H-WORK

MULTILEVEL INTERVENTIONS TO PROMOTE MENTAL HEALTH IN SMEs AND PUBLIC WORKPLACES

D 6.2

H-WORK INNOVATION PLATFORM

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 847386.

Project

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H-WORK Innovation Platform

Number	D6.2
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Document History

VERSION	DATE	SUMMARY OF CHANGES	AUTHOR
0.1	19.12.2022	Basic document structure	UNIBO
0.2	12.01.2023	First Draft	UNIBO
0.3	17.01.2023	Final Draft for Review	UNIBO
0.4	24.01.2023	Reviewed	AUSL
0.5	26.01.2023	Finalised after reviewers' comments	UNIBO

Executive Summary

This document describes the steps and actions taken by WP6 partners in developing and implementing the first version of the H- WORK.

It first presents the procedural aspects and the decisions taken by the partners to design and build the platform and then presents step-by-step the architecture of the platform with all the functions and interactive tools available to the end users

In detail, the two main areas of the platform are described.

- A log-in required section, including the three Interactive Tools:
    - H-WORK Benchmarking Tool includes the Organisational Health and Safety tool, which has been connected to the ESENER Databank to anchor the user data to existing European data;
    - H-WORK Decision Support System corresponds to the Workplace Mental Health and Psychosocial Wellbeing tools;
    - H-WORK Economic Calculator corresponds to the Economic Calculator tool that provides a possible expected ROI based on the multilevel intervention strategy suggested or designed
- A no log-in (or "open access") section, including the H-WORK Roadmap and the policy briefs developed to guide policymakers and relevant stakeholders to raise policy and normative standards and ensure that mental health at work is a requirement to be considered and managed by CEOs and business leaders. On the other hand, the area open to the general public consists of a series of downloadable materials that present guidelines, recommendations, steps, interventions and possible actions to promote health in the workplace.

Both the log-in required section and the open section of the H-WORK Innovation Platform are accessible **free of charge**. The Innovation Platform is designed to meet and uphold the principles of the General Data Protection Regulation (GDPR), provide transparency in data practices and ensure the anonymity of personal data.

The H-WORK Innovation Platform, currently in its initial phase, is now available online. However, changes to the platform's layout and other elements may be made in preparation for Deliverable 6.4, which will report on the results of the platform's testing phase. During this phase, the platform will be used by its intended end-users and their feedback will be gathered to ensure a highly intuitive user interface that provides the user with all necessary information and functions.

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Acronyms & Abbreviations

Term	Description
DSS	Decision Support System
EU	European Union
GA	Grant Agreement
GDPR	General Data Protection Regulation
H2020	Horizon 2020
HAT	H-WORK Assessment Toolkit
HET	H-WORK Evaluation Toolkit
HIT	H-WORK Intervention Toolkit
HR	Human Resources
OHS	Occupational Health and Safety
SMEs	Small and Medium-sized Enterprises

INTRODUCTION

The present deliverable describes the design, development, contents, and functionalities of the H-WORK Innovation Platform, which is one of the three main sets of expected outcomes of the H-WORK project.

The H-WORK project aims to design, develop, and implement multilevel interventions to promote mental health in SMEs and public workplaces (De Angelis et al., 2020). Three main sets of outcomes are foreseen. The first group of outcomes is constituted by the H-WORK Toolkits, namely, the HAT (D3.3), the HIT (D4.5), and the HET (D5.5). The second group relates to WP7's policy briefs (T7.3 for D7.5 to be submitted at M45). Finally, the third outcome corresponds to the H-WORK Innovation Platform, which features the H-WORK Benchmarking Calculator, the H-WORK Decision Support System, and the H-WORK Economic Calculator.

The H-WORK Innovation Platform is one of the project's main outputs, following the preparation and implementation of the project's exploitation phase. As such, it is one of the key outcomes expected from the "WP6 – RELEASE: Exploitation of the H-WORK Toolkits, introducing new products and services". Specifically, its development meets the goal of "T6.2 – Create, manage, and exploit the H-WORK Toolkits and Innovation Platform". Also, the H-WORK Innovation Platform deployed and publicly available fulfils the MS9, S05, and R2 as described in the GA.

European reports (EU-OSHA, 2019) show that although 79% of European managers say they are concerned about stress and mental disorders in their workplaces, less than 30% of workplaces in Europe have procedures to deal with them effectively. Due to a lack of knowledge and guidance, deciding which interventions should be implemented is a common issue facing employers. One of the main challenges is, therefore, to support organisations and their representatives (i.e., managers, supervisors, and leaders) in recognising psychosocial risk factors as a critical concern that needs to be addressed by concrete measures. Furthermore, a significant limitation of existing workplace interventions is the lack of cost-effectiveness evaluation, particularly in SMEs. It is, therefore, relevant to assess the cost-effectiveness and business case (i.e., budget impact) of implemented interventions from the employer's perspective.

The H-WORK Innovation Platform is designed as a service/tool addressing the challenges and limitations mentioned above. The aim of the platform is that of helping employers, HR managers, and OHS professionals to act on mental health at work. It provides analytical, decision-making, intervention, and evaluation tools to promote well-being in the workplace. Through the platform, organisations can benchmark their organisations against others similar in size and sector and use the decision support system to understand recommended interventions. Also, it allows to calculate how much money an organisation could save by carrying out mental health actions.

Based on the Exploitation Plan (T6.1, D6.1), one additional aim of the H-WORK Innovation Platform is to lobby relevant stakeholders (health and safety and health promotion agencies, SMEs, insurance companies, etc.) to adopt and promote the H-WORK project's results.

The present document provides a general description of the H-WORK Innovation Platform, encompassing its aim, scope, target audience, name and domain, overall architecture, contents, and functionalities.

THE H-WORK INNOVATION PLATFORM

Platform's aim, scope, and target audience

The H-WORK Innovation Platform is an outcome of the EU H2020 research and innovation project H-WORK: Multilevel Interventions to Promote Mental Health in SMEs and Public Workplaces. The project aims to design, develop, implement, and validate multilevel assessment, intervention, and evaluation toolkits to promote mental health in the workplace across Europe. Helping to improve and maintain employees' well-being is essential, not only because it is vital to have healthy people at work but also because a healthy workforce is associated with good organisational performance and climate. A healthy workplace is also a productive workplace. Unhealthy workplaces directly affect employees' ability to perform effectively at work. The H-WORK Innovation Platform provides analytical, decision-making, intervention, and evaluation tools to promote well-being in the workplace. Through the platform, employers, managers, and OHS practitioners can benchmark their organisation and use the decision support system to understand the kind of interventions recommended for their specific case. Overall, employers will be able to:

- discover how their organisation is doing as compared to others similar in size and sector (H-WORK Benchmarking Tool);
- make a snapshot of the situation of their organisation and see which action for improvement could potentially be implemented (H-WORK Decision Support System);
- calculate how much money their organisation could save by carrying out mental health actions (H-WORK Economic Calculator).

In addition, the H-WORK Innovation Platform provide suggestions and guidelines on how to carry out assessments, implement interventions, and evaluate them. Specifically, users will be able to broaden their knowledge on:

- how to identify needs for mental health at the workplace;
- how to implement effective strategies and solutions to promote mental health at work;
- how to discover whether the implemented actions have been effective as expected.

Finally, the platform includes policy briefs for employers, OHS professionals, and national and European policymakers. The H-WORK Innovation Platform's design, development, contents, and functionalities are heavily grounded on other Work Packages' acquired expertise about assessing, implementing, and evaluating multilevel interventions to promote mental health in SMEs and public workplaces, in particular, that articulated in the following WPs:

- "WP3 – COLLECT: Development of the H-WORK Assessment Toolkit, needs analysis, psychosocial risk assessment, baseline, final and follow-up measures";
- "WP4 – INTERVENE: Development of the H-WORK Intervention Toolkit, implementation in the intervention sites";
- "WP5 – EVALUATE: Development of the H-WORK Evaluation Toolkit, process evaluation and monitoring, economic evaluation";
- "WP7 – PROMOTE: Communication & dissemination, policy briefs and recommendations".

Platform's name and domain

The H-WORK Innovation Platform was given a straightforward, clear, and catchy name to promote its attractiveness and uptake among potential users. To decide upon the platform's name, a Qualtrics survey

poll was circulated by WP6 Lead (UNIBO) among all Consortium partners between Monday, September 19th and Friday, September 23rd, 2022, asking, "What is your favourite name for the H-WORK Innovation Platform?". Partners' representatives could select up to 2 options among 8 pre-defined ones. As shown in Table 1, "Mental Health at Work Platform" was the most voted option. As a result, the final version of the platform is currently available at the following link, whose internet domain was subsequently bought: https://www.mentalhealth-atwork.eu/.

Table 1. Results of the H-WORK Innovation Platform's name survey poll.

Candidate name and domain	Choice count (%)	Choice count (absolute)
Mental Health at Work Platform – mentalhealthatwork.eu	**36,36%**	**16**
Mental Health in the Workplace Platform – mentalhealthintheworkplace.eu	15,91%	7
Healthy Work Platform – healthywork.eu	15,91%	7
Mentally Healthy Workplace Platform – mentallyhealthyworkplace.eu	9,09%	4
Healthy Workplace Platform – healthyworkplace.eu	9,09%	4
Health at Work Platform – healthatwork.eu	9,09%	4
Mentally Healthy Work Platform – mentallyhealthywork.eu	4,55%	2
Health in the Workplace Platform – healthintheworkplace.eu	0,00%	0
	100%	**44**

Platform's overall architecture and functions

Design process and output

Designing the H-WORK Innovation Platform was based on two primary strategies. First, similar digital platforms available on the market were screened. The aim of this part of the design process was twofold. On the one hand, it aimed at taking inspiration on how the future H-WORK Innovation Platform could look in terms of graphical layout, structure, and content. On the other hand, it intended to identify the gaps and shortcomings of the currently available platforms that the H-WORK Innovation Platform could exploit and address as a new service or product. In total, the following sources were screened via the internet, both from EU projects and other entities, and both related to workplace mental health and not:

- the SAFETY CUBE project's DSS (https://www.roadsafety-dss.eu/#/);
- the LANDMARK project's DSS (http://www.soilnavigator.eu);
- the LANDSUPPORT projects' DSS (https://www.landsupport.eu/);
- the Mental Health+ project's benchmarking tool (https://tool.mentalhealthplus.eu/);
- the Gender+ projects' benchmarking tool (https://tool.genderplus.eu/);
- the Learning Performance Benchmark by MindTools for Business (https://mindtoolsbusiness.com/solutions/learning-performance-benchmark);
- the DSS by AGRICOLUS (https://www.agricolus.com/tecnologie/dss-decision-support-systems/);
- the Mental Health at Work Toolkits (https://www.mentalhealthatwork.org.uk/toolkit/);
- the Workplace Strategies for Mental Health's tools (https://www.workplacestrategiesformentalhealth.com/resources/Assessments-tools-and-workshops);
- the Mind Share Partners' services (https://www.mindsharepartners.org/);
- the LifeWorks' Toolkit for individuals (https://us.lifeworks.com/toolkit-individuals);
- the Working Well Toolkit by the American Psychiatric Association Foundation's Center for Workplace Mental Health (https://workplacementalhealth.org/employer-resources/the-working-well-toolkit);
- the IMP^{3}ROVE assessment platform (https://www.imp3rove.de/Services/benchmarking/);
- the HOBBIT evaluation platform (https://project-hobbit.eu/outcomes/hobbit-platform/);
- the European Benchmarking Co-operation's improvement program for water services (https://www.waterbenchmark.org/home);
- the Sphera sustainability strategy guidance (https://sphera.com/sustainability-strategy-guidance/);
- the PsychologyTools (https://www.psychologytools.com/).

As a second design process strategy, scientific literature (e.g., Dobson et al., 2019; Eriksson & Boman, 2018; Herold & Parsons, 1985; Howarth et al., 2018; Rodríguez-Sanchez et al., 2011; Siegrist et al., 2005; Szeto et al., 2013) was reviewed. This allowed to gather valid and reliable psychometric measurement tools to be integrated into the H-WORK Innovation Platform and deployed as relevant decisional triggers for the DSS. Results of the above design process strategies were shared and discussed within one-hour online monthly meetings with WP6 Contributors and within one-hour online bi-weekly meetings with the third-party contracted software development agency (i.e., Indici Opponibili). As a result, the H-WORK Innovation

Platform's architecture was defined and is now implemented and fully functioning. As shown in Figure 1, the architecture consists of the following two parts:

- A log-in section, including the three Interactive Tools:
  - **H-WORK Benchmarking Tool** includes the Organisational Health and Safety tool, which has been connected to the ESENER Databank to anchor the user data to existing European data;
  - **H-WORK Decision Support System** corresponds to the Workplace Mental Health and Psychosocial Wellbeing tools;
  - H-**WORK Economic Calculator** corresponds to the Economic Calculator tool that provides a possible expected ROI based on the multilevel intervention strategy suggested or designed.
- A no log-in section, including the **H-WORK Roadmap** linked to the H-WORK toolkit (Assessment, Intervention, Evaluation) and the **Policy briefs** developed to ensure high-standard requirements for mental health promotion in the workplace.

Both the log-in required part and the open access part of the H-WORK Innovation Platform are accessible free of charge.

