



EUSALP EU STRATEGY FOR THE ALPINE REGION

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Alpine Platform of Exchanges

A marketplace of externalities based on Digital Twins of resources, a sustainable business model for the Region

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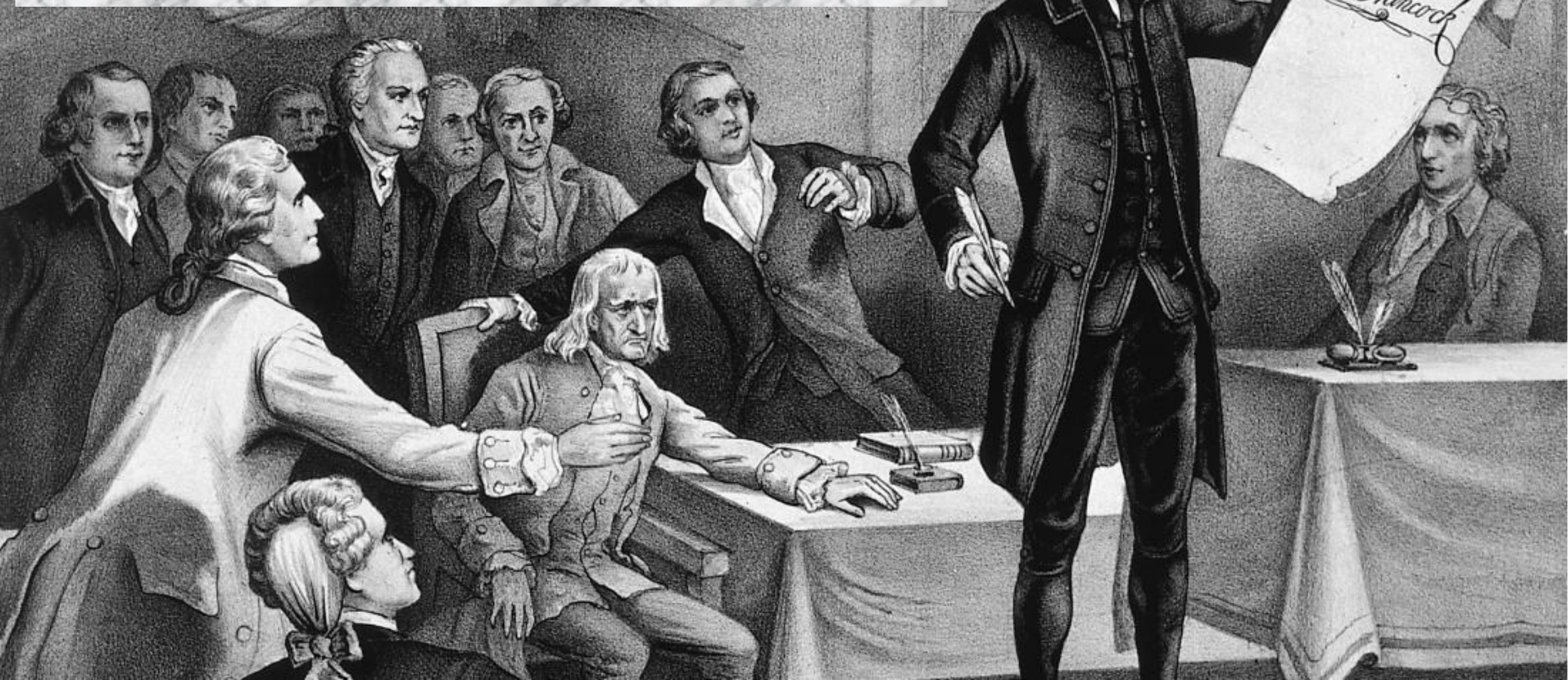
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**We the People (and the Robots)
of the United Alpine Data ...**

Drafting a New Declaration of Organizational Independence and a Data-Driven Constitution

Are you Thomas Jefferson or John Hancock?



Anti-Babel. Of Towers & Stones



Fixed capital, human labor, legal trust? A SW Theory of the Alps

Marc Andreessen



“Software is Eating the World”

Most assets have become virtualized and are being made available “as-a-service”, i.e. without requiring long-term **capital** commitments, full-time dedicated and specialized **labor**, and legally-bound **trust**.

The new logic of tangible and intangible assets: Property vs. Access

“Property is theft!”
(Pierre-J. Proudhon)



“Property is an inefficient method of asset allocation”. (attributed to Travis Kalanick, founder of Uber)



When a new technology arises, American startups will make a business out of it, Chinese companies will copy it, European institutions will regulate it.



