to support the creation of new companies, on the Milanese context.

Expertise and Knowledge

The owner of this Badge, acquire or expand the following knowledge:

- ⇒ Rural Development Program 2014-2020 in the Lombardy Region - activated operations;
- ⇒ The agricultural enterprise: start-up phase and legal form;
- ⇒ Access to regional RDP funding, operating methods;
- ⇒ Choice of legal form, administrative requirements;
- ⇒ Applications in terms of responsibility and taxation;
- ⇒ Regional / national / European funding.

Issued by: Formaper



OPENAGRI

Capacity
Buildline

OpenAgri's currently published Badges



Badge Name: Periurban agriculture - Business project and analysis of agricultural markets

Short Description: The owner of the badge get training on designing an agriculture business and to understand agricultural markets. Additionally, this course emphasize the effects of local, national, and international events on agricultural markets.

Expertise and Knowledge

The owner of this Badge, acquire or expand the following knowledge:

- ⇒ Landscape development, planning and territorial opportunities in Open Agri;
- ⇒ Local product and supply chains of the Milan / Lombardy agro-food market in the field of collective consumption - trends in buying habits;
- ⇒ Agroecology: eco-systemic services and strategic choices (rotation, agroforestry);
- ⇒ Agroecology: critical comparison on the sustainability of cultivation techniques (processing, irrigation, fertilization, defense);
- ⇒ Energy requirement and balance;
- ⇒ S.W.O.T .: Analysis of the Business Plan.

Issued by: Formaper



Badge Name: Business planning in peri-urban agriculture

Short Description: The owner of this Badge get training on all the aspects necessary to draw up an agricultural business project in a periurban context. The peculiarities of a peri-urban agriculture project have been considered alongside the more traditional elements of market analysis, formulation of a strategy, organization of a company and financial planning. The Badge owner is able to apply the learnings to the business

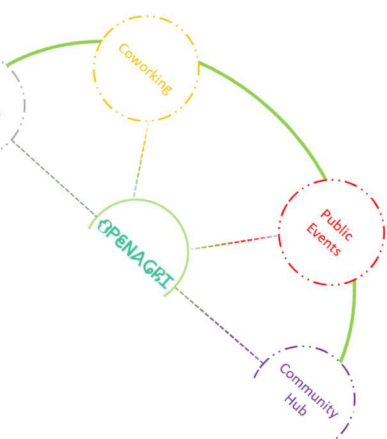
project with a dedicated personalized support. The course has a duration of 32 hours, including 2 hours of individual assistance.

Expertise and knowledge

The owner of this Badge, acquire or expand the following knowledge:

- ⇒ Business project and context: landscape, local product and supply chain analysis;
- ⇒ Market and demand analysis;
- ⇒ Agronomic services;
- ⇒ Energy requirement and balance;
- ⇒ Analysis S.W.O.T;
- ⇒ Marketing: research methodological tools;
 - ⇒ Strategic planning: analysis of the offer, segmentation and types of customers;
 - ⇒ Communication plan;
 - ⇒ Definition of the distribution / delivery organization of the product or service;
 - ⇒ Marketing Plan: marketing, prices, strategies;
 - ⇒ Legal forms, obligations, procedures, financing;
 - ⇒ Economic-financial planning.

Issued by: Formaper



OpenAgri's currently published Badges



Badge Name: Business Management: Business Idea & Value Proposition

Short Description: The Badge is assigned to participants that join the two-day workshop. The aim is to provide the basis for running a business. In the workshop participants can work on real cases and the exemplification of possible cases through Service Blueprints, the mapping tool that analyze and describe with timeliness, from the user's point of view, the operational phases of the service.

Expertise and Knowledge

The owner of this Badge, by participating in the Business Management Workshop: Business Idea & Value Proposition, acquire or deepen the following knowledge:

- ⇒ Value Proposition;
- ⇒ Touchpoints and customer journeys: design of the solution and the experience of the target around the service / product;
- ⇒ Service Blueprints: identification of the activities, resources and partners necessary for the realization and provision of the service / product.

Issued by: Avanzi



Badge Name: Business Management: Business Model & Business Plan

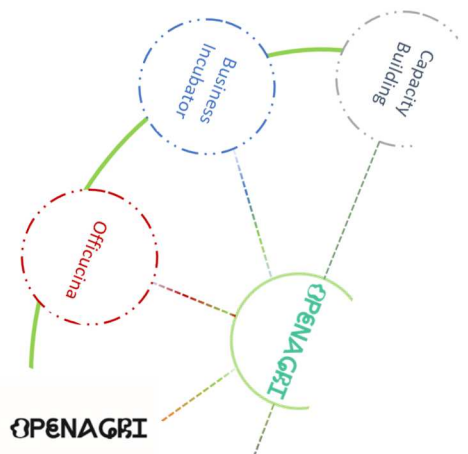
Short Description: The Badge is assigned to participants that join the two-day workshop. The aim is to provide the foundations for running a business. The workshop develop an analysis of real cases and examples of possible cases using the Business Model Canvas methodology. With the same methodology, workshop participants develop a Business Model Canvas for their own project.

Expertise and Knowledge

The owner of this Badge acquire or deepen the following knowledge:

- ⇒ Business Planning: development of a simplified business plan;
- ⇒ Business Modeling: identification and conception of a business model;
- ⇒ Project Identity: definition of the identity, vision and vision of the project idea;
- ⇒ Offering Map: identification of the current and prospective offer;
- ⇒ Target: identification and definition of the reference target of the project idea.

Issued by: Avanzi



OPENAGRI

The “Open Badges for New Skills in Periurban Agriculture” is part of OpenAgri Workpackage 4 – Skills, training and start-up business coordinate by the project partner Avanzi Srl. The activity 3 – Empowering capacities is implemented by the project partners CCIAA (Milan Chamber of Commerce, Industry, Craft and Agriculture), Cineca and IFOA (Training Institute for Enterprises Operators).

The author of the zoom-in would to thanks Cineca (not-for-profit Consortium, made up of 67 Italian universities, 9 Italian Research Institutions, 1 Polyclinic and the Italian Ministry of Education <https://www.cineca.it/en/content/about-us>) for the contribution to develop the Zoom-in content.

To know more:

<https://www.uia-initiative.eu/en/uia-cities/milan>

<https://bestr.it/badge/show/800>

<https://bestr.it/project/show/97>

<https://www.youtube.com/watch?v=ehfJdGjaQ6s>

Urban Innovative Actions (UIA) is an Initiative of the European Union that provides urban areas throughout Europe with resources to test new and unproven solutions to address urban challenges. Based on article 8 of ERDF, the Initiative has a total ERDF budget of EUR 372 million for 2014-2020.

UIA projects will produce a wealth of knowledge stemming from the implementation of the innovative solutions for sustainable urban development that are of interest for city practitioners and stakeholders across the EU. This journal is a paper written by a UIA Expert that captures and disseminates the lessons learnt from the project implementation and the good practices identified. The journals will be structured around the main challenges of implementation identified and faced at local level by UIA projects. They will be published on a regular basis on the UIA website.

Author: Miguel Sousa

UIA Expert

Miguel.sousa@inovamais.pt

July 2019

Urban Innovative Actions

Les Arcuriales
45D rue de Tournai
F - 59000 Lille

+33 (0)3 61 76 59 34
info@uia-initiative.eu
www.uia-initiative.eu

Follow us on **twitter**
@UIA_Initiative
and on **Facebook**.

The content of this Zoom-in does not reflect the official opinion of the Urban Innovative Actions Initiative. Responsibility for the information and views expressed in the journal lies entirely with the author.

