

2020
CiViTAS
Cleaner and better transport in cities

DESTINATIONS



Measure Evaluation Result

MAD 6.2 - Green credits: A Business Model for Mobility, Sustainability and Tourism

| | |
|---------------------------|---------------------------------------|
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Executive summary

Over the last few years, the use of public transport (PT) in Madeira, particularly in Funchal, has been decreasing. To overcome this trend and promote the recovery of this transport mode, the local team planned to implement a scheme where the PT passengers could have access to discounts and other benefits in various local shops and businesses. The objective of the measure was to provide PT users more reasons to use this transport mode, through a loyalty system. The final expected outcome was the Public Transport Friend initiative (PTF).

The implementation of the measure started with a thorough research process of the available mobile apps using credit schemes and related to sustainable mobility. The results shown that there was no mobile app that could be used for the green credit scheme for PT users. Due to this fact, Horários do Funchal (HF), the main urban and interurban public transport operator, decided to proceed with other strategy. The local team, together with the University of Madeira, defined the technical requirements to develop a new green credit system that could be used for all types of businesses, from small ones to big ones, using simple selling mechanisms and technologies. However, when the solution was initially defined, an integration with the ticketing system was envisaged, but HF's current ticketing system was not so far technically prepared to link with the requirement envisaged for the new green credit scheme.

Given the complexity of the solution foreseen and the need for several adjustments to the planned requirements, HF decided to proceed in parallel with an alternative solution. HF started to establish cross-sectorial agreements with the local business to provide discounts/advantages to the PT users, taking the first steps to create the PTF initiative. The participation and commitment of the local business was essential to create the network of the PTF. Along with a dedicated promotional campaign, a specific website was also launched (<http://www.horariosdofunchal.pt/amigos/?lang=en>) and intended to provide complete information about all the partnerships as to allow business owners to apply directly in the website to join the initiative. With this approach, it was possible to understand that the best way to establish agreements is through direct contact with the business owners, explaining the benefits of the initiative and using the opportunity to promote other HF services. The number of partners raised has varied over the last months, strongly due to COVID-19, which brought financial difficulties to the businesses and in some extreme cases led them to close the operation. During this process, it was raised 4 restaurants that can have more interest to tourists, but also the other partners can provide benefits for tourists and residents (jewellery, optical shop and pharmacy).

The evaluation results were retrieved from one survey applied two months after launching the initiative at the most frequented and main PT selling kiosk. The results shown that 23% already knew about the initiative. However, due to the COVID-19 it was not possible to proceed with the surveys to the business partners owners and the users of this initiative. All the non-essential business/shops were closed at the end of March and the entire April of 2020. Only in May the shops started slowly to reopen despite the relevant time and health restrictions. Nonetheless, HF keeps contact with the business partners to assess improvements opportunities and to get feedback about the activity. During these contacts it has been possible to understand that PT passengers are using the PTF advantages. It was understood by both stakeholders that this implementation has a unique win-win approach, involving relevant benefits for all.

This measure has been a big success, with 26 businesses brought on board, high public awareness, cross sector working, and it is transferable to other similar sites, without significant technical effort.

A Description

Since October 2019, HF's PT passengers have access to the PTF initiative which provides a selection of enjoyable advantages in several local businesses. These benefits are available to the HF's employees as for tourists and residents that purchase at least one ticket of the urban or the interurban public transport service of HF.

In September 2019, HF launched a thorough marketing campaign and started to promote the PTF initiative using, strongly the social media (Facebook and Instagram), company website, informative posters in the bus stops, hotels, ticket sales points and bus doors and with advertisements in the local newspapers.

At the same time, the initiative partners – in other words, the businesses offering benefits for PT users – continually promoted the use of PT through their own communication channels. This reciprocal support has been the most innovative component of the initiative, encouraging other entities, local businesses, and stakeholders to join this initiative and to promote a more sustainable urban mobility.

This measure had the cooperation of the local partners:

- ARDITI - Agência Regional para o Desenvolvimento da Investigação, Tecnologia e Inovação, contributing to the definition of the technical requirements.
- AREAM - Agência Regional da Energia e Ambiente da Região Autónoma da Madeira, CMF- Câmara Municipal do Funchal, and SRETC - Secretaria Regional da Economia Turismo e Cultura, participating in the meetings to define the idea concept and promoting the initiative.