Single child? Get yourself a “Digital Twin”



Every resource, every asset shall have a “digital twin”

The key to the Integrated Value Chain

Merging Real and Virtual Worlds with a Digital Twin

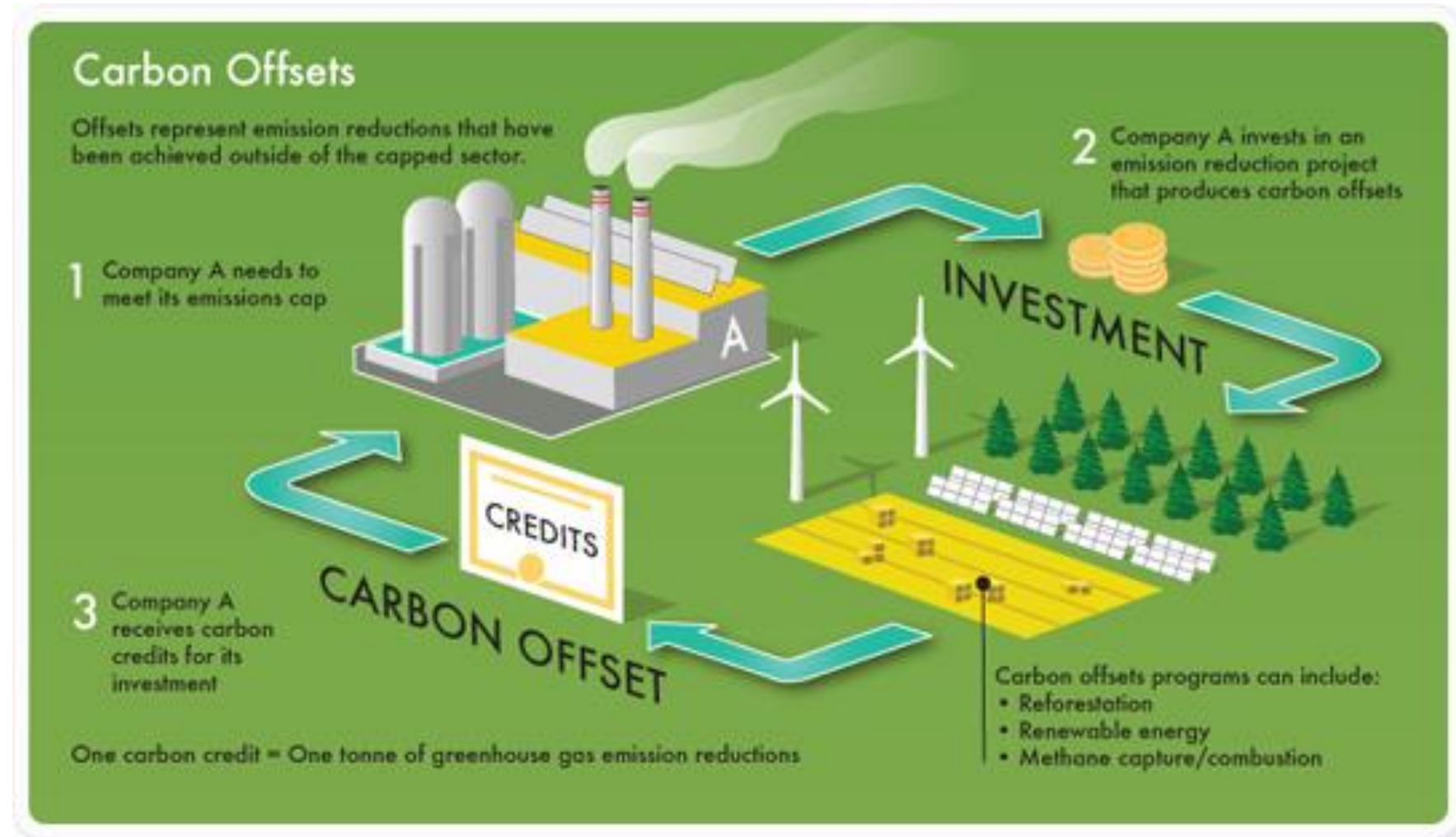


Which one is real..?