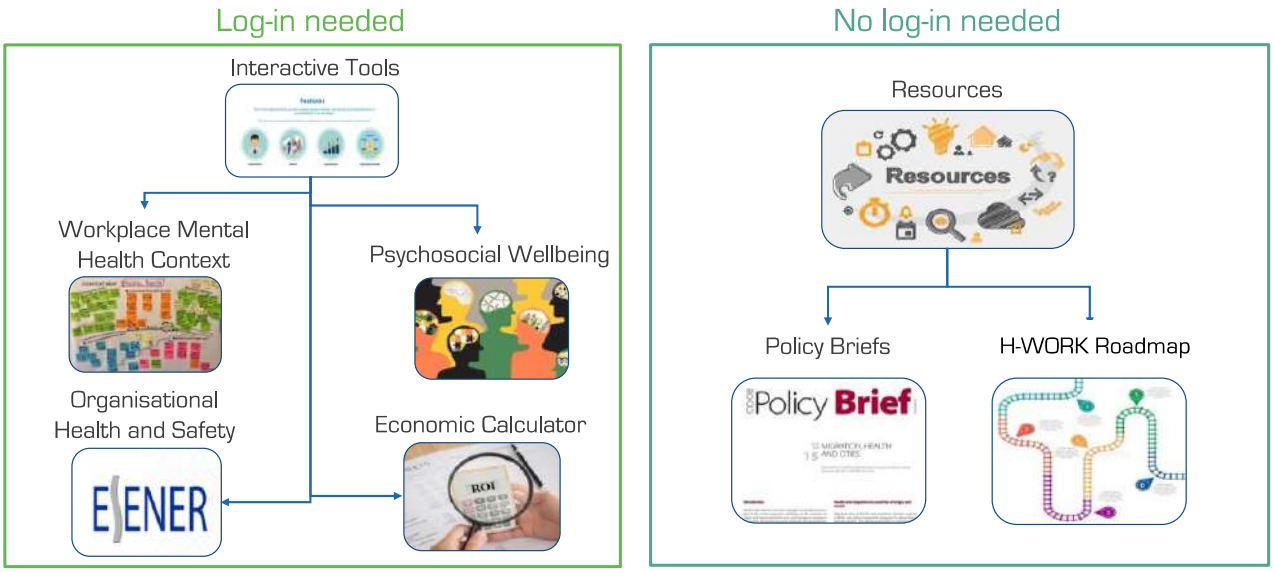


Figure 1. H-WORK Innovation Platform's architecture

Log-in required section

Overall, the log-in or private section of the H-WORK Innovation Platform corresponds to the three Interactive Tools, which can be accessed through the blue box located on the left of the top section of the platform's landing page (Figure 2). The H-WORK Benchmarking Tool, the H-WORK Decision Support System, and the H-WORK Economic Calculator.

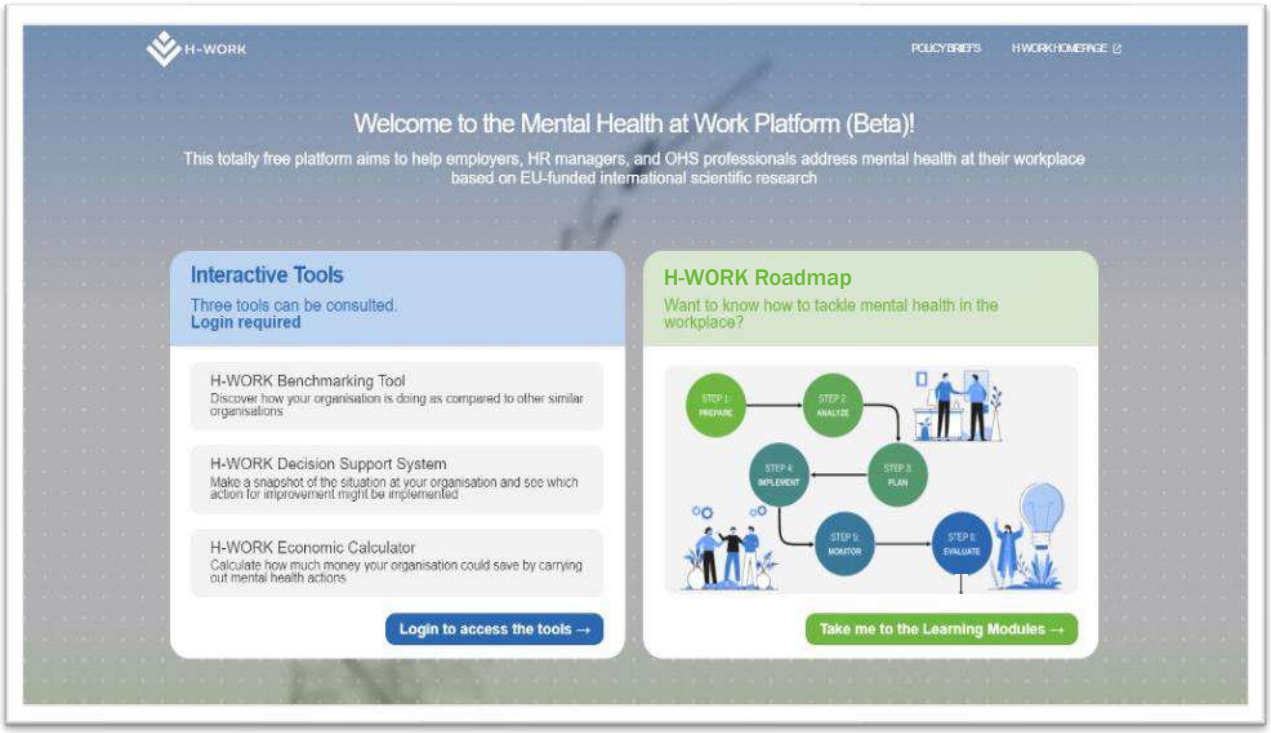


Figure 2. The top section of the H-WORK Innovation Platform.

The tools can be accessed via a soft log-in with a secure user's code after providing an e-mail address (Figure 3). The user needs to request an access code, which is then sent to their e-mail inbox. Finally, the user needs to insert the received code to access the tools. This procedure is compliant with GDPR as the user's e-mail address, which may contain identifying personal data (e.g., name, surname, year of birth, or gender), is only temporarily saved for the system to send the access code, but it is immediately deleted and never stored on servers. This information is communicated to the users through a disclaimer which they have to tick off before being able to submit their request for an access code.

Therefore, any further data or answers given in the interactive tools cannot be traced back to a legal or physical entity, ensuring complete data anonymity. However, the end-user will be able to use the feedback provided by the platform based on the data entered. Moreover, users can consult both the Privacy Policy (https://www.iubenda.com/privacy-policy/51062726/legal) and the Cokie Policy (https://www.iubenda.com/privacy-policy/51062726/cookie-policy) by clicking on the respective names presented underneath the "Request Access Code" button. The user log-in is set to be kept for a week to make the login process quicker and smoother. Furthermore, within this timeframe, the user answers are saved. After this time, the user will have to type in the login details again.

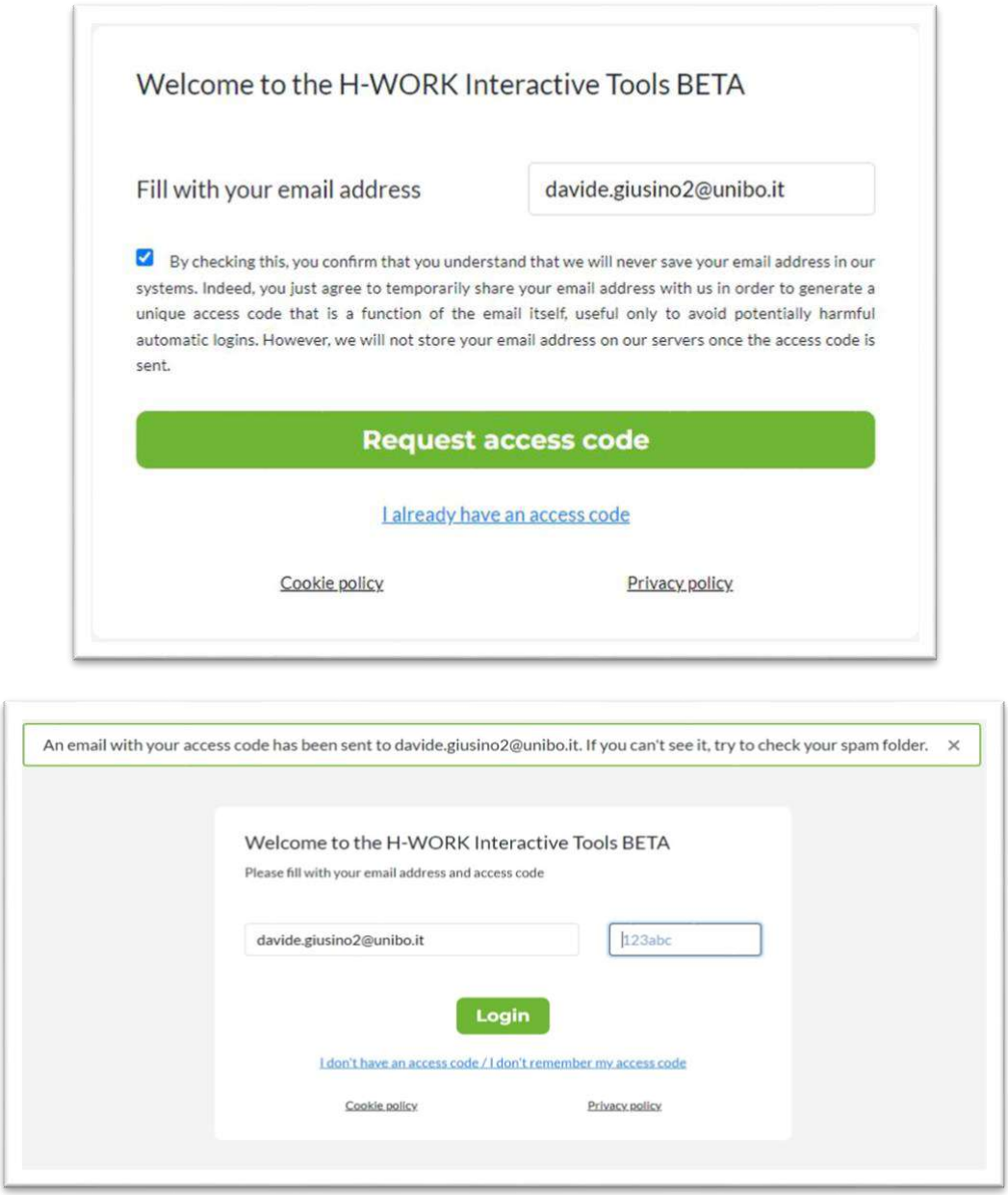


Figure 3. Log-in procedure to the online H-WORK Interactive Tools.

Once logged in, the screen shown in Figure 4 appears, providing a description of what the Interactive Tools do and a button below each description to access them. The tools are structured as follows:

- **H-WORK Benchmarking Tool** includes the Organisational Health and Safety tool;
- **H-WORK Decision Support System** composite of the Workplace Mental Health tool and the Psychosocial Wellbeing tool;
- **H-WORK Economic Calculator** corresponds to the Economic Calculator tool.

While the H-WORK project's visual identity has been kept (e.g., colours, font, logo, etc.), the naming of the tools has been modified by the partners involved in the WP6 meetings as compared to what was initially specified in the DoA to make them more immediately understandable and to sound more consistent to targeted users.

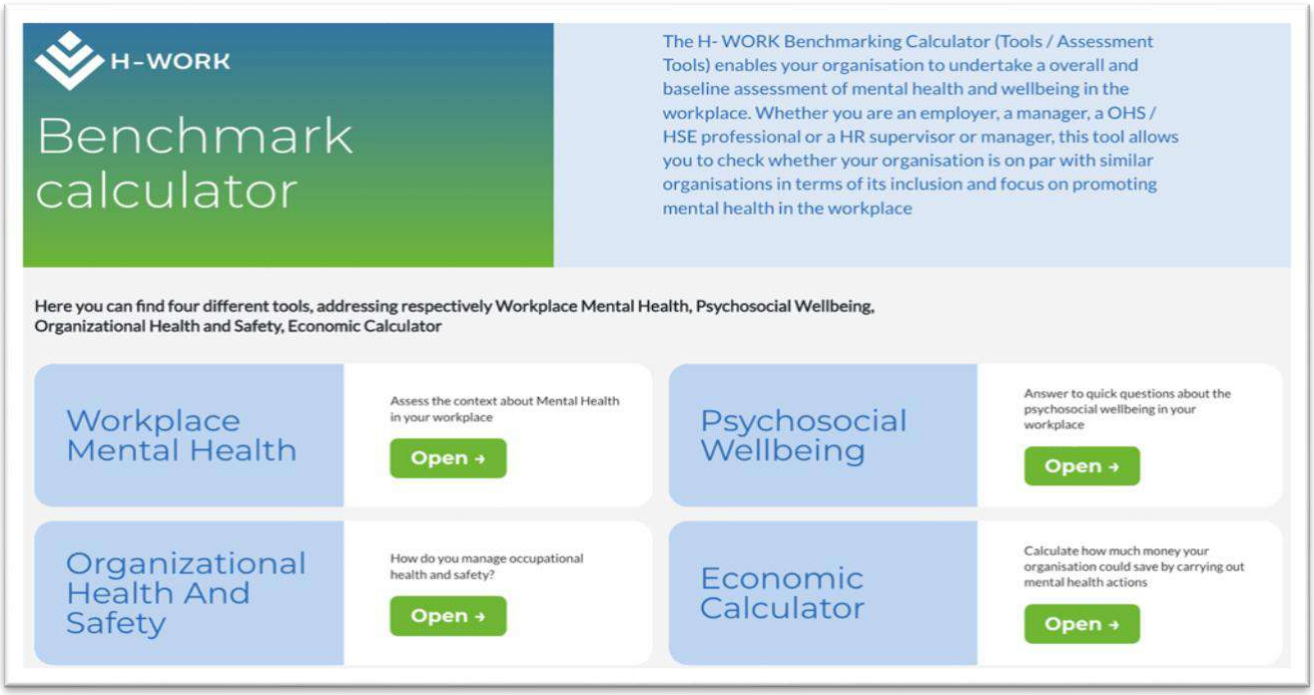


Figure 4. H-WORK Interactive Tools.

H-WORK Benchmarking Tool

In the Mental Health at Work Platform (i.e., H-WORK Innovation Platform), the H-WORK Benchmarking Tool goes under the name of "Organizational Health and Safety". This is a tool for inter-organisational comparison. Employers of the public sector and SMEs can use this product to assess how their organisation compares to others similar in size and sector within their country or the EU regarding employees' mental health and well-being.