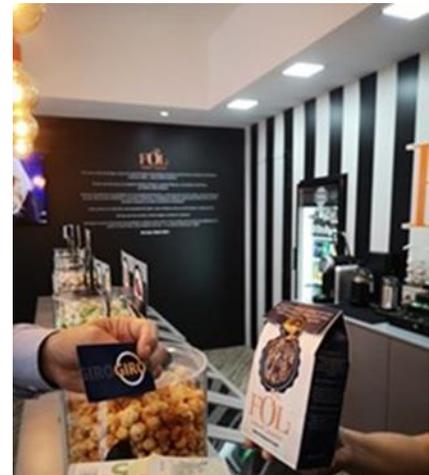


Figure 1: PT customer enjoying a discount in one of the initiative partners

A1 Objectives and outputs

City policy level objectives

- Improvement of quality of life
- Reduction in transport-related emissions
- Increase modal share of sustainable modes
- Reduce carbon emissions and leverage healthy habits within residents and tourists
- Enhance Madeira as an attractive tourist destination.

Measure specific objectives

- Development of a credit system to reduce carbon emissions and leverage healthy habits
- Increase the number of public transport's passengers
- Create and develop loyalty programs which are perceptible to the citizens and tourists of the benefits of sustainable mobility and environmental options
- Raise awareness of alternative modes of transport.

Outputs

- 26 institutional and business partners involved in the credit scheme at the local level
- 1 Online platform “Public Transport Friend” - To promote the commercial agreements
- Promotional “Public Transport Friend” campaigns.

A2 Inter-relationship with other measures

The measure shares some synergies with other CIVITAS DESTINATIONS measures as follows:

- **MAD 2.1-** Sustainable Regional Mobility Plan (SRMP). The stakeholders’ involvement was useful to raise the importance of PT and the need to promote its use. Also, the surveys applied to tourists at the port and the airport of Funchal were important to assess the value attributed by the tourists to the action of providing discounts when using PT.
- **MAD 6.3** - Mobility management planning tools for tourists and local tourism operators. To boost the PTF initiative, it was defined a strategy that combines the Tourist Kit product (multi-days tickets from MAD6.3) with the PTF initiative. HF decided to include in the tourist kits pack, PTF informative vouchers promoting the discounts and advantages available to be used by the tourists.
- **MAD 7.2** - Attractive public transport. The activities to increase the attractiveness of PT and the direct contact to the customers worked as a driver to promote the initiative PTF. On the other hand, the initiative was a way to have PT promotion from the business partners. In addition, the Carristur agents while selling the Tourist Kit product were also providing information about the PTF partnerships, through the PTF voucher.
- **MAD 7.4** - An open and smart public transport ticketing system. The plan to have a mobile app with the connection of the ticketing system and the green credit scheme depends on the ticketing system. During the project it was not possible to develop a new ticketing system, however, it was developed a plan for the green credit scheme to be launch when the new ticketing system will be complete.

A3 Target groups and/or affected part of the city or region

This measure targeted the users, residents and tourists, of PT of the urban service of Funchal, and the interurban service of HF (Curral das Freiras, Camacha, Santo da Serra and Santana).

A4 Stakeholders involvement

| Stakeholder name | Activities description |
|---------------------------|---|
| Trade and services sector | It was set up commercial agreements, with promotional fares, discounts and combined products for both, residents and tourists. |
| Tourism sector | The hotels that have a partnership with HF to sell Public transport tickets promoted the Public Transport Friends initiative among their customers. |
| University of Madeira | The university supported the definition of the technical requirements to develop the green credit scheme. |

Table 1: Stakeholder’s involvement

B Measure implementation

B1 Situation before CIVITAS

Throughout the past 15 years, public transport passengers in Madeira were steadily declining, with a direct repercussion on the public transport operator revenues, as citizens were becoming wealthier and privileging private transport modes or arranging new shared mobility solutions.