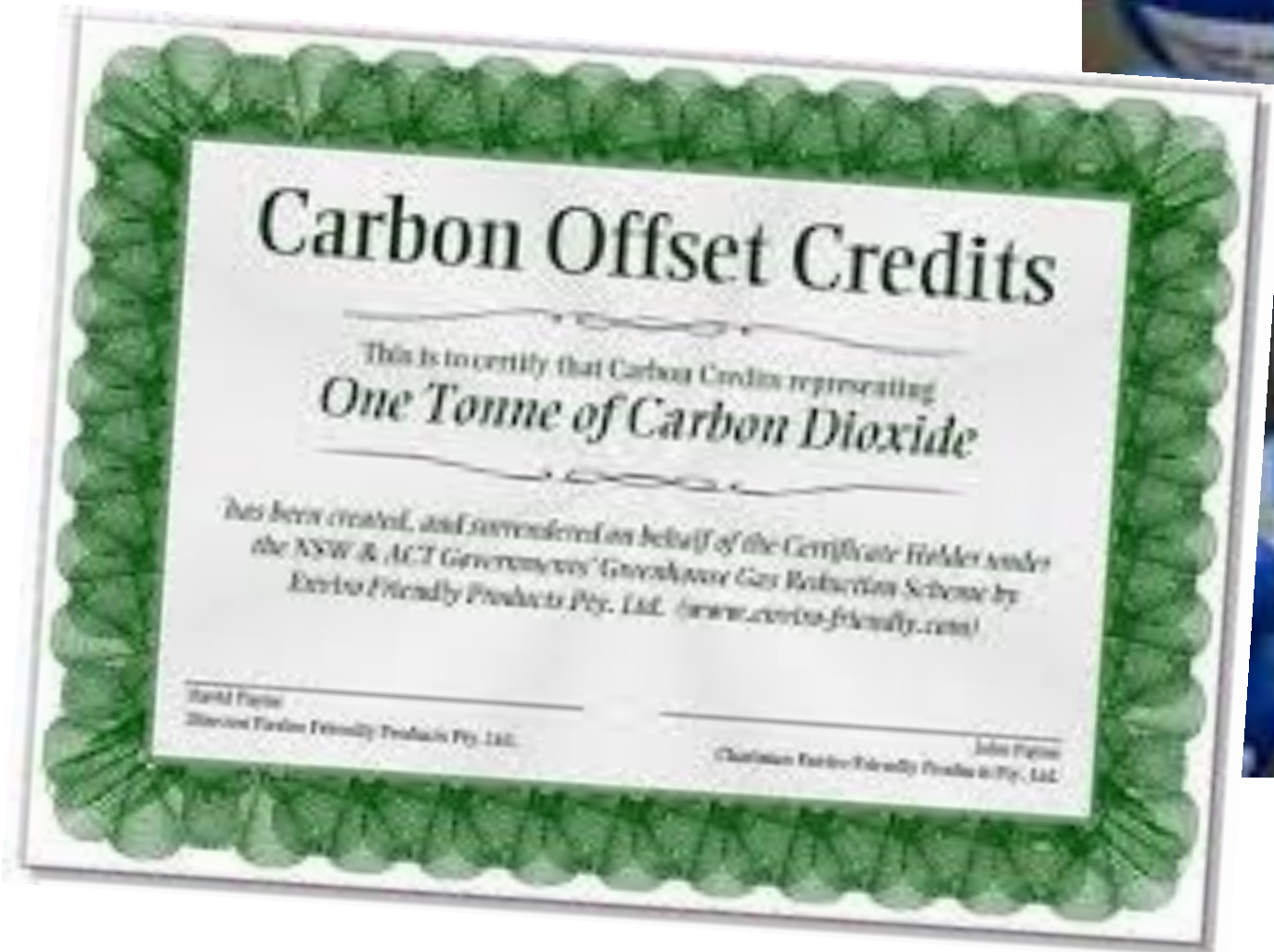


Digital by default and by fiscal policy.

A pigouvian token on negative externalities



ICT & CO2



The Economist

OCTOBER 31ST–NOVEMBER 6TH 2015

Economist.com

Our guide to America's best colleges

Turkey votes to the sound of bombs

Those ever-creative accountants

America takes the fight to IS

Coywolves: the new superpredator

The trust machine

How the technology behind bitcoin
could change the world



Engines of (artificial) trust

- Blockchains are the new platforms of verification and certification processes for companies and institutions.
- Laws & Negotiations (i.e. Smart Contracts) of the future are artificial.
- Capital & Labour (i.e. Data/Cryptocurrencies and Algorithms) of the future are artificial.



Alpine Regions, producers of “public goods”

Production/adoption of Digital Standards as public goods, **non rival e non excludable**.

- For institutions, public goods are obligations.
- For private enterprises, they are a differentiator, a open pact of service.

Generating public goods is a delicate equilibrium between incentives and liabilities.



