

# HOME-TO-WORK COMMUTE PLAN GENERAL SECTION

**INTERNAL** 

December 28, 2023

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# 1 Introduction and objectives

The Home-to-Work Commute Plan (HWCP) is a tool designed to provide each company with an opportunity to develop and support alternative and more cost-effective measures than using a car for employees' daily commute to work. These measures shall provide demonstrable benefits for the single employee (in terms of cost, time, convenience and safety), for the company (in financial, productivity, social responsibility terms) and for the community (lower social costs due to lower pollution, traffic, road accidents, travel times). The main purpose of the HWCP is therefore to introduce new organizational and operational models to improve accessibility to the workplace by reducing the use of private vehicles in favor of more environmentally sustainable transport.

Fondazione Bruno Kessler's HWCP is structured through the presentation of the overall structure of the Foundation, particularly regarding the different premises and location of the latter, as well as the staff pertaining to each of them. After the general analysis, you will see the study of the answers to the survey administered to employees and the comment on the results thereof.

During this year, we had also the chance to collect a series of suggestions from the staff, as well as to probe employees' propensity for ecological conversion. In this sense, measures are proposed to discourage employees from using their privately iwned vehicles if not shared, as well as a possible quantification of the consequent environmental benefit.

The heart of the analysis of the HWCP and the consequent proposals is set out in the annexes, divided for each site. In particular:

- Annex 1: via Sommarive and via alla Cascata premises
- Annex 2: registered office via s. Croce and vicolo Dallapiccola
- Annex 3: via delle Tabarelle offices

# 2 Legal framework

This HWCP has been prepared in compliance with Executive Order No. 209 of August 4, 2021 - Guidelines for the Preparation and Implementation of the Home-Work Travel Plan, which defines how to compile and implement it.

It also constitutes an integral part of the provisions of art. 229, paragraph 4, of Decree-Law No. 34 of May 19, 2020, converted, with amendments, by Law No. 77 of July 17, 2020, which is aimed at allowing the structural and permanent reduction of the environmental impact deriving from private car traffic in urban and metropolitan areas, promoting the implementation of actions to organize and manage the demand for mobility of people that allow a reduction in the use of privately owned motor vehicles for regular home-work commute and favor the decongestion of car traffic.

The implementation methods, with requirements and competences of the Mobility Manager, are set forth in Interministerial Decree no. 179 of May 12, 2021 – Implementation methods for the provisions relating to the Mobility Manager figure (in OJ no. 124 of May 26, 2021), which entered into force on May 27, 2021.

The figure of the Mobility Manager is enshrined in Decree-Law No. 34 of May 19, 2020 (Decreto Rilancio) converted into law No. 77 on July 17, 2020, which aims to encourage traffic decongestion in urban areas by reducing the use of individual private transportation. The regulation provides that companies and public administrations with individual local units with more than 100 employees located in a region capital, metropolitan city, province capital or municipality with a population of over 50,000 people shall adopt, by December 31 each year, a home-to-work commute plan (HWCP) for their employees aimed at reducing the use of individual private transportation by appointing a mobility manager for this purpose.

## 3 Context analysis

FBK is the top research foundation in Italy, ranking 1st for scientific excellence in 3 different topic areas and for the economic and social impact according to the results of the latest ANVUR research quality assessment.

With its 3,500 square meters of laboratories and scientific infrastructures and a community of over 450 permanent researchers, 140 doctoral students, 200 visiting and undergraduate students, 700 affiliates and accredited students, Fondazione Bruno Kessler operates as a real scientific and technological district, hosting in its offices and on its platforms a lively ecosystem of co-located organizations, spin offs, projects and training opportunities.

The result of a history spanning more than half a century, through 11 centers dedicated to technologies and innovation and the human and social sciences, FBK aims at excellence in science and technology with special regard to cross-disciplinary approaches and applicative aspects.

This is thanks to the constant focus on collaborations and exchange activities with public administration and entities, small, medium and multinational companies, European and international institutions, which expand its capacity for innovation and involve the local community and economy in the circulation of knowledge and technology.