In the meantime, the operational costs involving the provision of PT services in a remote and outermost island such as Madeira turned higher steadily with evident over costs that were reflected in higher price tariffs. Public transport on the island is therefore much more expensive than other similar sites. One way to overcome this economic burden and to make public transport more economically accessible for its clients, was to team up with other companies and offer structured discounts. In such way, people can benefit from a commuting system that can be regarded as competitive and appealing for locals and tourists alike. The Green Credit solution was therefore envisaged by the PT operator as a core business activity which can retain current passengers and attract new ones.

In a survey applied at the Madeira airport in 2018 to 193 tourists, it was evaluated the interest in a discount system for public transport users, "If there would be additional discounts (beach, museums, cable car, restaurant, etc.) using Public Transport service, would it be more attractive for you to use HF Public Transport?". 71% of the tourists indicated Yes, 21% said no, and 8% did not answer the question. The same question was applied again at the airport survey on 2019, where 68% of the tourists answered Yes. These results point tourists' interest on receiving discounts, but the low use of the benefits, reinforces the need for HF to expand the partnerships and improve the dissemination.

B2 Innovative aspects

- **New conceptual approach** – The initiative Public Transport Friend has a mutual approach to service promotion. From one side, HF promotes their partners, from the other side the partners promote the use of Public Transport as a way to have discounts or benefits in their services.
- **New economic instrument** – The initiative Public Transport Friend provide discounts to the public transport service customers, It can be seen as a way to reinforce the idea that public transport can be economically advantageous.

B3 Technology development

HF, with the support of ARDITI and the University of Madeira, defined the technical requirements for the Green Credit Scheme, considering the link with the HF systems, and all types of vending systems of the local business (small and big companies), and also considering the public transport user needs and their preferences.

As a first step, the local team performed a benchmarking analysis of the new solutions existing in the European and international market, because it was aimed to create an integrated and intelligent platform, and in the particular case of "Green points system" and other solutions, it was analysed particularly solutions from England and Singapore.

Several interactions were carried out to perform the design of commuting green credit platform solutions and development of Business Plan. Benchmarking analyses regarding existing solutions to track user's mobility patterns and gain points were performed, including meetings with industry providers BetterPoints, LuxMobility, and PostitiveDrive.

Several meetings and webinars with local, regional, and cross site partners concerning business model canvas workshop, and green credit schemes were carried out.

However, the development of the Green Credit Scheme had a strong dependence on the ticketing system (measure MAD7.4) and the ticketing system in place didn't allow a connection to a new Green Credit Scheme. On the other hand, the new ticketing system, complete for all the bus fleet will only be implemented after DESTINATIONS with ERDF (European Regional Development Funds).

To overcome this problem, HF decided to reformulate a tool developed in a former project SEEMORE (Intelligent Energy Europe). With some improvements, in October 2019 is was launched the "Public Transport Friend" platform.

B4 Actual implementation of the measure

The development of this measure proceeded with two parallel approaches. One was the technical study to develop the system, as explained in section B3, the other was the establishment of a partnership strategy to address and contact local businesses.

The cross-sectorial partnership started with an agreement with "Frente Mar" (local municipal company responsible for managing the local beaches) which provided discounts for PT monthly pass passengers (2017 to 2020). Then followed agreements with an optician service and a pharmacy. Given the positive feedback and interest of the retailers and service providers, quickly HF understood the potential of the initiative for both business sectors and passengers, and dedicated more efforts to this strategy. The acceptance of the local businesses was an essential step to create and boost the network of Public Transport Friends.

To better promote and manage the initiative, HF launched a dedicated website (<http://www.horariosdofunchal.pt/amigos/>).

The microsite provides information about the partnerships available to passengers, and besides, it allows the business owners to apply to join the initiative. Despite the low use of such mechanism, the website was a good channel to promote the first contact between both entities. It was understood that the best way to set agreements is through direct personnel contact with the business owners, explaining the benefits of the initiative and using the opportunity to promote other HF services, such as the busdoor advertisement, bargaining the best solution for both HF and the business owners.



Figure 2: PT passenger receiving discount at a PTF partner shop

The promotion of this initiative to the passengers and additional potential business partners started in September 2019, 2 weeks before the launch of the initiative. For the communication purposes, it was used HF social media (Facebook and Instagram), more dedicated to the youngers. Other dissemination channels used were, the HF website, posters in bus stops,

selling points, busdoors and advertisement in the local newspapers and flyers for public in general. Focused on tourists, it was also defined a communication campaign in English placed specifically at the hotels, and reinforced at the buses, selling points and bus stops.