	Excludable	Nonexcludable
Rival	Private Goods Food and clothing Car House	Commons Goods Fish in open sea Atmosphere Public waterways
Nonrival	Low-congestion Goods Cable television Satellite radio Online WSJ	Public Goods Tax-based: Nuclear umbrella The law Indirect private funding: Search engine On the air TV

Proposal for a Feasibility Study on Application of ICT Infrastructures

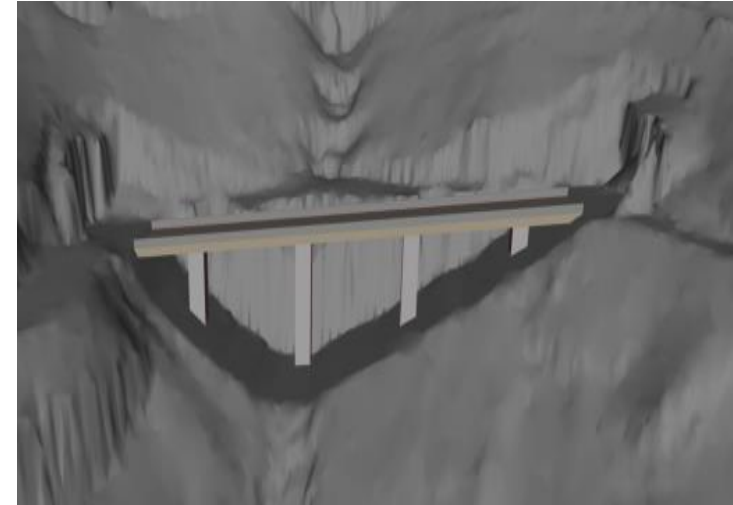
Ecosystem of Digital Twins (on top of 3D landscape model), for residents and tourists, and for all assets (tangible and intangible)

Digital cadastre of all resources/ assets, with API ecosystem for access/usage:

- Logistics and Triple Zero Mobility: Zero Emissions, Zero Accidents, Zero Ownership.
- Health care and safety
- Hospitality, food & beverage
- Sports & entertainment

Alpine Blockchain with Smart Contracts for Authentication & Access (eg. Civic.org)

Mapping of **Externality Footprint** (both positive and negative) for all resources: humans and assets. Not only energy consumption, but also providing feedback, capital, labour, trust.



Economics of Alpine Digital Platform: Pigouvian Tokens for Resources

Pigouvian Tokens

Based on scarcity of resources, desirability of access and elasticity of demand, an Alpine Marketplace of Externalities can be designed and implemented. The purpose is establishing a mechanism of incentives, to both tourists and residents, for a sustainable - if not accretive – fruition of all the Region's resources.

The logic is based on the Circular Economy Paradigm and the Tragedy of the Commons.