Figure 1 FBK premises via Sommarive 18

### 3.1 About Fondazione Bruno Kessler

The Foundation has been active since March 1, 2007 and takes up the legacy of the Istituto Trentino di Cultura, born from an intuition of Bruno Kessler, a far-sighted local administrator and founder of the University of Trento.

Established by law by the Autonomous Province of Trento, FBK is a private entity under public control and receives its most important funding from the Program Agreement signed with the Autonomous Province of Trento.

There are 2 main research hubs: science and humanities. The 2 hubs house 11 research centers dedicated to technologies and innovation and the human and social sciences, laboratories for micro and nano fabrication and design/production of silicon-based devices; numbers that allow FBK to aim for excellence in Italy and Europe.

The buildings in which FBK's research activity takes place are divided into 4 facilities, divided into 11 buildings located in the municipality of Trento.

The via Sommarive 18 facility houses 3 buildings. It is home to the scientific research of the Foundation, in particular the Centers for Cybersecurity, Digital Industry, Digital Society, Digital Health & Wellbeing, Health Emergencies, Sustainable Energy and Sensors and Devices. In addition to employees, in these premises there are also numerous electronic, computer and biological laboratories. This is where most of the staff, doctoral students and collaborators work.

Given the complexity of the systems present, these premises are manned 24 re a day by a concierge service that monitors via cameras the unmanned locations or otherwise the other locations when the service is not active.



Figure 2 the Foundation's hub located at via Sommarive 18, Trento

The via alla Cascata 56 complex is divided into 4 buildings. It houses co-located companies that collaborate on the Foundation's research and are strategic in taking the investigation produced to the market. In addition to the co-located companies, there are National Research Center offices and a part of the Foundation's staff seconded there.

The s. Croce complex is divided into two buildings:

- Via s. Croce 77, registered office, which houses the Italian-German Historical Institute, the Center for Religious Studies and the library;
- Vicolo Dallapiccola 12, apartment rented for use by the Autonomous Province of Trento, which houses the Institute for Evaluation Research on Public Policies.



Figure 3 the Foundation's hub located at via s. Croce 77, Trento

Via delle Tabarelle 286 is the site of the Theoretical studies in nuclear physics and related areas.



Figure 4 the Foundation's offices located at via delle Tabarelle 286

# 4 Fondazione Bruno Kessler's Mobility Manager

Eng. Chiara Morstabilini is, as of September 5, 2023, Fondazione Bruno Kessler's Mobility Manager. The appointment was formalized on that date by means of resolution no. 23/17/SP.

Since July 2019, she has been working at the Foundation in the Corporate Assets Service as *employee with coordination functions*. She currently provides support to the Service Head in budget and expenditure control activities, asset management and general services in addition to the management of service contracts (writing of technical specifications and tender assessments). She is the director for the execution of the cleaning contract, oversees the writing of lease/lease agreements (assets and liabilities, ISTAT adjustment and relations with Internal Revenue Service, as well as with co-located companies). She manages the web page with *transparency* asset declarations and organizes logistics services (mail, vehicles, furniture, space layout support).

The table below summarizes the characteristics of the employment contract and the places of employment.

Employment relationship	Permanent
Job classification	2nd Level - CCPL Foundations
Mobility Manager Working Hours	Full-time
Gender	F
Age	34
Where the Mobility Manager serves	All the Foundation's sites, mainly in via Sommarive 18, Trento

Table 1: Mobility Manager job classification and workplace

Since she started her employment relationship with the Foundation, Ms. Morstabilini has been able to deepen her knowledge in the field of management of public funds and contracts through numerous training courses. She is an active part in the writing of technical specifications, and collaborates in tender committees both as a member and as chairwoman.

As for her previous work experiences, Ms. Morstabilini worked from May 2014 to June 2019 at the Maccaferri Innovation Center in Bolzano with a position as Junior Research Engineer. There, she followed calls for provincially funded research in the field of the industrial application of hydraulic engineering products. This experience has allowed her to collaborate with various universities, including the Politecnico di Milano and Colorado State University.

She received his master's degree in Environmental and Land Use Engineering in March 2014 from the University of Trento, taking the State Certification Exam for Civil and Environmental Engineering in September 2014.