Figure 3: Advertisement in the bus door

Considering the low levels of awareness about the PTF initiative, mostly between tourists (2,5%), and the business difficulties imposed by the COVID-19 situation to the local businesses and also to HF, the public transport operator decided to reinforce the dedicated strategy. In addition, this was also as a way to promote the local businesses in such a critical circumstance.

Based on the partnerships established, HF developed specific **PTF informative vouchers** (September 2020), with promotional information regarding the discounts and the advantages, to be delivered to the tourists and to residents.

The approach to tourists was through the Carristur agents (tourism operator), who also sells the HF's Tourist Kit product (multi-day tickets) (activity in MAD7.2), also through the hotels (activity in MAD 6.3) and the pay shops. The informative vouchers were placed randomly inside the Tourist Kit pack including information about the benefits on restaurants, jewellery shop and museum. Regarding the residents, the vouchers benefits scope was wider, including also advantages in gyms, optic shops, medical services, pharmacy, between others. The vouchers started to be delivered during the monthly pass purchase at the main selling kiosk of Anadia. In total it was delivered a total of 850 promotional vouchers. Besides the traditional channels, HF also promoted the partnerships through social media (Facebook and Instagram).



Figure 4: PTF Informative Voucher

Another relevant aspect of the activity was that the initiative partners also promoted the use of PT in their communication channels. This was the most innovative component of this measure, having other entities, the local business, promoting and encouraging the use of PT. This cross-sector working can benefit the PT operator, acting as "free" advertising and reaching out to both local and tourist groups. This approach can be transferred to other similar sites.

By November 2020, HF counted with 26 business partnerships. HF planned to keep expanding the network, however, the COVID-19 situation had negative repercussions on the initiative, once several businesses that were HF's partners went bankrupt. Nonetheless, HF kept dedicating efforts to raise more partners and implement different approaches to dynamize the activity, for example the PTF voucher. Despite the situation, HF was able to raise 4 restaurants that can have more interest to tourists, but also the other partners can provide benefits for tourists and residents (such as jewellery, optical shop and pharmacy).

C Impact evaluation

C1 Evaluation approach

Expected impacts and indicators

| Impact category | Impact indicator | Unit of measure |
|-----------------|---|-----------------|
| Society | 1- Percentage of residents' customers and tourists aware about the PTF initiative | % |

Table 2: Expected impact and indicators

Method of measurement

| Impact indicator | Method* | Frequency | | | Target Group | Domain (demonstration area or city) |
|--|---------|-----------|--------|-------|-----------------------------------|---|
| | | Baseline | During | After | | |
| 1 - Percentage of residents' customers and tourists aware about the PTF initiative | S | n.a | n.a | M40 | Tourists and residents' customers | Funchal city and interurban area served by HF |

* (Data collection (DC), Estimation (E), Survey (S))

Table 3: Method of measurement

Detailed description of the indicator methodologies:

1 - Percentage of residents' customers and tourists aware about the PTF initiative - The responsibility for collecting this indicator lies in HF.

For residents, the information was collected through a survey at the main selling office (Anadia) ("Are you aware of the initiative Public Transport Friend?"; "If yes, what is your opinion regarding the discounts/partnerships? Very bad, bad, neither good nor bad, good, very good"; "Did you already benefit from this initiative?"). The survey was applied in end of November beginning of December 2019, to 102 HF customers. For tourists, the information was collected through a survey at the airport, with the same questions. The survey was applied at the beginning of December 2019, to 199 tourists.

The Business-as-Usual scenario

Not applicable for the indicator evaluated, as this is a new initiative.

C2 Measure result

| Impact category | Impact indicator | Unit of measure | Baseline | Ex-Ante | Ex-Post |
|-----------------|--|-----------------|----------|---------|--------------------------------|
| Society | 1-Percentage of residents' customers and tourists aware about the Public Transport Friend initiative | % | 0 | 5% | 23% residents 2,5% tourists |

Table 4: Measure results

C2.1 Society

1-Percentage of residents' customers and tourists aware about the Public Transport Friend initiative

The awareness of the PTF was higher among residents (23%) than tourists (2,5%). It is important to refer that the residents that were surveyed are users of PT, and the communication activity was more active in the traditional public transport communication channels.