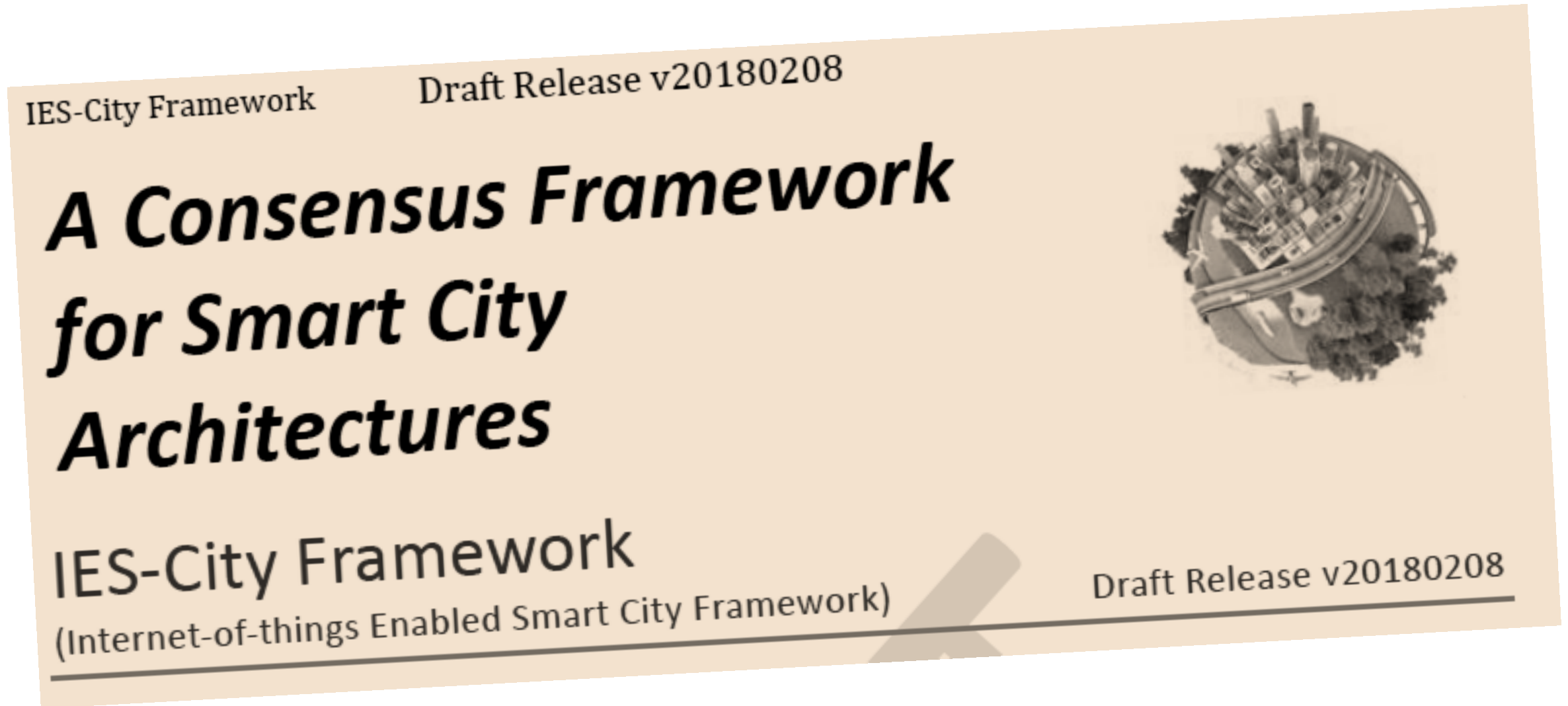
Tokens to be issued with a Public "Apline ICO". Granting access requires acquisition of token from the issuers. It grants priority of access to resources

All humans and assets have API for exchanging smart contracts for access and use of resources. Those who don't participate in the process and don't qualify themselves, will be charged the top level of taxation.

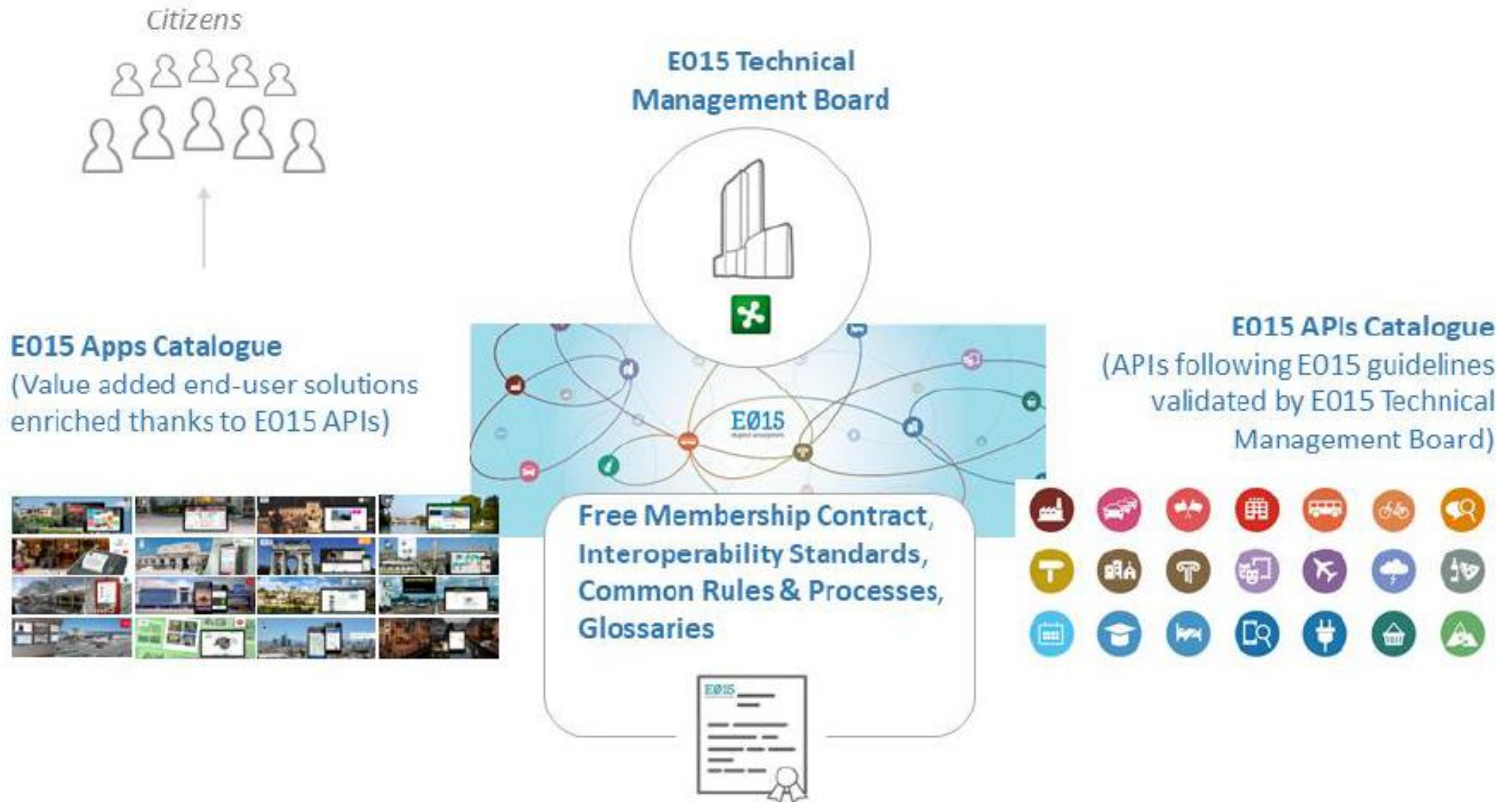
Journey Token will be proportional to the Externality Footprint.