## 5 Fondazione Bruno Kessler's staff

The nature of the research carried out at the Foundation and the current calls for research, encourage a great effervescence of personnel, which is reflected in a high turnover rate thereof. In order to provide the number of the staff currently in force, we considered the average data for 2023. Excluded in this report are interns from the via Santa Croce office, for whom no calculation was currently possible.

Below, please see a summary table.

Resources	Sommarive	Cascata	s. Croce	Vicolo Dallapiccola	Villa Tambosi	Total
Co.co. in-house consultancy contracts (jobs act)	15	-	11	5	3	34
Co.co. Offices	-	-	24	-	-	24
Employees	632	5	25	11	12	685
Ph.D. students	178	-	3	2	2	185
Temporary workers	17	-	-	-	-	17

Table 2 Fondazione Bruno Kessler's staff by location

In-person work at the Foundation's premises is permitted from Monday to Friday between 7.30 a.m. and 8 p.m. Outside of these days and hours, in-person work at the Foundation's premises is allowed only if the reasons are provided and if previously authorized (allowed only for the Povo facilities as it is always manned for safety purposes).

Due to the unusual nature and organization of research and study work, researchers and technologists are required to clock in only once a day to record in-person attendance. Also managers and executives are required to clock in only. Technical, administrative and support staff are required to clock in every time they come in and clock out every time they leave.

# 6 The survey administered to the staff

Based on the guidelines in the relevant legislation, a questionnaire was submitted to the staff of the Foundation for the drafting of this document. The structure of the questionnaire, adapted from the one suggested by the Municipality of Trento, was available for workers to take it anonymously from November 30, 2023 to December 17, 2023.

The survey was provided both in English and Italian, in the following wording. Please note that entrpes marked \* refer to questions with mandatory answers.

### **SECTION 1: General Questions**

- What is your predominant place of work on in-person days? \*
   Among the options there is also the item I work mainly remotely
- What is your job classification?
- ...and your contract?

Enter if Part Time or Full Time

- How many working days per month do you work remotely on average?
- How would you describe your gender?
- How old are you?

The question includes options fby age groups

• Do you own a car or a moped?

SECTION 2: car characteristics, subject to positive response inherent in ownership

- What is your car's engine displacement?\*
  - The question includes options for classes\*
- What is your car's power supply?\*
- What are your car's emissions?\*

SECTION 3: moped characteristics, subject to positive response inherent in ownership The questions are identical to the previous ones.

## SECTION 4: description of wintertime commute

- How do you get to work in the winter months on in-person working days?\*
- During the wintertime commute, do you do other activities (errands, shopping, sports, driving other people...)?\*
- How much do you spend (in euros) on average per month on your commute?\*
- How many kilometers do you travel by car/motorcycle to get to work (one-way)?\*
- How many methods of trportation do you use to get to work?\*
- In what time slot do you leave?

The answer includes 15-minute slots from 6:30 a.m. to 9:00 a.m., in addition to the answer there is no fixed time

What time do you usually finish work to return home?\*

The answer includes 30-minute slots from 2:00 p.m. to 7:00 p.m., in addition to the answer there is no fixed time

What time do you leave work on in-person Fridays?\*

The answer includes 30-minute slots from 12:00 p.m. to 2:30 p.m., in addition to the answer there is no fixed time and at the same time as the other days

- Do you normally go back home for lunch on in-person working days?\*
- How much time (in minutes) do you spend on average, including stops, if any, for your return trip?
- What is the destination of your commute?\*
- Do you use a private transport method for your commute?