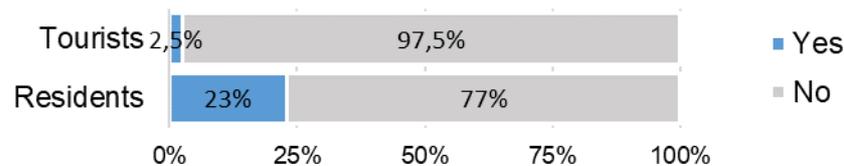


Figure 5: Awareness of Public Transport Friend initiative

Within the group of those who knew the initiative, the residents have a better opinion (4,0 in an increasing scale from 1 to 5), than tourists (3,3).

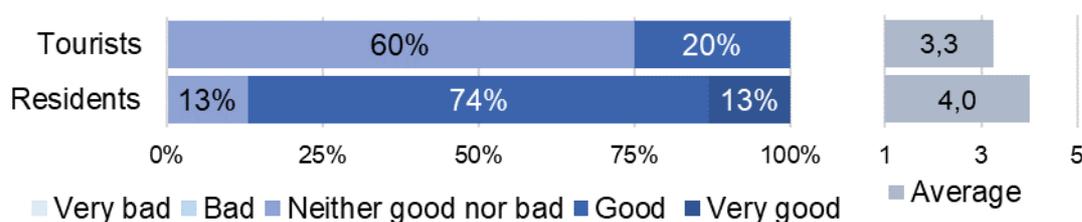


Figure 6: Opinion regarding the discounts/partnerships

From the surveys, only one resident stated that had benefit from this initiative.

C3 Quantifiable targets

| No | Target | Rating |
|----|---|--------|
| 1 | At least 100 residents and 100 tourists actively participating in the green credit scheme | NA |

| | | |
|--|--|-----|
| 2 | At least 80% of the participants stating that their mobility information and their satisfaction with the mobility services have improved | NA |
| 3 | Local business transactions improved in at least 10% among the targeted people | NA |
| 4 | Rebalance transport modal share by increasing sustainable modes in at least 5% (more 4.870 tourists using PT per year) | NA |
| 5 | *At least 5% residents' customers aware that the green credit scheme is available | *** |
| 6 | *At least 5% of tourists aware that the green credit scheme is available | * |
| NA = Not Assessed O = Not Achieved * = Substantially achieved (at least 50%) — ** = Achieved in full *** = Exceeded | | |

*New target, not in GA

Table 5: Assessment of quantifiable targets

The targets from 1 to 4 were planned in the grant agreement, and the target 5 and 6 were defined during the measure development.

The initiative PTF was launched in October 2019, and it was planned to have 6 months of operation, followed by the evaluation of the expected targets in April 2020, through surveys to the business partners owners and the users of this initiative. However, due to the situation caused by the COVID-19, it was not possible to perform proper evaluation as planned. All the non-essential business/shops were closed at the end of March and the entire April of 2020, and a slow opening with very restrictions started in May.

Nonetheless, HF keeps in contact with the business partners to assess improvements opportunities and get feedback about the activity. During these contacts it has been possible to understand that PT passengers are using the Public Transport Friend advantages, but due to operational constrains, the business partners have not been capable of quantifying into a number of clients or revenues. It is however understood by both stakeholders that it is a win-win approach, with benefits for all involved. With these conditions, it was not possible to assess the targets from 1 to 3.

Target 4 was evaluated in MAD 6.3 measure, under which were implemented a set of specific initiatives focused on the tourism sector.

The target 5 was exceeded among the resident's customers (23%). On the other hand, target 6 was only substantially achieved with just 2,5% of the tourists aware about the initiative.

C4 Up-scaling of results

It is expected that after surpassing the negative effects caused in the society by the COVID-19, it will be possible to join more business partners to this initiative, develop more dissemination activities targeted to the public transport users, and consequently the users of this initiative will increase. In this situation, HF will monitor all the indicators initially planned in the grant agreement that was not possible to access.