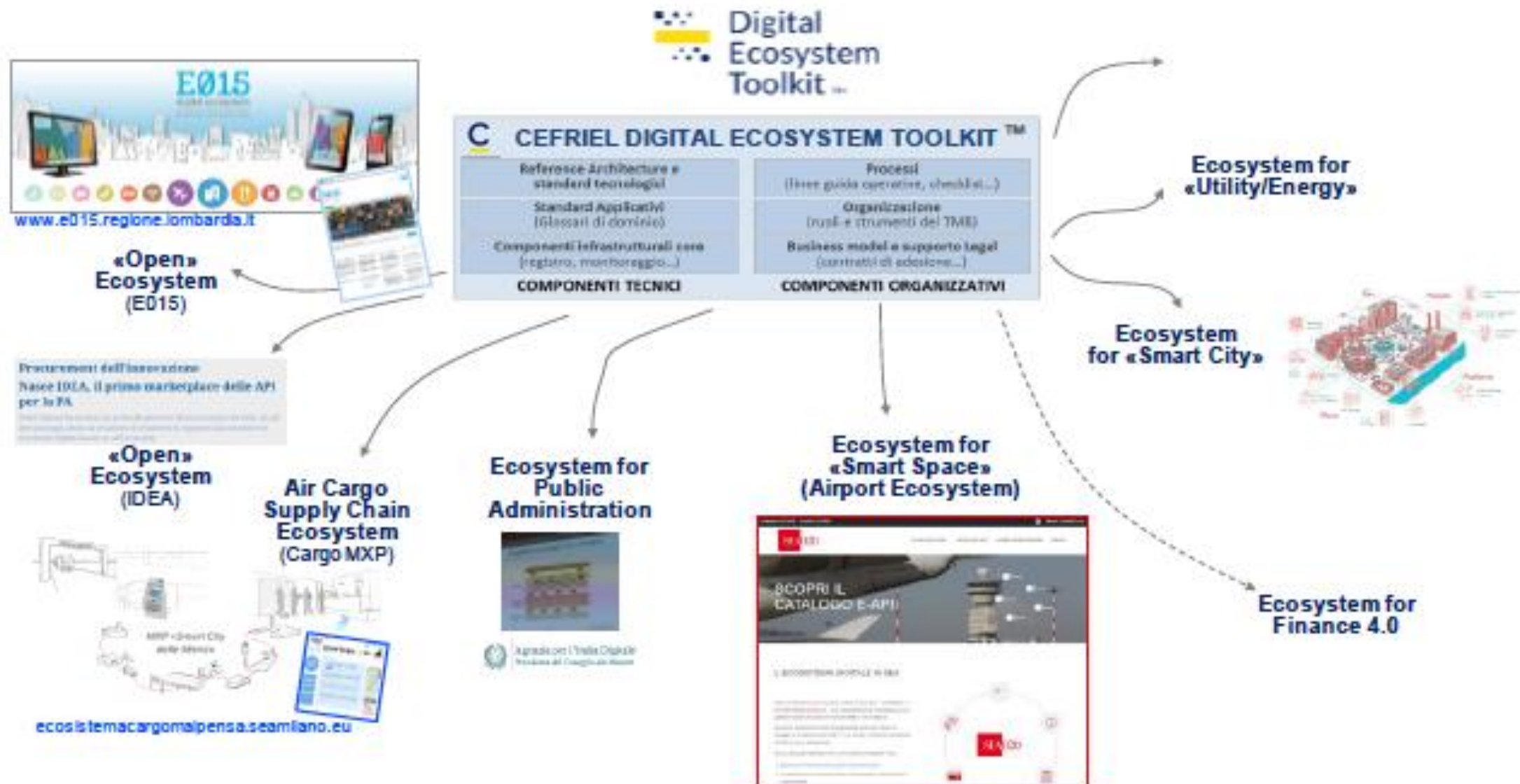
Adapting the rules of Smart City Architectures to the Alpine Region



