

## **Written Submission**

### **Part 1: Executive Summary**

Carbinity commits to continuously improving climate change issues and encouraging people to have a healthy living habit. The business is sustainability as we are eco-friendly and the crisis is ongoing.

Carbinity was founded in 2022 and will be operated by a group of young people who care about climate change and human health in 2023. The team includes Sophia, Eric, Cindy, Yani, Kevin, and Elva.

Carbinity offers an app including step counting function and calculating how much carbon emissions are reduced. Finally, the person will be awarded based on its contribution.

Carbinity is a very comprehensive, intelligent and considerable app in the market. As we do not require any payments from users, it can easily attract users to try our apps.

### **Part2: Impact**

As our “Carbinity” encourages citizens to take public transportation more often instead of driving private vehicles, the low-carbon emission lifestyle that we are promoting can keep the global greenhouse effect within limits and reduce atmospheric dust pollution, which directly impacts the environment. This effect is crucial considering a continuous increase in carbon emissions will cause global warming, leading to a severe issue—climate change. Climate change refers to a shift in weather

patterns and temperature causing a variety of abnormal climates and natural disasters, such as drought, desertification, sea level rise, and increased diseases and pests. If the earth's surface temperature continues to rise at the current rate, the global temperature will increase by 2 to 4 degrees in 2050. As a result, Arctic and Antarctic icebergs will melt significantly, leading to a significant rise in sea levels, which will directly cause coastal cities to be destroyed by floods. Climate change also has an impact on agriculture and animal husbandry. The increase in early spring frost damage due to the advance of crop development period caused by climate warming can lead to serious hazards such as unstable agricultural production, local drought, and high temperatures. A decrease in the yield and quality of grassland due to meteorological disasters will also increase the loss of agriculture and animal husbandry. The impact of climate change on water resources and coastal zones is also serious. Sea level rise causes seawater intrusion leading to soil salinization. If greenhouse gas emissions are still not limited and taken seriously, they will cause irreversible losses to mankind. Thus, our innovation could directly reduce the harm caused by climate change. In addition, "Carbinity" also has a number of indirect and side effects. As people intentionally limit their use of private vehicles, it can reduce the exploitation of non-renewable energy on the earth and decrease the damage to mineral deposits since most of the carbon is produced by burning fossil fuels. Furthermore, it can force countries to accelerate the research and use of renewable energy and green energy.

### **Part3: Traction**

Carbinity also has a broad impact on society: such a mobile application will be

widely used, and more and more people will choose to use public transportation instead of driving their cars. Buses and subways are considered the most occasional means of mass transit and the development of the so-called “incentives” that exist in Carbinity. It will lead to a rapid increase in demand for public transportation by the urban population, which will lead to more buses being invested in by public transportation companies. Carbinity significantly impacts society and plays a fundamental role in urban development. According to statistics, transit ridership has not increased as much as it should have in recent years and, to some extent, is trending downward. Almost all transit riders understand transportation and choose their mode of transport from the perspective of their convenience. On the other hand, Carbinity can change people's initial mindset to choose a seemingly cumbersome way to travel that they have never preferred before - public transportation - by redeeming their accumulated walking steps for a free one-way ticket to public transit. It helps people get into the habit of exercising and walking, which is the best way for people to relax after long hours of work and study.

#### **Part 4: Strengths & opportunities**

Carbinity would be supported by the Ontario government for funding and promoting. The funding from the government would be a stable resource for the company to raise capital, which ensures financial support for the company's operating activities. The main focus of the app is not profitability due to the focus on climate change, so the stable funding from the government brings reliability to other investors and users. The assistance from the government is special for Carbinity when

compared with other similar products, which creates the opportunity that Carbinity can attract more investors and users. The government's support encourages investors and users to have confidence in Carbinity's sustainable operations and keep investing or using the app. The possible risks of failing to pay the debt or even bankruptcy are less likely to happen, which strengthens the investors' willingness to associate with Carbinity. The support of the government also naturally introduces the liability of using the app while the app has just entered the market, which reassures potential users from the chance of using public transportation for free. More users may be attracted to joining Carbinity.

There are a lot of products aiming for global warming and environmental protection, but Carbinity is also dedicated to bringing benefits to users by saving their costs on public transportation, instead of spending on purchasing the product itself. The improvement in customers' experience brings Carbinity the opportunity of a greater probability of attracting users, since Carbinity combines the advantage of spreading positive attitudes in environment protection and striving benefits for users. The increase in positive effects of using Carbinity causes the app to be strongly competitive with other similar products.

## **Part 5: Business Overview**

Carbinity is an app to improve the climate change issue and focus on people's health and welfare. This app can count people's daily walking steps and award people with free public transit tickets. As Carbinity is a non-profit company, revenue will be generated by some in-app advertisements, and collaboration with some government

owned companies. This app is available on iOS, Android, and Google Play Store.

Carbinity delivers a thoroughly customizable and personalized interface. Our product targets people who live downtown, encouraging them to walk and take public transit, rather than driving and Ubering. This app differentiates itself from the competition by offering valuable awards and no fees required. In the market, many health and fitness apps offer customers to purchase a membership subscription to unlock functions. However, as our goal is to reduce climate change, no payments are required other than your action.

#### **Part 6: Team**

We have a diverse and competent team behind Carbinity with members in correlating fields.

The leader, Sophia Cao, is the primary decision-maker in the team. Despite her excellence in leadership, she is also one of the main programmers of Carbinity.

The other programmer Kevin Li has sophisticated programming and data analysis skills thanks to his abundant experience creating websites and apps.

As a commerce student, Cindy Jiang focuses on coordination and collaboration in the team and takes the responsibility of managing the human resource of the team.

As Carbinity focuses on environmental issues, Ya Ni Zhao, currently studying commerce, has excellent skills in combining social issues with profitable organizational structures. She is in charge of analyzing the external environment of Carbinity.

Eric Chen, a commerce student, focuses more on the product itself. At the same time,

Elva Wu is responsible for investigating and predicting the possible impact of Carbidity.