The answer includes the option yes, I use the public transit system and I only walk or bike to work

#### SECTION 5: Use of private vehicles, depending on previous response

- Why do you prefer the use of private transport for your commute?\*
- Are you the driver of the vehicle you use for your commute?\*
- How satisfied are you with the following aspects of using a car/motorcycle for your commute?
   The options are: out-of-pocket travel costs (e.g. gas, parking, tolls, ...), travel times, road safety during the journey, theft and vandalism prevention and parking system
- How long would it take you to commute if you used public transit?\*
- Have you ever used public transit for your commute?\*

SECTION 5: Public transit assessment. The section is administered to both those who use public transit daily for their commute and those who use it occasionally

- What ditance (in kilometers) do you have to travel to get to work on public transit?\*
- How satisfied are you with the following aspects of commuting?\* The options are: travel costs, travel time, service frequency, punctuality, number of interchanges and travel comfort
- Do you have a public transit pass?\*
- Why do you use public transit for your commute?\*
- Please rate public transport options in general (be it local public transit or train etc...)\*
- Express your degree of satisfaction with the following aspects of public transit \*

The options are: comfort, punctuality, travel time, information, proximity to stops, fares, frequency, safety

- How far is the nearest stop from the starting point of your commute (in m)?\*
- What public transit routes do you use for your commute?\*

SECTION 6: description of summer commute, section administered if the commute mode is different from winter commute

- What methods do you use in the summer months for your commute?\*
- Do you do any other activities (e.g., running errands, grocery shopping, playing sports, accompanying other people...) during the commute, either on the way there or on the way back?\*
- What time do you usually leave work on Fridays on in-person working days?

The options are: same options as above in section 4

- Do you normally go back home for lunch on in-person working days?\*
- How much time (in minutes) do you spend on average, including stops, if any, for your return trip?

The options are: same options as above in section 4

• What is the destination of your commute?

### **SECTION 7: Proposals for Improvement**

Under what conditions would you use the public transit more for your commute?\*

The options are: shorter travel time, more comfortable public transportation, more regular rides, more frequent rides, transportation in my work hours, transportation close to my home, less difficulty in making connections, more safety on public transportation, if I could have an incentive to buy tickets, if I could combine public transportation with cycling, and under no circumstances

- How would you be willing to use carpooling or car sharing?\*
- On which days of the week do you use or would you use car pooling or car sharing?\*
- Would you be willing to join a car sharing service?\*
- Do you have any suggestions for improving your daily commute?\*
- If you had the possibility to combine multiple transportation methods in a single pass, which would you choose?\*

The options are: public transportation (bus, streetcar, urban and suburban subway), train service, cab, scooter sharing, bike sharing, car rental, and none of the above

- Would you be willing to share your commute with someone?\*
- Would you be willing to use your bike for your commute?\*
- Would you be willing to use your scooter for your commute?\*
- If a charging point for electric vehicles were available at the destination of your commute, which one would you commute with?\*
- If you could choose the type of incentive, which would you prefer?\*

The options are: discount on travel passes, discount on suburban passes, discount on the cost of purchasing a bicycle, discount scooter sharing subscription, discount bike sharing subscription, and parking-public transportation agreement (e.g.Formula Park&Ride, Velostation)

# 7 Mobility Management Corporate Initiatives

The Foundation, with regard to in-person work days, encourages the use of public transportation, or arriving by foot, or the use of environmentally friendly private transportation through the infrastructure in each location and presented in the attachments to this document.

Showers are available at the locations of via Sommarive, via alla Cascata, via delle Tabarelle and vicolo Dallapiccola. There are no showers on s. Cross because the bathrooms are difficult to reconvert. However, the site is less than 50 m from Vicolo Dallapiccola, where showers are available. Also, lockers are available at via Sommarive.

The offices of via Sommarive, via s. Croce and via delle Tabarelle are also equipped with bike racks.

The use of public transportation is incentivized through an agreement with Trentino Trasporti esercizio for a discount on city passes in the municipality of Trento.

#### 7.1 Incentives

Until 2019, the discount paid for the purchase of a city pass amounted to 30%. This discount, applied at the time of pass issuance and supported by a statement from the Employer, is achievable only with a minimum number of 50 passes per year. This target was not achieved in the 2020 - 2022 period and therefore the Foundation was forced to lower the discount to 20%. The changed conditions have been attributed to various factors:

- Closure due to the pandemic for the years 2020 2021
- Less use of public transportation, in favor of private mobility or walking to avoid sources of infection during the pandemic
- Reduced number of rides in 2020 due to the pandemic
- Less aflows into buildings by employees given the introduction of remote work (5 days per month, unless otherwise agreed between employee and supervisor)

For these reasons, the discount offered to employees for 2023 amounts to 20%

The certificate for the issuance of the pass is issued upon request and notice is given on the portal and at the time of recruitment.