The benchmark stems from an algorithm based on the data retrieved from the EU-OSHA ESENER survey 2019 (https://visualisation.osha.europa.eu/esener/en/survey/overview/2019) about the way health and safety risks are managed at workplaces, with a particular focus on psychosocial risks such as work-related stress. Permission for access to ESENER 2019 dataset has been regularly requested and obtained before platform implementation.

Users are forwarded to a page in which they are asked to select their organisation's country, size, and industry sector (Figure 5). The setting allows for 33 country options (Figure 6), 7 organisation size categories (Figure 7), and 21 industry sectors (Figure 8).

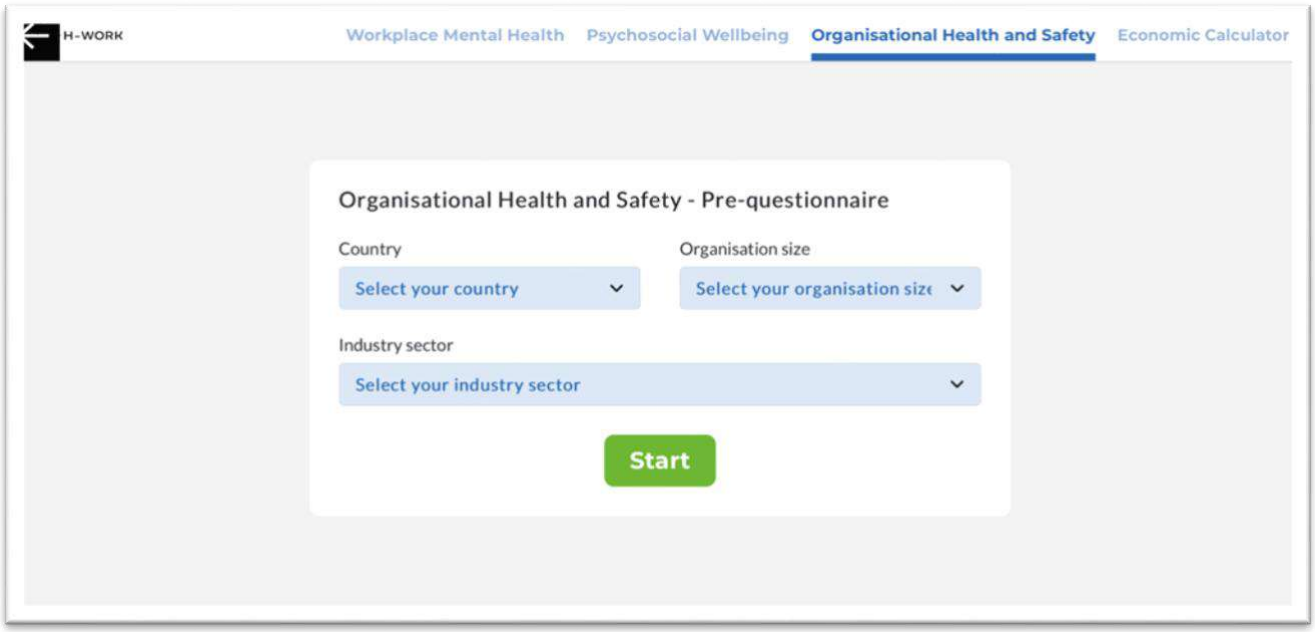


Figure 5. The landing page of the H-WORK Benchmarking Tool (Organisational Health and Safety).

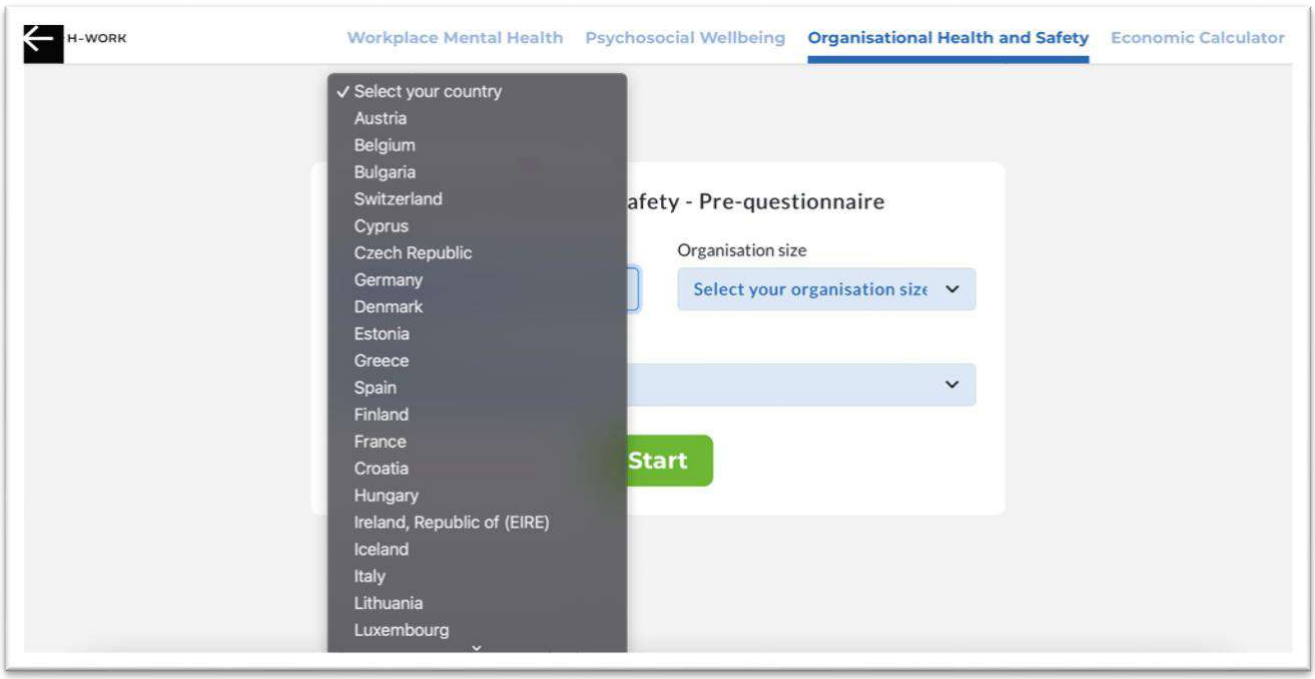


Figure 6. H-WORK Benchmarking Tool's country options.

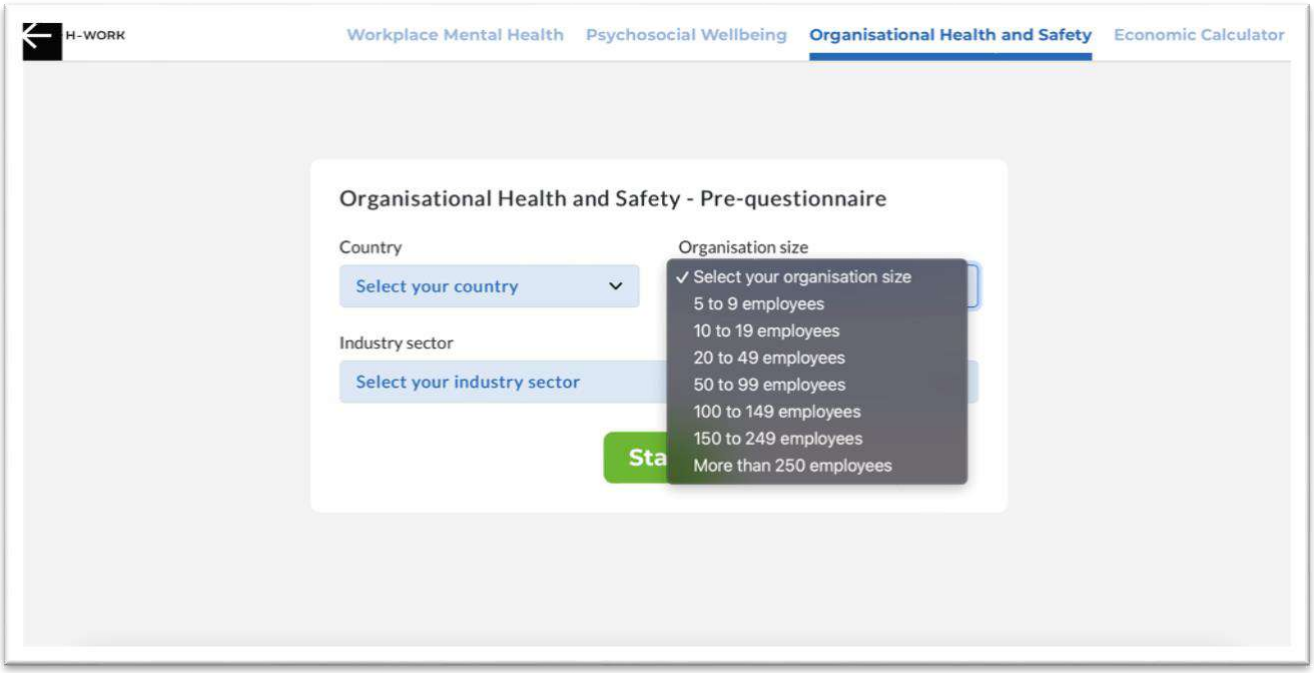


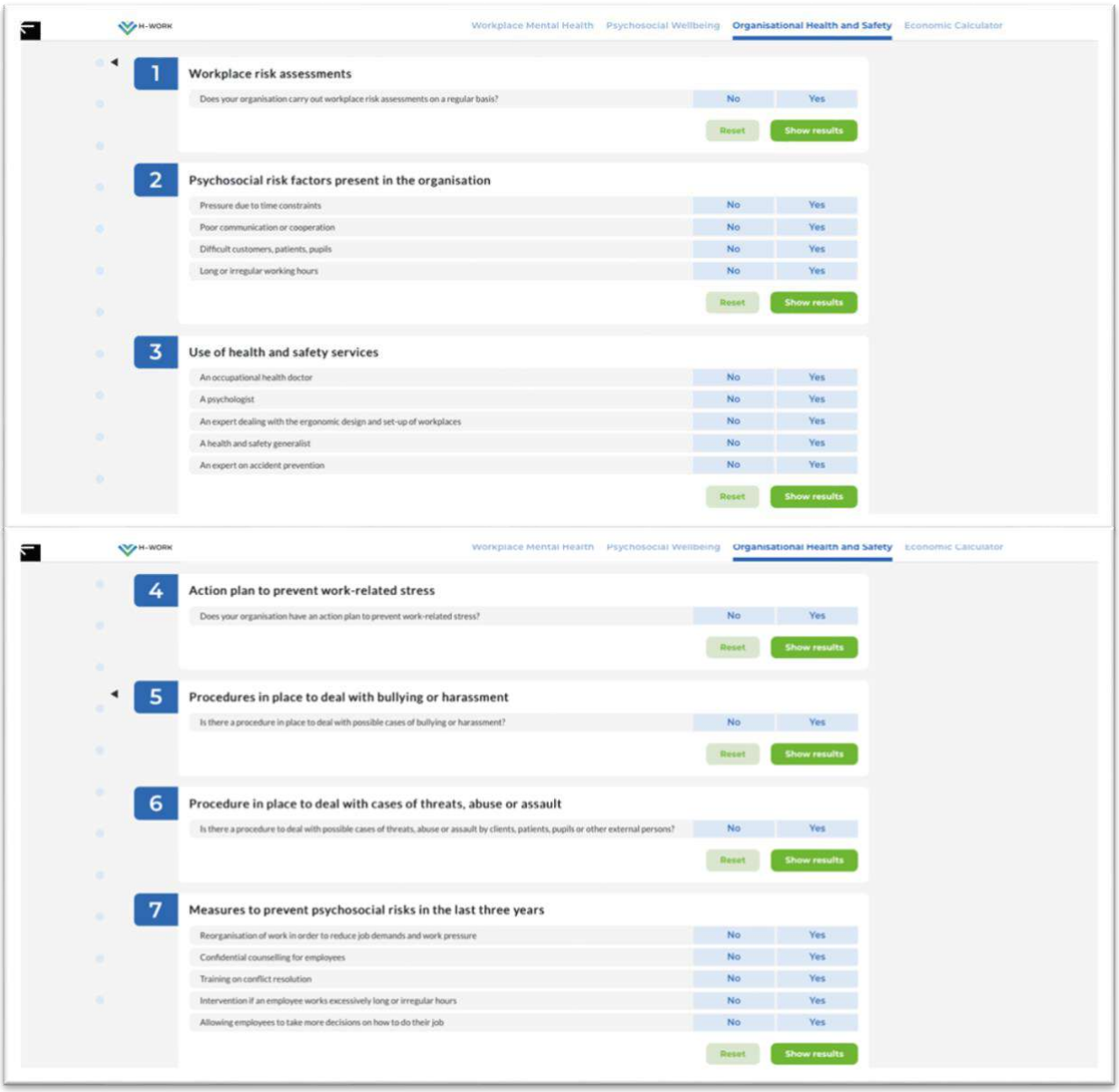
Figure 7. H-WORK Benchmarking Tool's organisation size categories.

Figure 8. H-WORK Benchmarking Tool's industry sector options.

Once the required information about their organisation's size and the sector has been selected, users can answer a questionnaire (Figure 9) asking 11 simple questions as to whether:

1. The organisation carries out workplace risk assessments on a regular basis;
2. Certain psychosocial risk factors are present in the organisation;
3. Certain health and safety services are used;

4. The organisation has an action plan to prevent work-related stress;
5. A procedure is in place to deal with possible cases of bullying or harassment;
6. A procedure is in place to deal with possible case threats, abuse or assault by clients, patients, pupils or other external persons;
7. Certain measures to prevent psychosocial risks have been used in the last three years;
8. Employees are usually involved in the design and implementation of measures taken following a risk assessment;
9. Employees have a role in the design and set-up of measures to address psychosocial risks;
10. Health and safety are discussed between employee representatives and the management;
11. Health and safety are discussed in staff or team meetings.