The experience of Lombardy: E015 digital ecosystem



A toolkit for developing and extending digital ecosystems



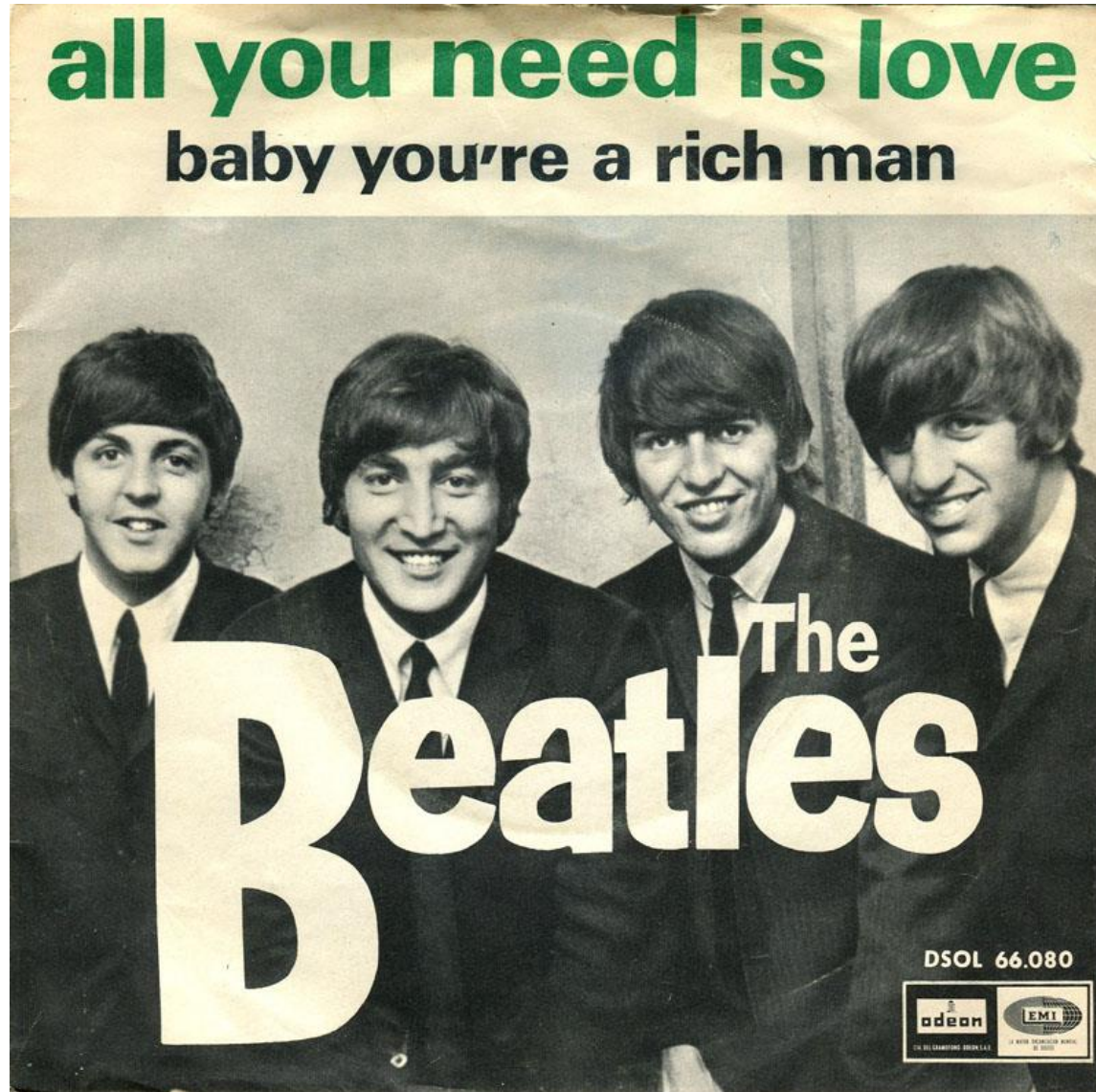
The E015 Digital Ecosystem in Lombardy: references