For the year 2024, FBK has decided to apply a 30% discount, assuming responsibility for the failure, if any, to meet the threshold that would entitle it to obtain the discount. It counts on encouraging the use of local public transportation through internal advertising both at recruitment and through newsletters.

## 7.2 Remote working

The Foundation normally grants all staff with teleworkable duties the right to work remotely for up to five working days per month. The single day can be converted into two half working days provided that the daily theoretical schedule is completed. At the initiative of the interested worker and in agreement with their immediate Supervisor, without prejudice to the organizational and production needs, the limit of five days may be increased upon signing an "individual reciprocity

pact". The reasons for the above increase shall be formalized, always be evident and lead to one of the following situations: needs for work-life balance, sustainability, study and research needs as well as in particular situations of fragility or mental or physical impairment. Remote working hours are flexible and, subject to compliance with the number of hours established by the Collective Labour Agreement for Foundations and individual contracts; no mandatory core hours are provided for.

Work carried out remotely shall always be clearly visible from the timely submitted timesheets of researchers and technologists or - for technical, administrative and support staff - from daily reporting. Failure to comply with the latter provision is a form of breach of contractual obligations, thus it may be reported and, if applicable, challenged.

Personnel with non-teleworkable duties who are unable to work remotely at all, will be entitled, within each two-month period and as a form of regenerative relief, to choose between a day of training paid by FBK or a day of paid leave, or alternatively, welfare-related benefits.

The welfare system linked to remote working and the signing of the reciprocity pact also has an impact on the mobility plan. Lower aflows of personnel into the buildings also implies less vehicular traffic to reach them. The plan advanced is thus a win-win system in that the employee has the opportunity to subscribe to a personalized plan that combines work and personal needs, and the entire community benefits with reduced emissions in the home-to-work commute

## 7.3 Agreements with shared mobility operators

Since 2009, Fondazione Bruno Kessler has had an agreement with Car Sharing soc. coop. established by resolution of the FBK Board of Directors of 30.4.2009. FBK contributed as a subsidizing *party*, with payment of 5,000.00 euros.

Through this agreement it was possible for employees to enroll in the service free of charge using capped rates:

- hourly rate: between € 2.00 and € 5.00 depending on the car category (applied only from 7 am to 10 pm);
- for Saturdays and Sundays, the weekend offer is in effect, with a 50% reduction in these rates;
- km fare: € 0.40 for the first 100 km per trip, € 0.30 for the following ones.

As of Dec. 4, 2020, according to Provincial Council Resolution No. 2019 ("Approval of the Three-Year Program for the Reorganization and Rearrangement of Provincial Companies"), it was established that Fondazione Bruno Kessler is required to divest its stake in Car Sharing Trento Soc. Coop. by June 30, 2021. Pursuant to the above resolution, the FBK Board of Directors, by resolution no. 02/21 of January 26, 2021, resolved to divest the FBK stake in Car Sharing Trento Soc. Coop.

After this divestment, agreements with shared mobility operators have no longer been activated. To date, there are no active agreements.

### 7.4 Communications

Communications at the Foundation are managed through a periodic newsletter sent by email. The information transmitted by the Human Resources Service to employees covers a wide range of areas, including mobility and related benefits.

In addition to this source of communication, an internal portal with special FAQs is available to answer major questions related to internal services and to be redirected, when applicable, to ticketing systems.

Other sources of communication are the paper bulletin boards present in all the locations on which the most varied notices are posted, as well as the screens placed in premises entrances.

# 8 Survey Results

The results of the questionnaire administered to employees can be seen in the attachments to this document, divided by location.

The offices of via Sommarive and via alla Cascata were considered as a single site as they can be reached by the same road infrastructure. They differ in the services offered, for example the presence of bicycle parking, but their proximity allows employees to move between the two on foot, including to take meals. The questionnaire data was then grouped in Annex 1.