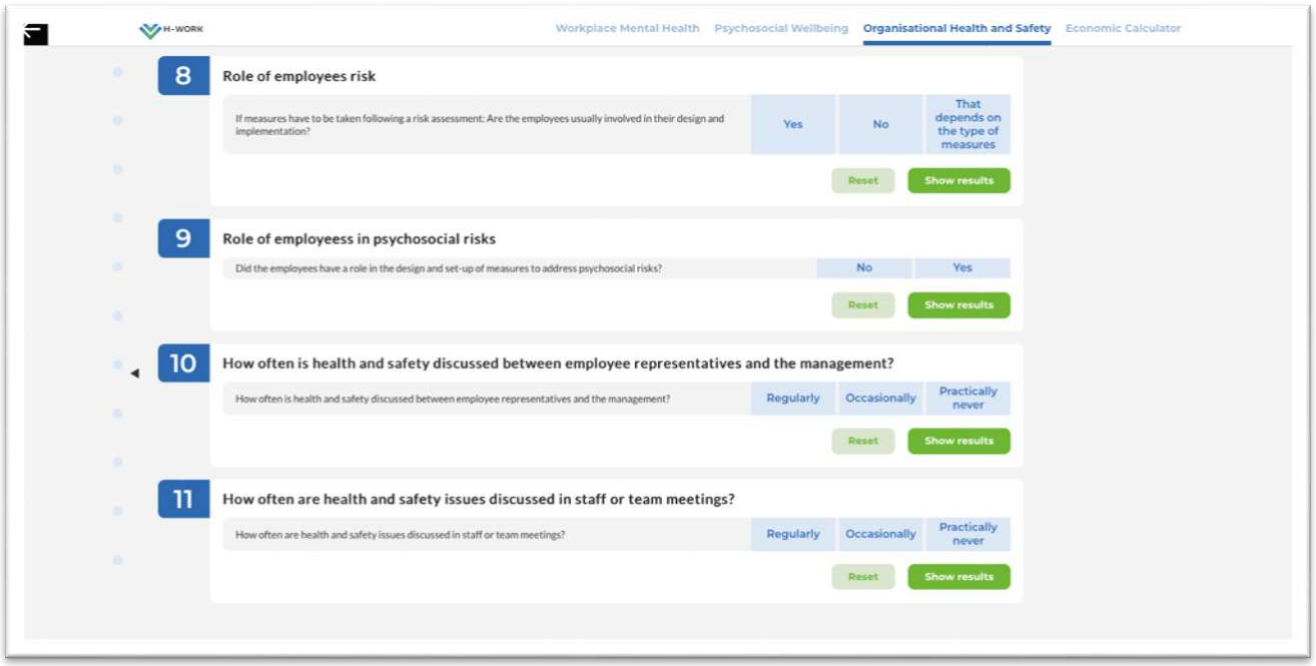


Figure 9. H-WORK Benchmarking Tool's questionnaire based on ESENER 2019.

For each question, results can be shown to compare the user's organisation to organisations identical in size or sector, both in the same country and Europe. For example, regarding the same industry sector, Figure 10 shows that an Italian organisation in the education sector does carry out workplace risk assessments on a regular basis (answer "YES" to question number 1), just like the 94% of Italian organisations do and the 78% of European organisations working in education. The left side of the blue dashboard illustrates the percentage of organisations within the same country and industry sector as the user's organisation performing similarly on the designated target indicator. Conversely, the right side of the dashboard displays the percentage of European organisations performing similarly on the designated target indicator within the same industry sector as the user's organisation.

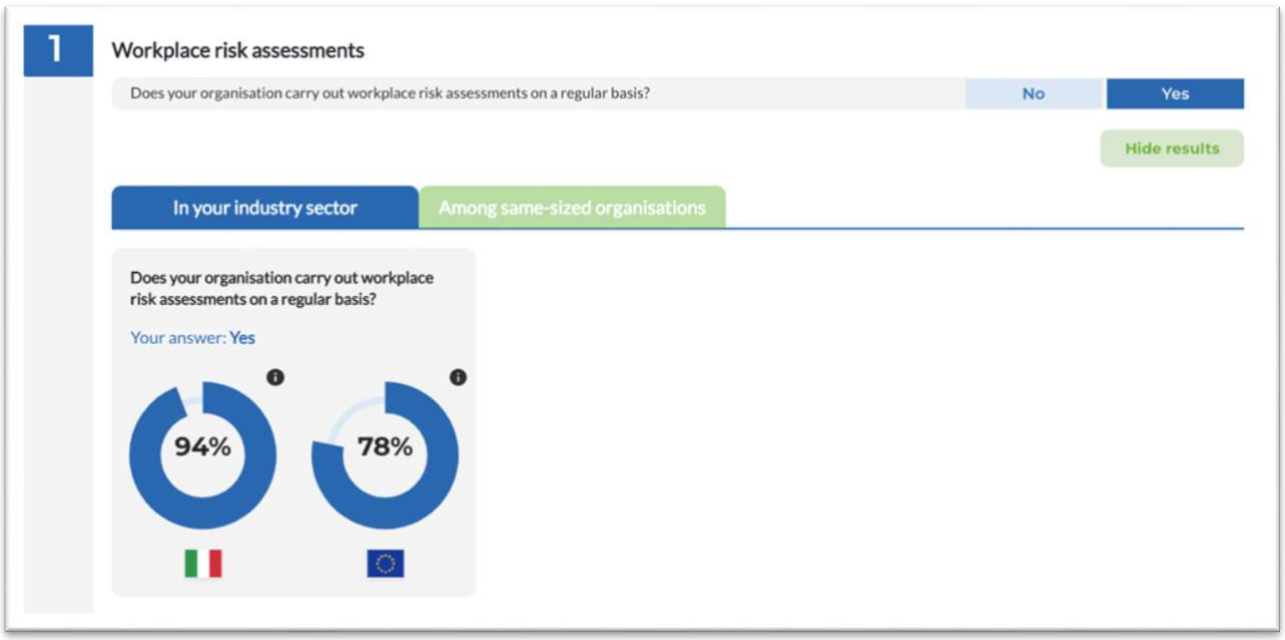


Figure 10. Example of the results of the H- WORK Benchmarking Tool by industry sector.

As for the comparison with same-sized organisations, Figure 11 shows that the above Italian organisation does similar to the 100% of Italian organisations having the same size and to the 95% of European same-sized organisations. The left side of the green dashboard shows the percentage of organisations in the same country that have the same size as the user's organisation and are performing similarly on the target indicator. The right side of the dashboard shows the percentage of European same-sized organisations that are doing like the user's organisation on the target indicator.

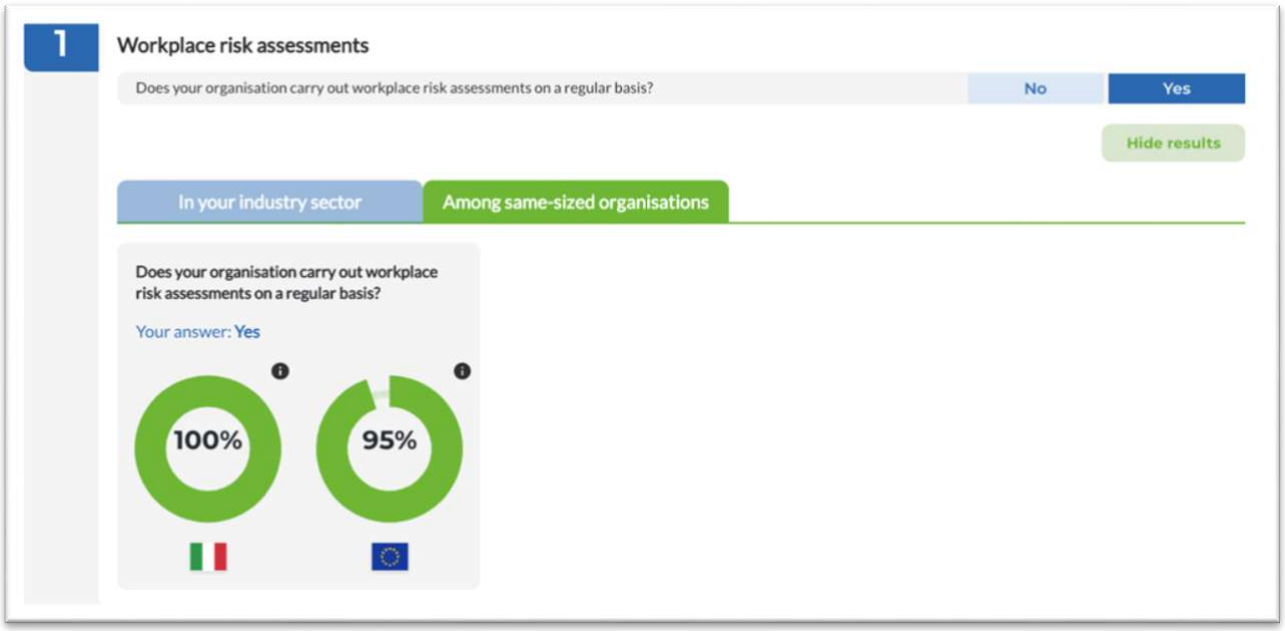


Figure 11. Example of the results of the H- WORK benchmarking tool by organisational size.

The H-WORK Benchmarking Tool aims to be the first benchmarking tool regarding workplace mental health and well-being in Europe. Based on comparisons between a user's organisation and similar organisations, it can nudge employers, HR managers, and OHS practitioners to start-off actions regarding mental health at their workplaces. For instance, a manager realising that their organisation falls within a minority of organisations not carrying out regular workplace risk assessments might be persuaded of the importance of doing so and start doing it to catch up with the majority.

H-WORK Decision Support System

In the Mental Health at Work Platform (i.e., H-WORK Innovation Platform), the H-WORK Decision Support System is divided into two tools which go under the names:

- Workplace Mental Health;
- Psychosocial Wellbeing.

The DSS is a service aiming to enable employers from the public sector and SMEs to decide on the most appropriate intervention strategies and techniques at different levels (i.e., individual, group, leader, and organisational, according to the IGLO model by Day and Nielsen, 2017) to promote mental health in their workplace. It is conceived as a tool to inform organisational decision-making and support organisations in identifying suitable actions to promote mental health in their organisations.

Workplace Mental Health tool

The Workplace Mental Health tool is aimed to assess how the workplace context is doing in terms of policies and programmes about mental health at work, as well as management commitment and work environment openness to the topic. As shown in Figure 12, it consists of three measures (Effective Policies on Mental Health, Effective Leadership on Mental Health, and Stigma on Mental Health), including three items each, to which users can answer "yes" or "no". Questions of Effective Policies on Mental Health concern whether the organisation provides mental health support for vulnerable workers implements good practices for their workers' mental health, and considers workers' mental health a priority. Questions of Effective Leadership on Mental Health concern whether leaders discuss mental health issues with their staff, think about how to improve mental health, and take responsibility for the mental health of their staff. Finally, questions of Stigma on Mental Health concern whether employees with a mental health condition are afraid of being open about it, concerned about related consequences, and have difficulties in seeking support.

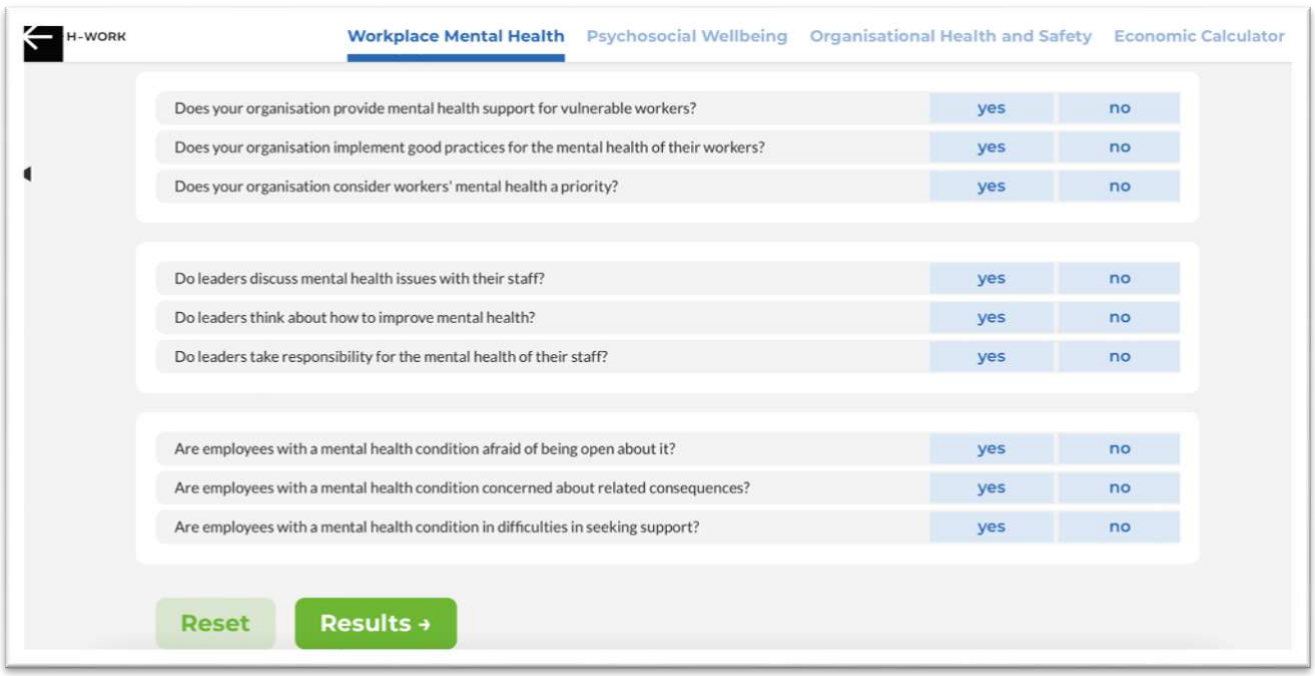


Figure 12. Workplace Mental Health tool of the H-WORK Decision Support System.