D Process Evaluation Findings

D1 Drivers

At a **political/strategic** level, this measure is part of an engagement agenda in developing behaviours and actions aimed at better sustainable mobility and transport in the region. The activities developed in measures MAD 2.1 and MAD7.2, demonstrate the importance of increasing public transport promotion.

In addition, this measure benefits from **involvement and communication**. The commercial team of HF, with direct contact with the business owners, defined agreements that benefit both entities.

The use of crossed discounts/benefits between business is well perceived at a **cultural** level, however, the main partners of this kind of initiatives are big businesses as supermarkets and gas stations, and difficult to raise. The initiative Public Transport Friends allows the small business to join a discount/benefit scheme in an easy way and is an opportunity to promote the local and small business.

At an **organizational** level, these agreements work as a win-win strategy for both partners, by allowing the public transport company to promote the other services and having the use of public transport being promoted by other services.

In the **financial** aspect, the implementation of this measure had a small effort. The concept of the idea was defined by the local project team, the research and the commercial department defined the plan, the website was developed by the technical team of HF, the design was produced by the HF's designer person. The only costs related are related to human resources and communication materials.

D2 Barriers

Due to the **technical complexity** of the overall solution, several technological issues were faced. On one hand, the green credits measure requires, besides a huge commercial effort, a complex business model design, development and implementation process. Following the design problems, there were also difficulties in finding adequate suppliers, which resulted in successive delays in the progress of this measure. Also, the link with the ticketing system is not possible with the ticketing system in place.

D3 Lessons Learned

The green credit scheme was initially planned as a system depending on big technology development. Besides the barriers to implement this, the local team did not give up the idea and found a simpler way to implement it.

The **best way to reach agreements is the direct personnel contact** with the business owners, explaining the benefits of the initiative and using the opportunity to promote other HF

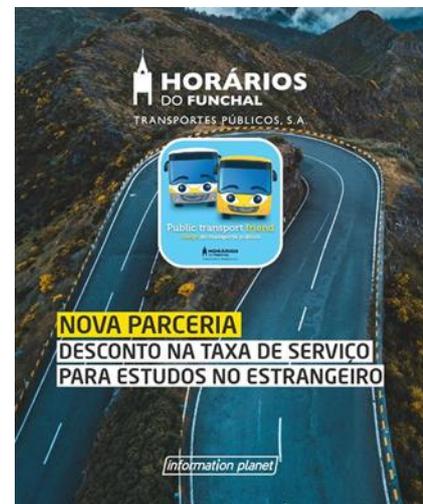


Figure 7: Publicity of the initiative in the social media of a partner

services, such as the busdoor advertisement, negotiating the best solution for HF and the business owner.

This measure has been a big success, with 26 businesses joining the initiative, high public awareness, cross sector working, and it is transferable to other similar sites, without significant technical effort.

E Evaluation conclusions

This measure did not have a complete evaluation with only one indicator related to the awareness of the Public Transport Initiative, as explained in section C3. HF understands that is good to reach the awareness, in a so short time, of 23% of its' customers. The tourists' awareness was only 2,5%, revealing a need to reinforce the strategy focused on the tourism sector, by enlarging the tourist business partners, from one side, and by having more hotels promoting the initiative.

F Additional information

F1 Appraisal of evaluation approach

Due to the COVID-19 situation, it was not possible to complete the measure evaluation. Some indicators initially planned were not assessed. Despite that, within this measure the local team performed the evaluation process, getting lessons for the future activities and that can be replicated in other sites.

To understand the general knowledge of the initiative Public Transport Friend, it would be useful to survey to the population in general and not only to the public transport customers. It would help to understand if this initiative could transfer/attract users of private modes of transport to the public transport service.

F2 Future activities relating to the measure

The local team will continue the commercial activities to raise more partners to the initiative Public Transport Friend. Some improvements on the website will be developed, making the process of finding the partnerships desired by the passenger easier, by adding some filters and orders.

Following the implementation of the new ticketing system by the public transport operator, it will be analysed the possibility to launch the green credit scheme with the technical requirements defined under this measure, to have a more complete and interesting solution for all stakeholders involved (passengers and business owners), allowing the attractiveness of this initiative to increase.