The offices of via s. Croce and vicolo Dallapiccola are a few meters away from each other and are consequently served by the same public transportation lines. For this reason, they were merged into Annex 2.

The results of the Via delle Tabarelle site are set out in Annex 3.

# 9 The design of the HWCP

## 9.1 Discouraging the use of private cars

Disincentive options for the use of private cars will be discussed within the working group, to be implemented during 2024. Suggestions for improvement that emerged through the questionnaire will be collected here. Among the various options that emerged, the option of an incentive to purchase or maintain a bicycle in addition to an incentive for suburban public transportation as well was appreciated. It is found less palatable to disincentivize by paying for parking, rather convertible into an incentive for car sharing/pooling.

FBK had already created an app, called Play&Go that allows users to:

- Participate in mobility actions active in their municipality;
- Track one's sustainable commute;
- Verify commute with mode-detection algorithms that allow participants to progress and compete
- Create custom challenges and, where possible, incentives.

At this time, the working group has just been created, involving the municipality of Trento as well. The project would also extend the use of this app to employees by promoting sustainable mobility through gamification.



Figure 5 areas of application of the Play&Go app

## 9.2 Promote the use of public transportation

Through a joint analysis between Fondazione Bruno Kessler and Trentino Trasporti, passes provided with a corporate discount were monitored. Since more than 50 passes have been issued for the year 2023, it was deemed appropriate to proceed with a corporate discount of 30% on the city transportation pass, this discount percentage will be applied to employees who apply for the certificate.

The possibility of extending this discount to regional transit passes was also explored. This agreement is not applicable because there is no agreement between Trentino Trasporti and the Autonomous Province of Trento.

Suggestions for improvement received from employees also included *favoring more frequent public transportation rides*. During 2024, it is intended to seek a channel of communication with the transportation manager, if possible also through the participation of the university, to seek:

- more decent transportation conditions: buses are very crowded;
- increased number of rides leaving empty from Piazza Fiera to prevent capacity from becoming saturated already at the start, ensuring connections also while the 5 bus is running;
- increased frequency of bus 13 especially during hours 7-9 a.m. and 3-5 pm.

## 9.1.1 Promote cycling or micromobility

During 2023, the sizing and design of 5 photovoltaic shade shelters at the Sommarive Street site was completed. They are scheduled to be installed during 2024.

The current wooden canopies are structurally weak and have a reed roof shading system. The reed is subject to severe weather deterioration and inclement weather making it unsafe for users as well as ineffective. These systems were installed in 2020, shortly after the renovation of the outdoor area.



Figure 6 Outdoor refreshments area at via Sommarive 18

Given the instability of the canopies currently present, a canopy has been designed as shown in the figure below



Figure 7 new canopy to be installed during 2024

The indicative investment is approximately € 95,000 including VAT and includes:

- The three-canopy installation at the "picnic ed. north" area is 3.5x7.0 m each made of painted galvanized steel structure, equipped with ballast tanks anchored to the uprights to be used as a refreshment area;
- The two-canopy installation at the "bike park" area is 3.5x7m each made of painted galvanized steel structure, equipped with ballast tanks anchored to the uprights where new parking spaces will be prepared for the bikes to be used both in the winter and summer season;
- The installation of 12 photovoltaic panels for the canopy, inverters included.

A cash flow of c.a € 10,000 is estimated totally from self-consumption income.