Based on the user's responses, the system generates a score for each psychometrically measured dimension. The score is always given on a scale ranging from 1 to 10. However, the directionality or valence of the score varies depending on the valence of the measured dimensions, such that higher scores on

Effective Policies on Mental Health and Effective Leadership on Mental Health are better scores, whereas lower scores on Stigma on Mental Health are better scores. As shown in Figure 13, qualitative feedback, conceptual definitions, and bibliographic references are provided for each measure. Also, a colour coding system is deployed to indicate worrying (i.e., red), acceptable (i.e., yellow), and sound (i.e., green) scores.

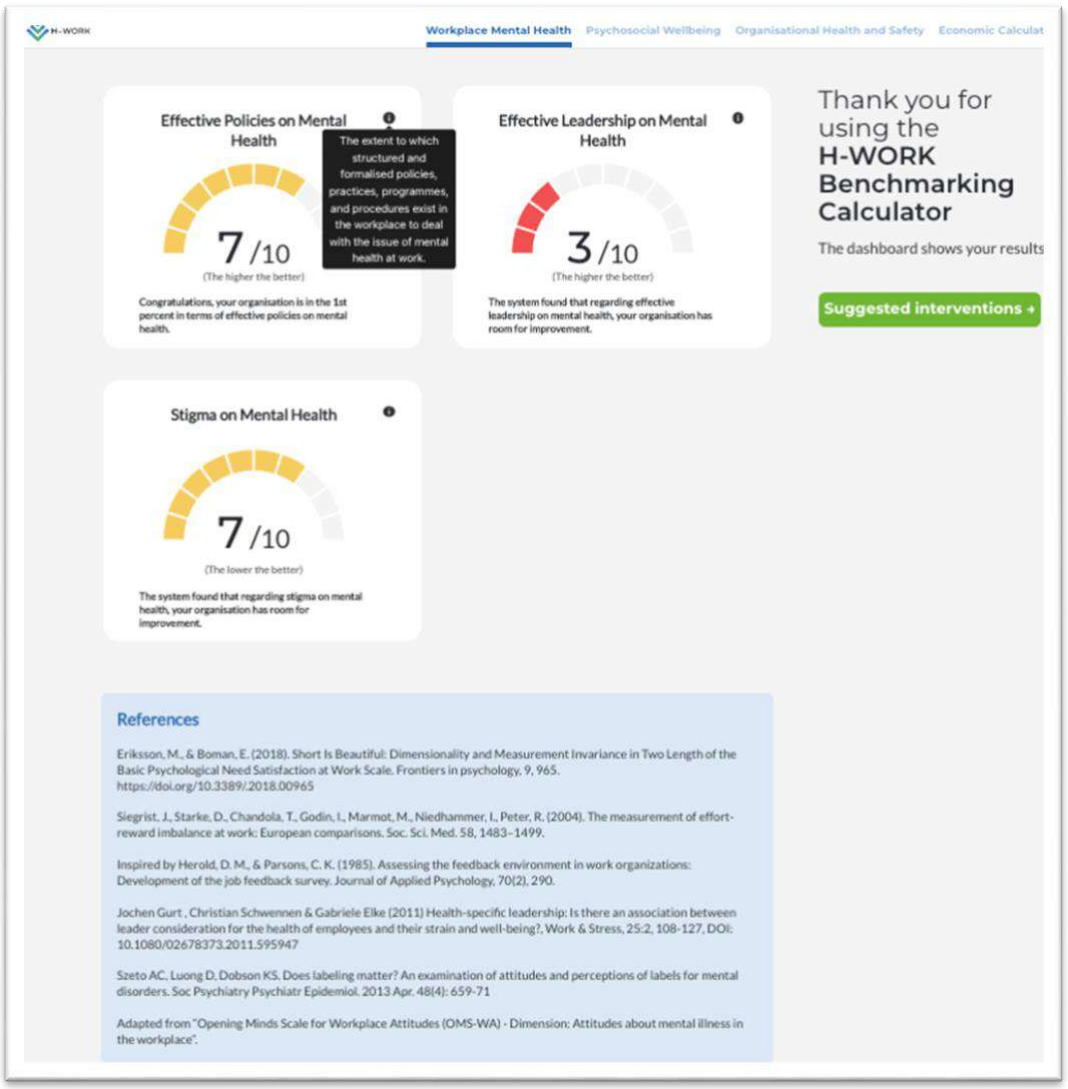


Figure 13. Scoring from the H-DSS Workplace Mental Health tool.

Psychosocial Wellbeing tool

The Psychosocial Wellbeing tool aims to assess how people at the workplace are doing on reliable indicators of mental health and well-being at work. Figure 14 shows seven measures (Perceived Distress, Perceived Engagement, Workload, Interpersonal Conflicts, Team Cooperation, Self-Management, Positive Leadership) of three items each and one measure with two items only (Role Ambiguity). Answer options range from "Strongly disagree" to "Strongly agree". Items of Perceived Distress concern whether employees are emotionally exhausted, dissatisfied with their work, or stressed. Items of Perceived Engagement measure whether employees are engaged in their work, energised, motivated, and proud of their work. Items of Workload gauge whether employees have constant time pressure due to a heavy workload, are often pressured to work overtime, and their job has become more and more demanding over the past few years. Items of Interpersonal Conflicts assess whether there is frequent reporting of interpersonal conflict, common disagreements during meetings, and if people at work are rude and yell at others. Items of Team Cooperation indicate whether team members are able to communicate in the team smoothly, are working

together efficiently, and provide support to each other. Items of Self-Management relate to whether employees are able to self-manage in their daily routine, have concrete plans for their future self-management, and try to develop themselves professionally. Items of Positive Leadership measure whether leaders are able to communicate effectively with their team members, are effective, supportive, empowering, and resilient. Finally, items of Role Ambiguity determine whether employees' roles are ambiguous and whether managers give conflicting information about the work to be done.

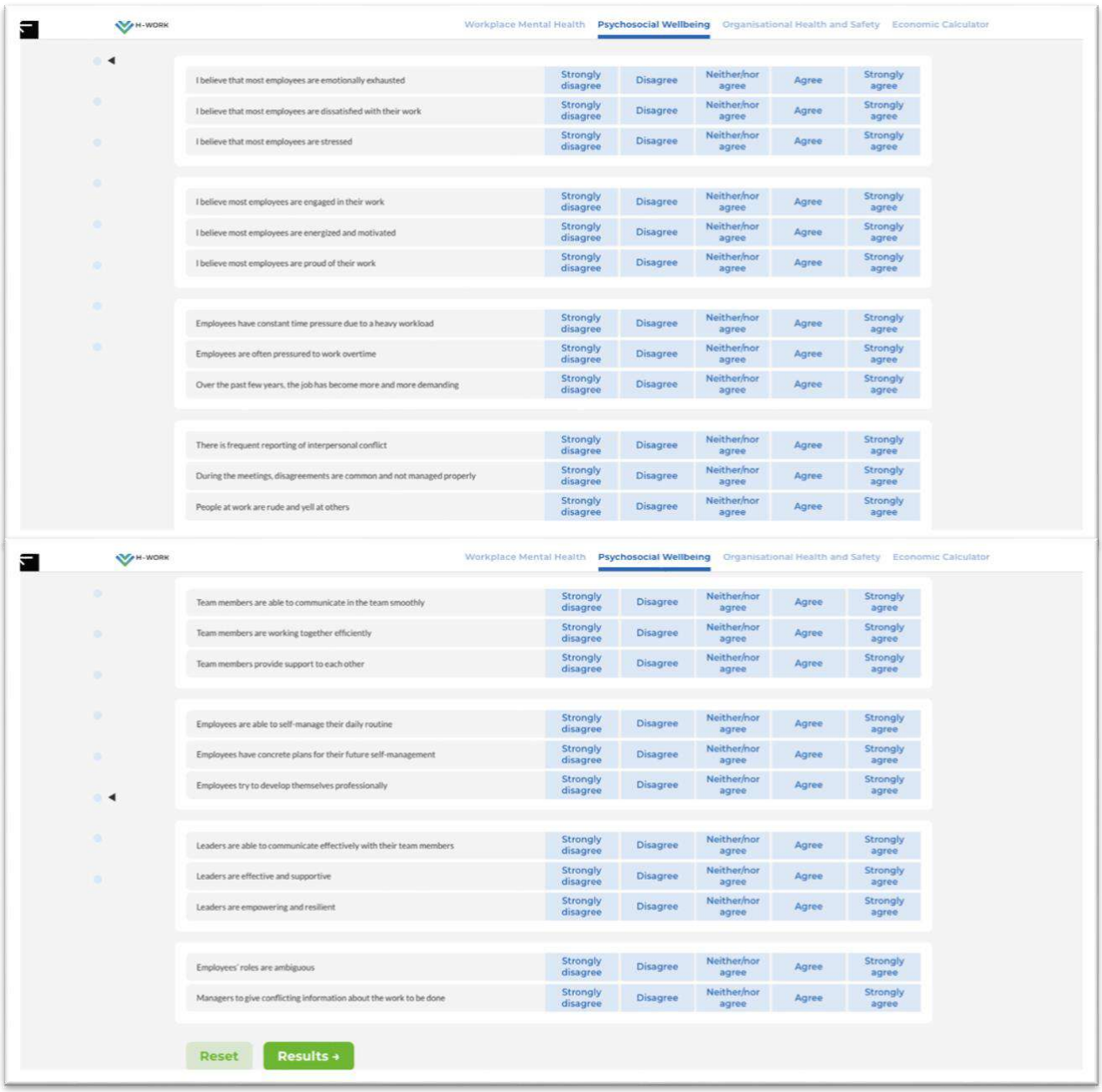


Figure 14. Psychosocial Wellbeing tool of the H-WORK Decision Support System.

Based on the user's responses, the system generates a score for each of the psychometrically measured dimensions. The score is always given on a scale ranging from 1 to 15, except for Role Ambiguity which is given on a scale from 1 to 10. The directionality or valence of the score varies depending on the valence of the measured dimensions, such that higher scores on Perceived Engagement, Team Cooperation, Self-Management and Positive Leadership are better scores, whereas lower scores on Perceived Distress, Workload, Interpersonal Conflicts and Role Ambiguity are better scores.

As shown in Figure 15, qualitative feedback, conceptual definitions, and bibliographic references are provided for each measure. Also, a colour coding system is deployed to indicate bad (i.e., red), acceptable (i.e., yellow), and good (i.e., green) scores.

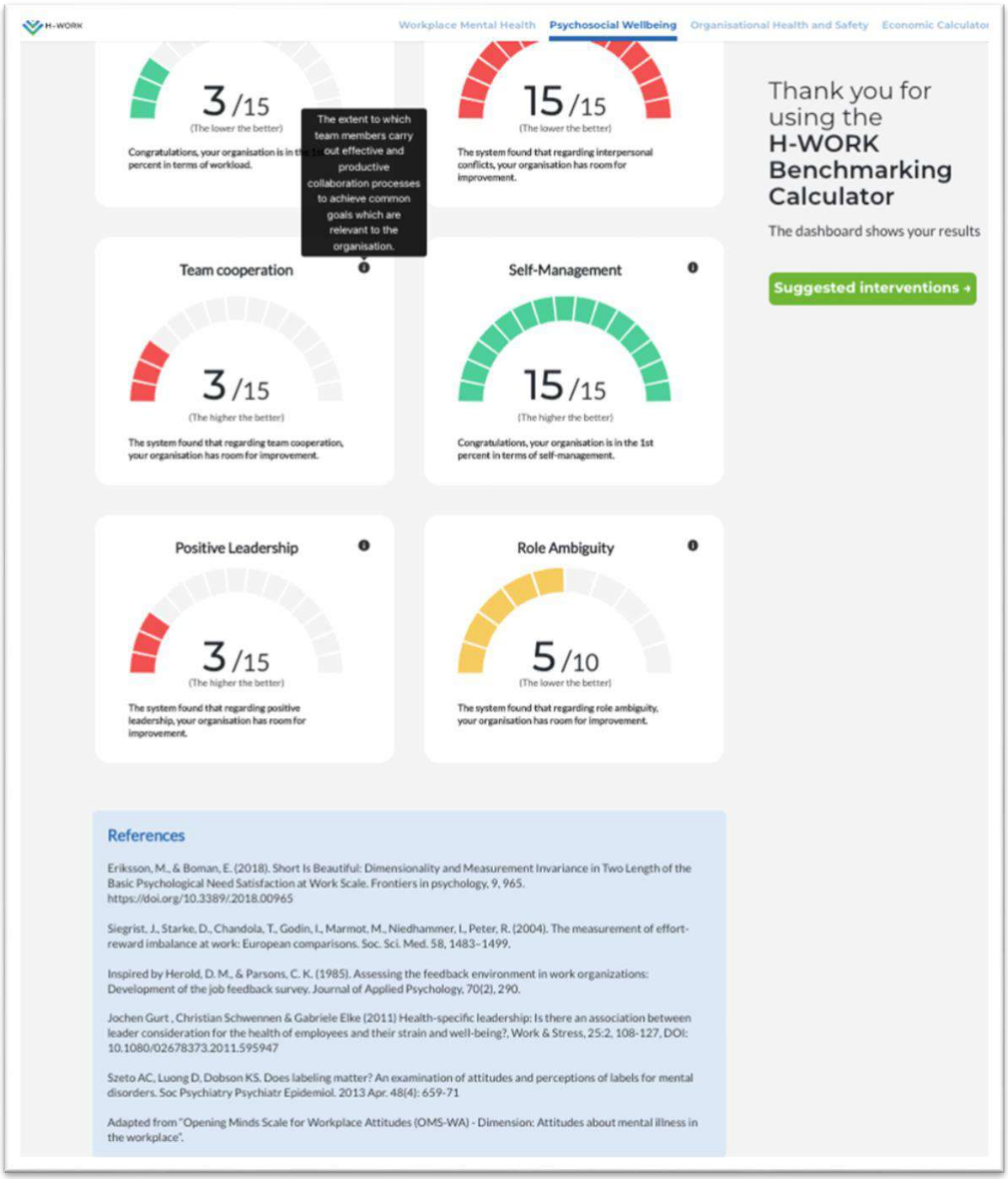


Figure 15. Scoring from the H-DSS Psychosocial Wellbeing tool.

