

February 28th, 2020

## **Transportation & Climate Initiative Of the Northeast and Mid-Atlantic States**

### **RE: CEiiA's Comments on Transport & Climate Initiative's Regional Policy Proposal**

**CeiiA** is the Centre of Engineering and Product Development, a nonprofit innovation organization headquartered in Matosinhos (Porto), Portugal. We are at the cutting edge of technology in the mobility space, namely in automotive, urban mobility, aeronautics, Ocean and Space. Our organization is consistently ranked among the most innovative organizations in Europe. In 2017, the **UN Global Compact** elected CEiiA as a hub to develop and test urban sustainable technologies and is honored as a benchmark of the 11th Sustainable Development Goal - Sustainable Cities and Communities. CEiiA has partnered with **Global Futures Group (GFG)**, an advisory firm based in New York City to establish partnerships, pilots and promote AYR in the US. GFG advises public and private clients on best practices to create smart, livable and equitable Cities. GFG founded and produces Smart Cities New York, the leading conference in North America on Smart and Sustainable Cities. GFG was founded by the Hon. Jerry Hultin, former Undersecretary of the Navy, former President of NYU Tandon and currently Chair of the New York Academy of Sciences.

CEiiA strongly believes that there is no future without innovation and we are focused on developing and designing new products to be used as services. CEiiA developed **AYR**, a revolutionary platform that aims to **accelerate the decarbonization of cities** by incentivizing citizens to make **sustainable mobility choices** in their everyday commuting decisions by **rewarding the emissions that they do not generate**.

AYR aims to shift the decarbonization paradigm from paying to offset emitted GHG to rewarding avoided GHG emissions. The AYR platform quantifies the avoided GHG emissions from transportation and values them as AYR credits (digital coins). Users of the platform would then be able to exchange these credits for green goods and services with the partners of AYR. Each time a citizen uses a low carbon mobility mode (e.g. a bike instead of a car), he/she will gain AYR credits in proportion to the avoided GHG emissions. She/he can then use AYR credits to spend on services and goods like more time on bike sharing, charging electric vehicles, organic local vegetables and sustainable coffee. Imagine using your avoided GHG emissions to buy hundreds of green products in a seamless easy way, all from your phone.

The AYR platform is the only platform that allows users to monitor their carbon footprint and take concrete steps to reduce it, by **changing behaviors and creating new habits**. Additionally, the platform allows cities and companies to reduce their own GHG emissions without expending capital. In

order to generate large scale impact, AYR requires an ecosystem where digital coins can be exchanged for a variety of green/sustainable products. It requires public and private sector players to embed and/or accept AYR credits as a means of payment. By expanding the AYR partner ecosystem and with subsequent citizen and corporation adoption of AYR, a virtuous cycle of sustainable behaviour is reinforced and the network effect strengthened.

AYR has been deployed in two cities in Portugal - Matosinhos, Lisbon and São Paulo in Brazil. One of the objectives of the municipalities was to reduce traffic congestion and carbon emissions. Additionally, the cities wanted to promote the use of public transportation with complementary micro-mobility modes for the first-and last-mile trips. In the six months since its implementation, the AYR platform has helped citizens avoid the generation of 32.72 tons of GHG. In the municipality of Matosinhos, citizens were able to pay some of the local taxes using AYR credits thereby incentivizing sustainable behavior. Additionally, we could track behavior changes and we demonstrated that citizens were making more sustainable choices based on their own intrinsic incentives. Following the success in these three pilot cities, the AYR platform will be soon deployed in Cascais with an improved design and fully integrated with a Mobility as a Service (MaaS) solution, developed from the ground up using the AYR platform.

Given that around 60 percent of all trips in the United States are five miles or less and that 46 percent of automobile trips are three miles or less, there is undeniable potential of sustainable micro-mobility transportation options to enable more convenient, flexible local mobility while creating cleaner, healthier, more connected and less congested cities. Implementing the AYR platform into cities will accelerate this transition.

CEiiA strongly supports the bipartisan Transport and Climate Initiative and we look forward to seeing a clear set of policies that accelerate the decarbonization of the transportation sector.

Because of the **strong complementary nature of the AYR platform with the goals of TCI**, CEiiA urges the TCI to consider the following comments and suggestions before finalizing its program:

1. An enabling policy environment to implement AYR and to grow the network of AYR and its partners
  - a. In Matosinhos, the city launched a local regulation that required the integration of mobility operators in the AYR network, demanding that they accept payments in AYR credits. Additionally, mobility operators are able to use AYR credits to pay city taxes.
  - b. Matosinhos is expanding where AYR credits can be accepted as payment to local sports infrastructures, retail, théâtres, cinemas and museums creating a local ecosystem where AYR is used as a coin

2. Part of the proceeds of the cap and investment program should be used to expand the mobility network and improve the public mass transportation options that serve transit-poor communities
3. CEiA also believes that a portion of the proceeds should be used to develop the EV infrastructure

If AYR is embedded in local and state policies or endorsed by local and state governments, the moral suasion and incentive effect of reducing GHG emissions in line with the goals of the TCI would be increased. Without capital expenditures, AYR can help the world reach the decarbonization goals that it needs to, in a way that complements local policies and instills lasting behavioural change.

Thank you for allowing us the opportunity to provide comments on the draft RPP. We commend the administration's work and we look forward to the policy proposal.

Sincerely,

Pedro Luis Diez Gaspar  
*Future Business Technology Director, CEiA*

Gianluca Galletto  
*Managing Director, Global Futures Group*