Produzione annua stimata					reddito da autoconsumo			Investimento					<u>pay</u> <u>back</u> <u>simple</u>
	n. pannelli	potenza	Potenza	prod.	produzione		reddito da	costo		potenza	costo tot.		
	fotov.	pannello	totale	Specifica	annua	tariffa	autoconsumo	pensilina	costo fotov.	picco	Fotov.	Costo totale	
	n.	W	kW	kWh/kWp	kWh	€/kWh	€		€	kWp	€	€	anni
Pensilina 1	12	405	4,86	1 200	5 832	0,35	2 041,20€	7 712,80 €	2 300,00€	4,86	11 178,00€	18 890,80 €	
Pensilina 2	12	405	4,86	1 200	5 832	0,35	2 041,20€	7 712,80 €	2 300,00€	4,86	11 178,00€	18 890,80 €	
Pensilina 3	12	405	4,86	1 200	5 832	0,35	2 041,20€	7 712,80 €	2 300,00€	4,86	11 178,00€	18 890,80 €	
Pensilina 4	12	405	4,86	1 200	5 832	0,35	2 041,20€	7 712,80 €	2 300,00€	4,86	11 178,00€	18 890,80 €	
Pensilina 5	12	405	4,86	1 200	5 832	0,35	2 041,20€	7 712,80 €	2 300,00€	4,86	11 178,00€	18 890,80 €	
					29 160		10 206,00 €					94 454,00 €	9

## Photovoltaic only

Produzione annua stimata					<u>reddito</u>	da auto	consumo	<u>Investimento</u>				<u>pay</u> <u>back</u> <u>simple</u>	
	n. pannelli	potenza	Potenza	prod.	produzione		reddito da	costo		potenza	costo tot.		
	fotov.	pannello	totale	Specifica	annua	tariffa	autoconsumo	pensilina	costo fotov.	picco	Fotov.	Costo totale	
	n.	W	kW	kWh/kWp	kWh	€/kWh	€		€	kWp	€	€	anni
Pensilina 1	12	405	4,86	1 200	5 832	0,35	2 041,20 €		2 000,00 €	4,86	9 720,00€	9 720,00 €	
Pensilina 2	12	405	4,86	1 200	5 832	0,35	2 041,20 €		2 000,00 €	4,86	9 720,00€	9 720,00 €	
Pensilina 3	12	405	4,86	1 200	5 832	0,35	2 041,20 €		2 000,00 €	4,86	9 720,00€	9 720,00 €	
Pensilina 4	12	405	4,86	1 200	5 832	0,35	2 041,20 €		2 000,00 €	4,86	9 720,00€	9 720,00 €	
Pensilina 5	12	405	4,86	1 200	5 832	0,35	2 041,20 €		2 000,00 €	4,86	9 720,00€	9 720,00 €	
					29 160		10 206,00 €					48 600,00 €	5

- > estimated return on investment (photovoltaic energy+canopies): 9 years
- > estimated return on investment, not counting the costs of canopies: 3 years

#### 1. Miscellaneous Benefits

The suggested system could allow the pursuit of the following advantages:

•	Replacement of wooden shading canopies, now obsolete Reduction in power usage at via Sommarive	29,160	kWh/year
•	percentage reduction in usage Povo	0.58%	
•	avoid CO2 emissions/year for (0.59kg/kWh el):	17	t CO2
•	equal to fiat PANDA (113g/km CO2 20.000km/year)	8	FiatPanda

Given the self-generation of electricity through photovoltaic panels, the regulatory aspects of providing employees with electric bike charging stations will also be investigated. In view of the legal nature of the Foundation, it is important that this possibility does not cause fiscal damage, and for this reason it must be carefully examined.

#### 9.2 Achievable benefits

The benefits achievable are difficult to quantify at this time. With the exception of the production of photovoltaic panels, already set out above, the direct benefits of the measures taken can only be estimated by monitoring and comparing this plan with next year's plan.

## 9.3 Implementation Schedule

The various suggestions contained in the HWCP are being implemented this year, in particular:

- New agreement with Trentino Trasporti Esercizio with a 30% discount on city transit: from January 2024:
- Installation of photovoltaic canopies and new bike parks at via Sommarive 18: spring 2024;
- Creation of internal and external round table for Play&Go apps: from January 2024, first meeting scheduled for January 12, 2024;
- Improvements to the Foundation's internal working group to improve communication management: immediately;
- Creation of an internal working group to coordinate and convey the next proposals for sustainable mobility: from spring 2024.

# 10 Adoption of the HWCP

This HWCP is adopted by resolution number 11/2024, signed by the Head of the Corporate Assets Service, Amos Collini, J.D..

# 11 Communication of the HWCP to employees

The activities of the HWCP will be communicated to employees from time to time through the newsletter and posted in coffee areas.