Suggested interventions

Both for the Workplace Mental Health and the Psychosocial Wellbeing tools, the H-WORK DSS generates a list of suggested interventions based on the scores obtained by the user, that is, based on the dimensions results as being those that most need to be improved within the user's organisation. Interventions are those which have been implemented throughout the WP4-related implementation phase of the H-WORK project and which Consortium partners have strong experience of and expertise in. For instance, a user whose

organisation scores low on the dimension of Positive Leadership will consistently be suggested to implement the Positive Leadership Development intervention. As shown in Figure 16 and Figure 17, each suggested intervention is provided with information regarding its background, objective, format, contact or provider, bibliographical references, and additional materials. For each intervention, a disclaimer is also presented warning that, despite the presence of theoretical basis and empirical evidence supporting the intervention effectiveness, the intervention may not necessarily work as expected. Indeed, each single workplace has its own dynamics and contextual factors which may differently impact whether the intervention is effective or not. Therefore, it is recommended to assess the fit between the intervention and the organisational environment. This principle is in line with the realist approach (Nielsen & Miraglia, 2017) adopted as the main philosophy and methodology of evaluating interventions in the H-WORK project. Indications on some activities to carry out to assess such organisation-intervention fit (e.g., workplace mental health needs analysis) are provided within the H-WORK Roadmap which are described later on in the present document.

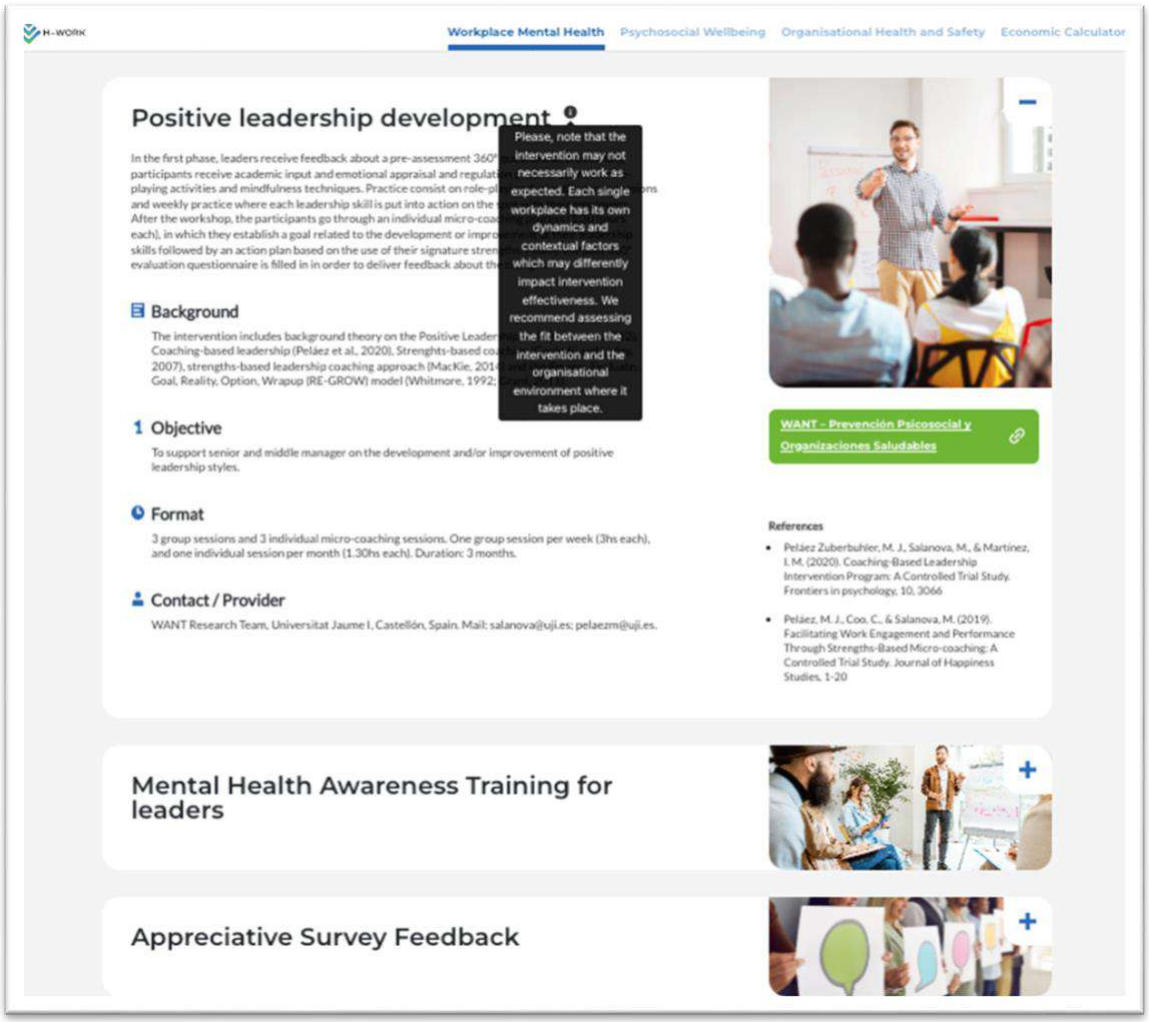


Figure 16. Example of suggested interventions upon completion of H-DSS Workplace Mental Health tool.

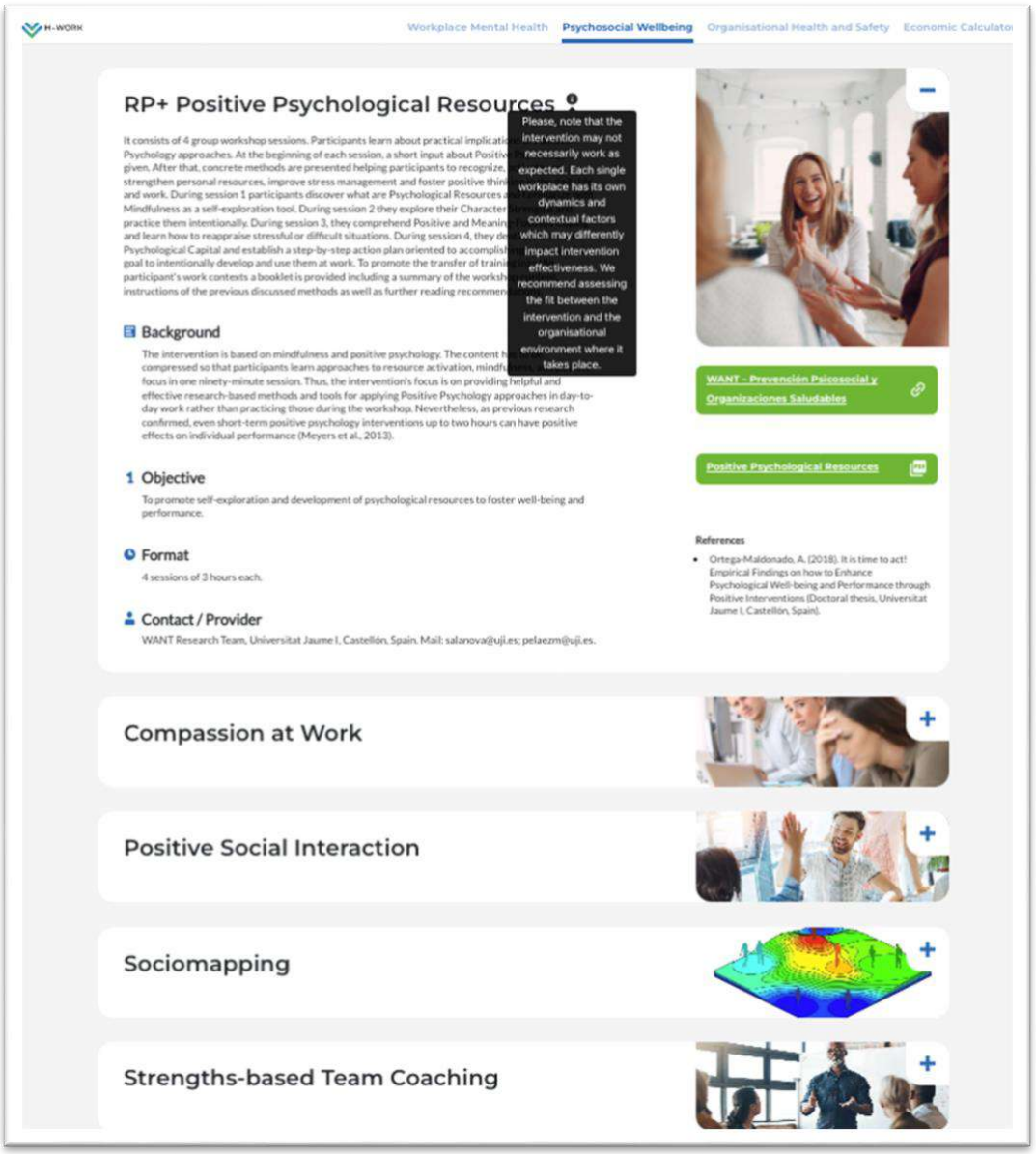


Figure 17. Example of suggested interventions upon completion of H-DSS Psychosocial Wellbeing tool.

To summarise, the H-WORK Decision Support System provides managers, HR directors, and OHS practitioners not only with a snapshot of the current situation of their organisation in terms of certain workplace mental health indicators, but also with recommendations and guidelines on which consequent actions to pursue and how. However, the user has decisional power over which intervention to implement among those suggested and if to contact H-WORK Consortium partners or other professionals to go on to the process of workplace mental health initiatives. Nonetheless, on the basis of H-WORK DSS feedback, their decision-making will be more informed as compared to not having consulted the tool.

H-WORK Economic Calculator

As another tool to inform organisational decision-making, the H-WORK Economic Calculator deploys an algorithm to allow managers, HR directors and OHS practitioners from public organisations and SMEs to calculate retrospective and prospective costs of multilevel interventions to promote mental health and well-being. In other words, it is a calculator for potential economic impact of intervention measures, combining information about the effectiveness of a measure with the costs of this measure.

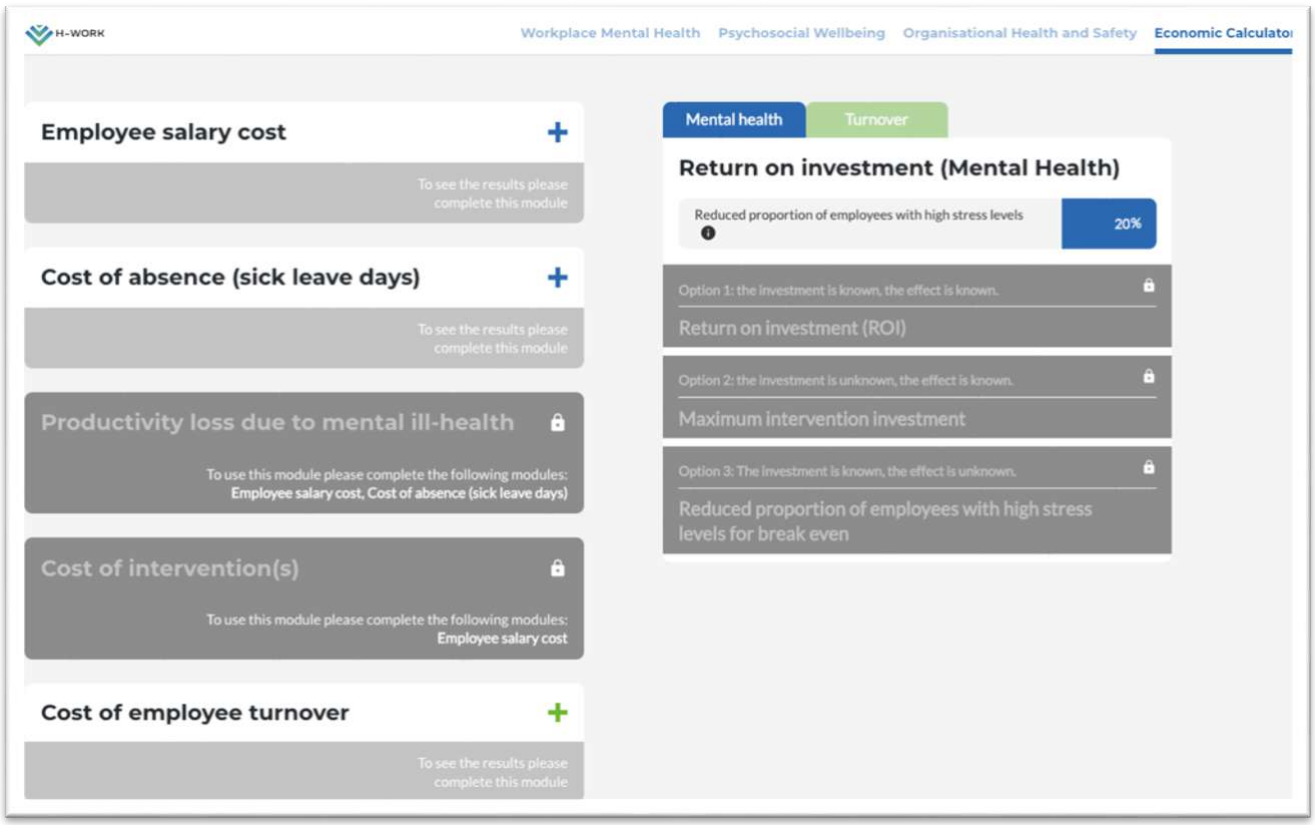


Figure 18. H-WORK Economic Calculator.

As shown in Figure 18, productivity loss due to mental ill-health and cost of interventions can be calculated based on employee salary cost and cost of absence in terms of sick leave days. On the one hand, employee salary cost (Figure 19) is calculated on the basis of average monthly salary, social security contributions including employer's contribution, pension and insurance, number of employees corresponding to full-time positions, number of months the calculation is based on, additional employee costs compared to salary costs, and scheduled working hours per year.