The E015 Digital Ecosystem initiative <http://www.e015.regione.lombardia.it> was established in 2010 by major Italian associations of industries and companies (Confindustria, the Chamber of Commerce of Milan, Confcommercio, Assolombarda and Unione del Commercio). The E015 reference model was conceived by Cefriel, since then in charge of the scientific coordination and evolution of the Ecosystem. In 2011, Expo 2015 S.p.A. became a full partner of the initiative. In 2013, the E015 Digital Ecosystem was publicly launched. In 2015, the Regional Government of Lombardy replaced Expo 2015 S.p.A. as the organization in charge of managing the E015 Digital Ecosystem and extended the duration of the initiative to 2021. In 2017 the E015 Digital Ecosystem became part of a regional law in Lombardy, as a strategic reference initiative promoting a “digital first” approach for assets sharing.

Thanks to common interoperability standards and participation processes (E015 guidelines), E015 Digital Ecosystem members, who have signed a free contract, can play two different roles:

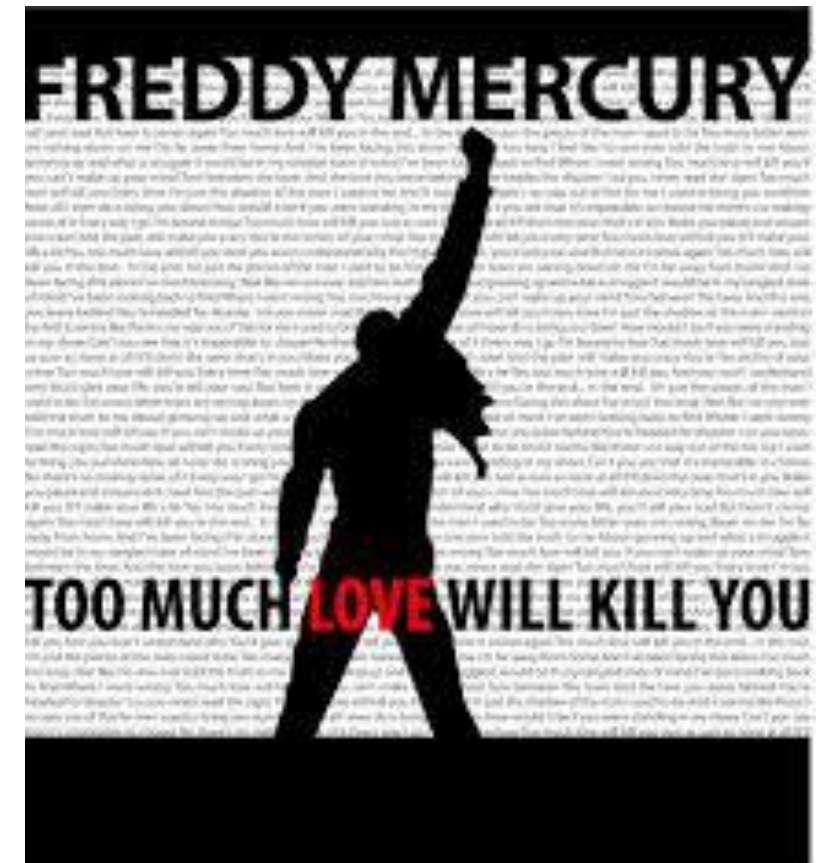
- **Sharing E015 APIs**, describing their own APIs in terms of both functionalities and usage policies, in order to share their digital assets to unlock additional business value from them. The E015 APIs are validated by a Technical Management Board, and are listed into a catalogue, in order to promote E015 APIs discovery.
- **Building E015 Apps**, enriching value-added integrated solutions for the end-users, asking for the E015 APIs listed into the E015 APIs catalogue. Two examples of E015 Apps are the official Regional Government of Lombardy web app <http://www.l15.regione.lombardia.it> or the info-mobility portal of the Municipality of Milan <https://www.muoversi.milano.it/>.

All You Need Is “Law”



But...

“Too Much Law Will Kill You”



Thanks!
Arrivederci...

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