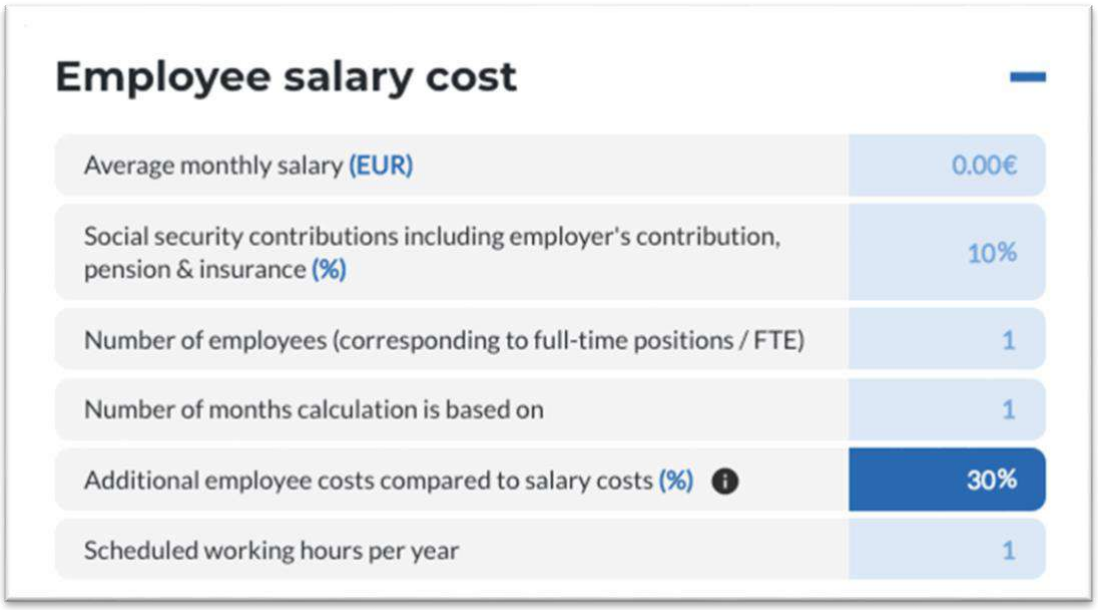


Figure 19. Calculation of employee salary cost in the H-WORK Economic Calculator.

On the other hand, cost of absence in terms of sick leave days (Figure 20) is calculated on the basis of average monthly salary, average cost of absence per sick day compared to monthly salary, number of employees corresponding to full-time positions, number of scheduled working days per year per employee, and absence as a percentage of scheduled working hours.

Figure 20. Calculation of cost of absence (sick leave days) in the H-WORK Economic Calculator.

Since the calculation of productivity loss due to mental ill-health depends on the calculation of employee salary cost and cost of absence, the module to calculate productivity loss due to mental ill-health (Figure 21) can only be completed after filling out the previous ones. Productivity loss due to mental-ill health is calculated in relation to added value per year, percentage of employees with high stress levels, productivity loss due to high stress levels, and percentage of absence due to mental ill-health.

Figure 21. Calculation of productivity loss due to mental ill-health in the H-WORK Economic Calculator.

Similarly, since the calculation of cost of interventions depends on the calculation of employee salary cost, the module to calculate cost of interventions (Figure 22) can only be completed after completion of the employee salary cost module. Cost of interventions is calculated with respect to the time required for intervention in minutes, the number of employees participating in the intervention, the hired consultants or professional personnel to deliver the interventions, the equipment and materials, travel expenses, premises cost, and other costs.

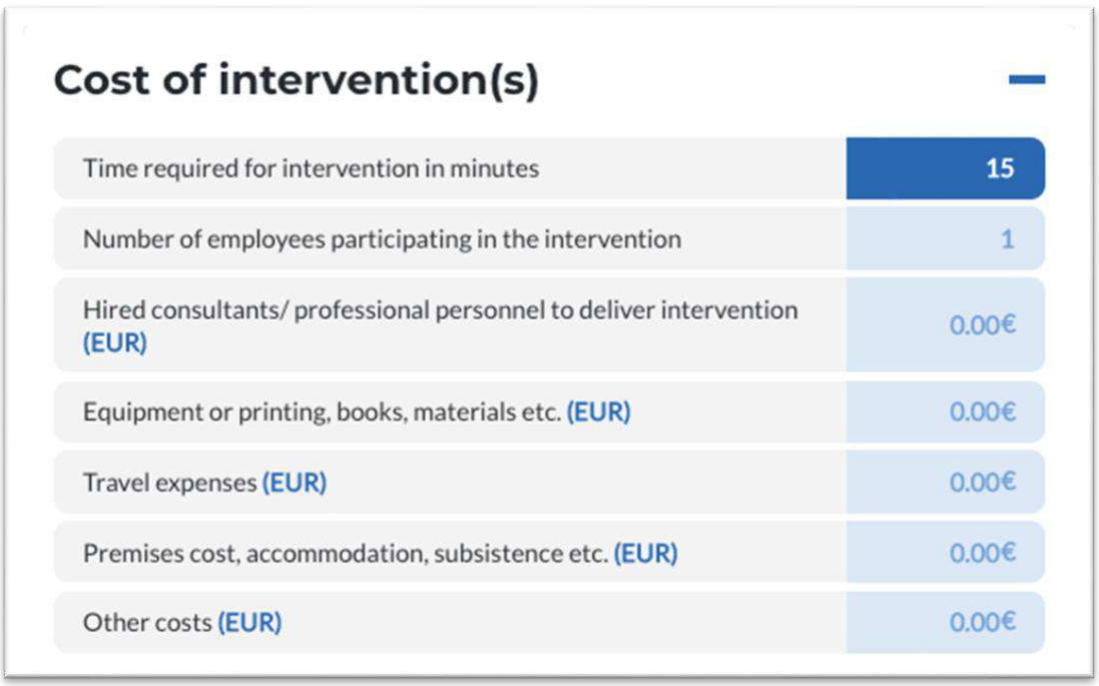


Figure 22. Calculation of cost of interventions in the H-WORK Economic Calculator.

Also, cost of employee turnover can be calculated (Figure 23) on the basis of the number of employees corresponding to full-time positions, the turnover rate of full-time employees, the internal and external recruitment cost per hire, the training investment per hire, the daily wage of newly hired employee, the days to reach acceptable performance, and the cost of lost productivity due to replacement.

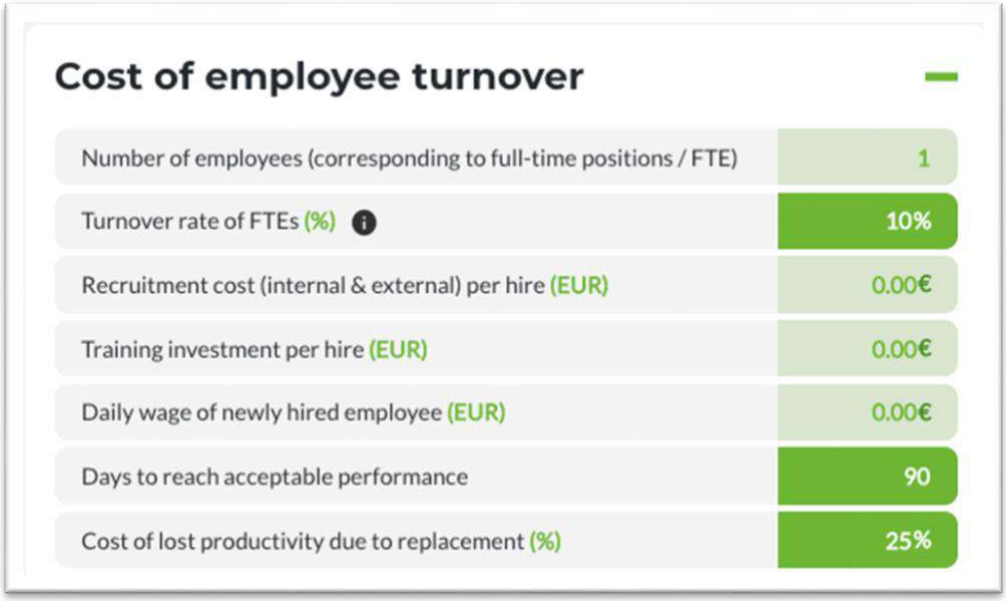


Figure 23. Calculation of cost of employee turnover in the H-WORK Economic Calculator.

Based on the calculations of productivity loss due to mental ill-health and cost of interventions, the return on investment (ROI) for mental health can be calculated (the blue button in Figure 24). In this sense, the mental health related ROI measure will be explicative of the maximum intervention investment, and the reduced proportion of employees with high stress levels for break event.

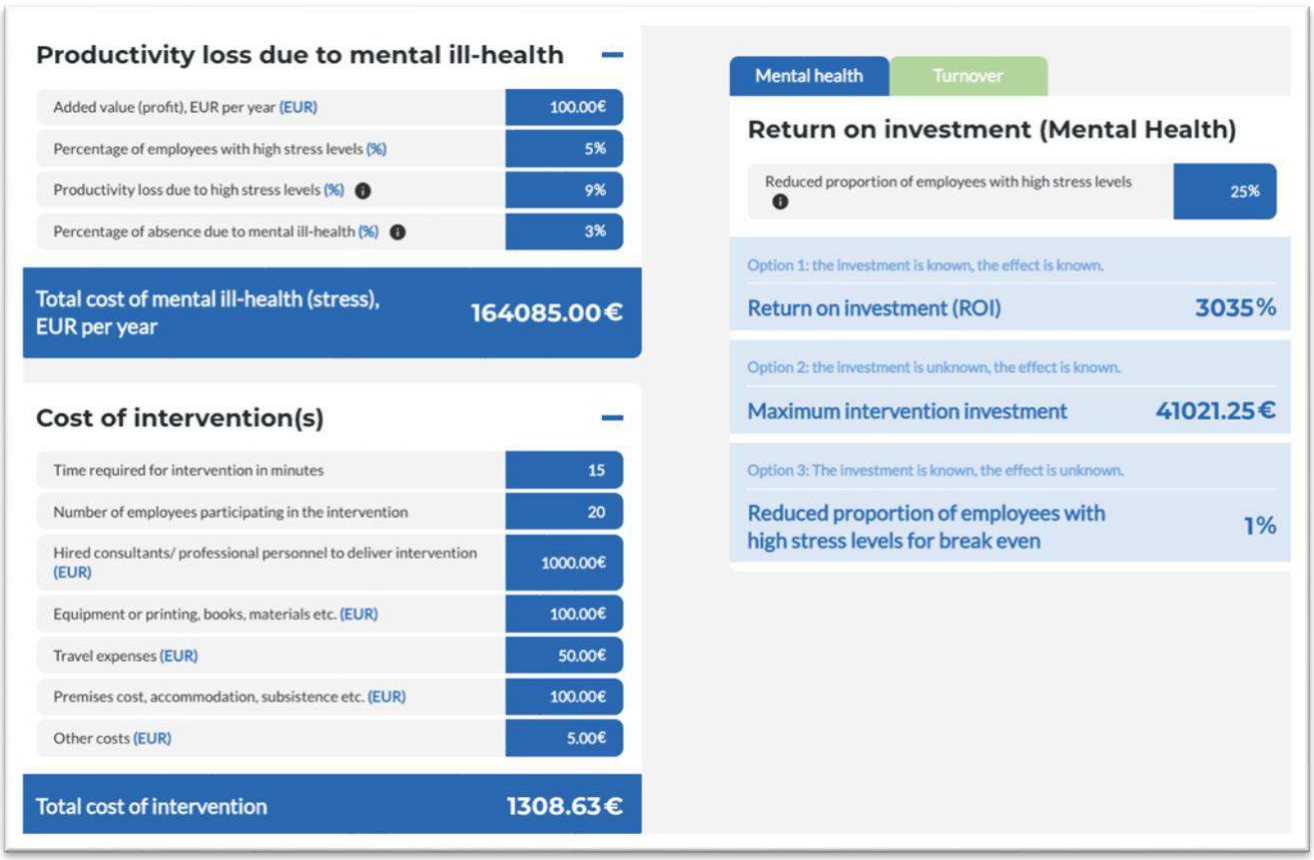


Figure 24. Calculation of return on investment for mental health in the H-WORK Economic Calculator.

Finally, based on the calculations of cost of employee turnover, the return on investment for turnover can be calculated (the green button in Figure 25).

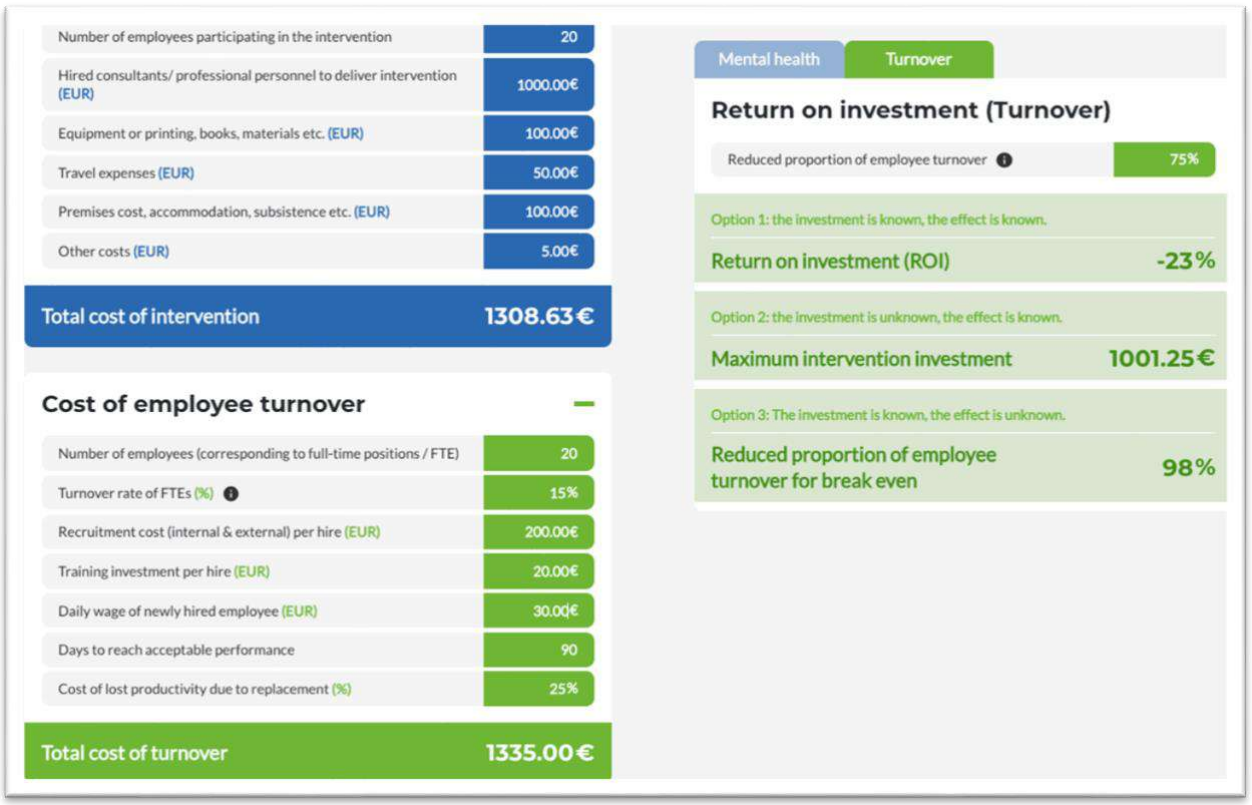


Figure 25. Calculation of return on investment for turnover in the H-WORK Economic Calculator.

No log-in required section

Overall, the no log-in or open access section of the H-WORK Innovation Platform corresponds to the Roadmap where a step-by-step handbook is available through the green box located on the right of the top section of the platform's landing page and to the policy briefs listed at the bottom section of the platform (Figure 26).

H-WORK Roadmap

The H-WORK Roadmap describes a seven-step process on how to design, develop, and implement multilevel interventions to promote mental health in the workplace and how to monitor and evaluate the implementation process of the interventions and their impact, as follows:

- ***Step 1: "Prepare the ground"***. This step provides information on how to how to get started with preparing and implementing interventions aimed at optimising mental health and well-being in public organisations and SMEs. This encompasses establishing a team (e.g., a steering team) and developing a communication plan and strategy to inform the working population and take them on board. Tips and recommendations are based on experience in such a multi-country project.
- ***Step 2: "Prioritise the needs"***. The aim of this step is to gain a comprehensive knowledge of the psychosocial factors that affect mental health and well-being at work and to identify any possible areas and to improve mental health and well-being in the workplace. This step includes all stakeholders to ensure participation and mutual understanding of the needs at different levels.
- ***Step 3: "Plan the actions"***. This step is about choosing the multilevel intervention actions to be implemented (at least at two different levels of the organisation) and developing a detailed action plan. It is divided into different actions. First, lining up or re-engaging the steering group. Second, defining the level to work on (e.g., individual, group, leader, organisational levels) based on the needs emerged from step 2. Third, matchmaking the needs with the interventions. Fourth, understanding how to guide and ensure the implementation of the interventions selected.
- ***Step 4: "Actions into practice"***. This phase concerns the implementation of the interventions and consists of guidelines to put into action the interventions and ensure that they have maximum impact, i.e., that they are as effective as possible in improving employees' mental health. Each intervention has its own scope, project, target group and content, with a clear programme structure to follow and instructions for facilitators to maximise their active contribution to the overall effectiveness of the implementation process.
- ***Step 5: "Keep track and adjust"***. This step is about monitoring the impact of interventions and collecting feedback from the participants to be able to adjust aspects or elements of the interventions that might not be working as expected. This helps to have an idea of whether adjustments are needed to ensure that participants and the organisation benefit from the intervention. This means to also considering organisational aspects that can increase the chance of successfully implementing the interventions.
- ***Step 6: "Sustain the progress"***. In this step, it is of utmost importance to evaluate the extent to which workers involved in interventions have the opportunity to integrate their learnings into their daily work and to measure the extent to which the organisational context is supporting the adoption of new behaviours that can promote mental health in the workplace at different levels of the organisation.
- ***Step 7: "Measure success".*** This step assesses the effectiveness of interventions on mental health and well-being post-implementation. This will be achieved by analysing measures collected pre-,

during and after the interventions to determine any improvements in mental health and well-being resulting from the interventions.

Users can download a PDF file for each step to obtain the guidance, recommendations and tools contained in the H- WORK toolkits (HAT, HIT, HET) to implement each step of the roadmap as much as possible.

The H-WORK Roadmap is currently considered the first version to be made available with the first online publication of the Platform. Changes to the Roadmap and other parts of the Platform may be made in anticipation of Deliverable 6.4, which reports on the activities and results of the testing and validation phase of the Platform by potential end users

Policy Briefs

Finally, the bottom section of the H-WORK Innovation Platform's landing page includes the provisional list of policy briefs which are being developed as part of T7.3 – "Provide recommendations and policy briefs for employers, occupational health professionals and policy makers, organise workshops and a final event" (Lead: EFPA). Although the final versions are to be submitted within D7.5 – "Policy briefs and recommendations for health professionals and policy makers", definitive policy briefs are already available (Figure 27) and more are currently being in the pipeline.

The policy briefs aim to provide employers and OHS professionals from the public sector and private SMEs with recommendations and guidelines regarding good organisational practices and policies when it comes to mental health at work and multilevel interventions to promote workplace mental health. Also, the policy briefs target national and EU policymakers and cultural and legislative differences in EU countries. All policy briefs are publicly accessible and can be downloaded in .pdf digital format in several different languages.

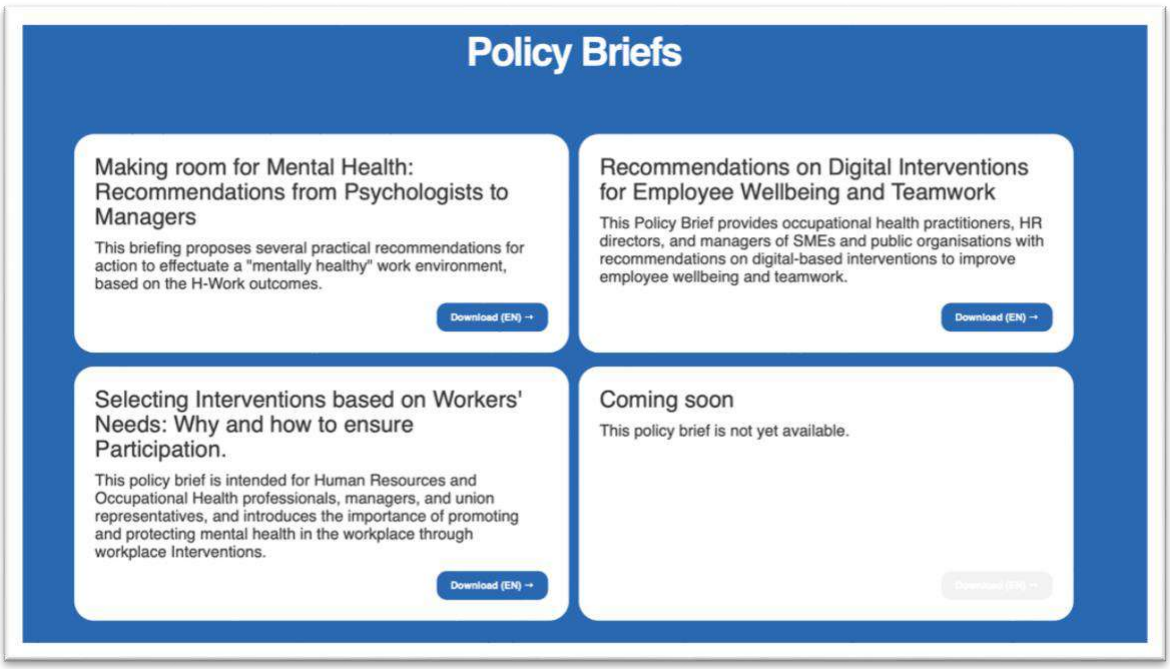


Figure 26. Provisional list of policy briefs available on the H-WORK Innovation Platform.

CONCLUSIONS

The present deliverable described the Mental Health at Work Platform (H-WORK Innovation Platform), a free and easily accessible web-based platform proceeding from the EU H2020 H-WORK project to help employers, HR managers, and OHS professionals acting upon mental health at their workplace.

While it has already been made publicly available online (https://www.mentalhealth-atwork.eu/), the H-WORK Innovation Platform is currently being promote among public and SME organisations, associations of practitioners and mental health professionals, and other relevant stakeholders through partners' networks such as EFPA, VALORA, and ENWHP. At the time of writing this document, the platform has already been showcased in the following three occasions:

- in-presence oral presentation at the XXX Congress of the Italian Association of Psychology, held in Padua, Italy, on Friday, September 30th, 2022 (http://www.aipass.org/en/xxx-congresso-aip-plenario-padova-27-30-settembre-2022);
- virtual exhibitor booth at the Work Wellness Institute Conference (Figure 28) held online on Thursday, November 3rd, 2022 (https://workwellnessinstitute.org/courses/wwi-conference-breaking-down-the-reality-of-workplace-wellness/);
- online oral presentation at the EFPA Presidents' Council Meeting, held in Vilnius, Lithuania, on Friday, November 18th, 2022.

The above events have taken place in suitable contexts to spread the word about the H-WORK Mental Health at Work Platform to employers and OHS professionals and academics. Also, it was taken advantage of such opportunities to start recruiting beta-testers to be involved in the subsequent WP6 tasks.

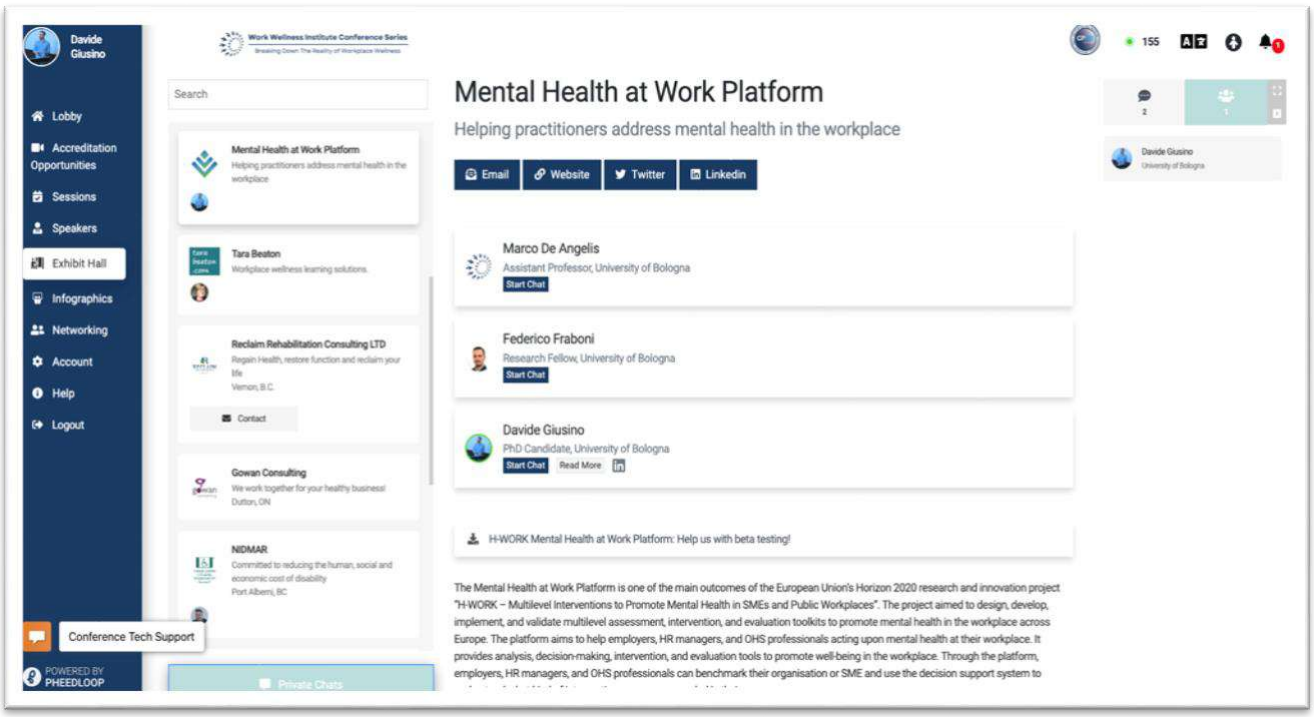


Figure 27. H-WORK Innovation Platform's virtual exhibitor booth at WWi online conference.

T6.3 – "Test the usability and provided content of the H-WORK Innovation Platform" will indeed be performed until M46 to ensure the usability and positive user experience of the H-WORK Innovation Platform. A series of user tests will be carried out. Feedback gathered along a structured test setup will

ensure that main improvements can be implemented in a structured and fast way. Main aim of the optimisation iterations is to ensure a highly intuitive user interface that provides the user with all necessary information and functions. The overall platform interface and software solutions available on the platform will be aligned with end-user requirements (e.g., CEOs, managers, policymakers). UNIBO's expertise in Human Factors and Ergonomics will be deployed to implement user experience and usability tests aimed to achieve high levels of acceptance of the entire system. The main expected benefit of this work is a deep understanding of the users and a long-lasting relationship with the H-WORK Innovation Platform. UNIBO will create market fit between the platform applications and the end users. This will increase uptake, usage, and satisfaction from end-users. Thus, the interactive services provided (e.g., Benchmarking Calculator and DSS) will continuously be developing and improving. Overall, this work will feed D6.3 – "Final Exploitation Plan", which will contain the results of the platform validation, with a list of specific improvements and recommendations suggested by end-users.

The latest version of the H-WORK Innovation Platform delivered by M46 will also include the complete translations of the H-WORK Roadmap and the related materials into the H-WORK intervention sites' five languages, namely Italian, Spanish, Dutch, Czech, and German.

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