



Engagement Strategy

Green Trail Concept | September 2023





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More information on the project can be found at <https://www.greentrailconcept.eu>

Abbreviations and Acronyms

ACRONYM	DESCRIPTION
ATRA	American Trail Running Association
EACEA	European Education and Culture Executive Agency
EC	European Commission
EU	European Union
GTC	Green Trail Concept
IAAF	Association of Athletic Federations
IAU	International Association of Ultrarunners
ITRA	International Trail-Running Association
KJF	Kilian Jornet Foundation
LDR	Long-Distance Running
SDGs	Sustainable Development Goals
TBL	Triple-Bottom-Line
UN	United Nations
USATF	USA Track & Field
WMRA	World Mountain Association
WP	Work Package

Executive Summary

As the EU moves towards more sustainability behaviours, it has been expressed that sport has gained significant power as a transversal policy area, being recognised as a crosscutting contributor in the promotion of health, youth, social affairs, inclusion, and equality, among others.

The **Green Trail Concept (GTC)** project financed by the European Commission, under the Erasmus + Programme, aims **to integrate** the principles of **environmental protection, economic impact, inclusion, and social justice** in the organisation and management of trail running events. The project will engage running event participants, sport audiences and organisations, and public administrations in taking more sustainable actions oriented at reducing the impact on natural environments, protected areas, and their surrounding social and economic landscape.

Engaging individuals in sports events is one of the main issues to be addressed. In this line, the GTC project will develop an engagement and raising awareness strategy targeting outdoor running events' audience by **(1)** analysing and considering the specific target groups, their interests and background and **(2)** the creation of a communication plan and toolkit and the engagement strategy.

To gain an in-depth insight into the nature of trail races and their resulting effects, it is essential to analyse the participants who run in these events. Although many different actors participate in the organization of the races, runners are considered the **end users** of these events and therefore their influence in making them more sustainable is crucial. Nevertheless, the engagement strategy that will be developed in this document will also examine and identify the rest of actors, considering different strategies to reach out the broader audience possible.

In this sense, this document presents a general overview about trail running and sustainability, a segmentation study on runners' profiles based on an overview of the existing literature and experts' interviews, a communication plan and toolkit and finally different engagements strategies to raise awareness in the three pillars of sustainability in outdoor sport events.

Although the primary focus of the GTC project lies on race organizers, it equally acknowledges, as mentioned above, the fundamental role of runners as end-users in shaping the sustainability of trail running events. As the main participants in trail running, runners directly interact with the natural environments, protected areas, and the surrounding social and economic landscape. Therefore, their actions and behaviour during these events can significantly impact the overall sustainability outcomes. Recognizing this, this document places a strong emphasis on engaging and motivating runners to embrace sustainable practices. Moreover, runners' influence extends beyond the events themselves, as they can inspire and advocate for a culture of sustainability within the broader sporting community and society that drives lasting positive change.

1. Introduction

1.1. Objectives

The main objective of this document is to present the path needed for properly reaching, engaging, and retaining end-users in **more sustainable trail races** that will be tested during the project lifetime and beyond it.

To achieve the expected outcomes, the following key activities have been deployed:

- The **analysis** of the **existing literature** of sociological studies profiling runners, deepening into the relations and impacts that runners have on the communities from rural and mountainous areas in which large races take place repeatedly.
- Supporting the existing literature review with four **semi-structured interviews**:
 - **3** interviews held with experts in mountain sports, two of whom are also trail runners, aiming at pinpointing distinct segments within the broader runner community, taking into account the business, sociology, and marketing perspective.
 - **1** interview directed towards a civil servant responsible in enhancing societal and economic welfare at the community level in the organization of sustainable events.
- The design of an **engagement strategy** including:
 - A *segmentation study*: consistent runner typologies evincing different needs, interests, access barriers and behaviour patterns will be developed.
 - A *communication plan and toolkit*: identify communication channels, multipliers, and creation of informative materials.
 - The organisation of a *global raising awareness and communication campaign*.

1.2. Background information on running trails in rural and mountainous areas

Trail running is a term adopted internationally to describe long-distance running races in a natural environment. Its precise origin, as extensively discussed in the contextual analysis within the GTC report D2.1 on *Data collection methodology and indicators*, proves elusive. The first recorded instance of men running in mountainous terrain with common rules occurred in Scotland in 1040, as reported by mtnath (2022)¹. While this race was not purely for pleasure but rather to secure employment, it marks one of the earliest known competitions in such challenging environments. Over the centuries, references to runners carrying messages and mail emerged, employing runners as a means of transport for distances up to 150km.

¹ More information available here: <https://mtnath.com/history-competitions/>

Nonetheless, trail running appears to have its roots in the 19th century within the United Kingdom, where mountain competitions primarily focused on the enjoyment of running emerged, particularly in regions like Scotland and England. These competitions typically involved shorter distances ranging from 2 to 5 km. It's noteworthy that in 1820, trail running became integrated into the outdoor pastime known as "Hare and Hounds."

In the early 20th century, mountain guides and running clubs in mountainous regions began organizing races to summits, and trail running emerged as a prominent and rapidly growing category in outdoor sports. As highlighted by a famous elite trail runner in the interview:

Trail running emerged as a sporting activity around 1970 in England and attained international recognition by approximately 1980. During its inception, trail running was primarily practiced by the elite, given its demanding nature in terms of financial investment and the requisite levels of technical and physical preparation.

Elite Trail Runner

The first international organized races emerged in California, such as the Dipsea Trail Race, while in the 1990s, races began to gain international popularity, attracting younger runners. In the 2000s, trail running saw a surge in Europe, starting with the UTMB® in 2003 and followed by many other races.

The momentum continued to grow, reaching its peak around 2008, driven in part by the influence of social media. As a consequence of the increasing interest, the Committee for Mountain Running, later becoming the World Mountain Association (WMRA), was formed to oversee the sport. In 2012, the first **International Trail-Running Conference** took place, leading to the foundation of the **International Trail-Running Association (ITRA)**² aiming at raising awareness on the respect of the environment and promoting sustainable development in trail running.

As per a comprehensive definition of trail running, various interpretations of this sport rose within the framework of competitive regulations. For instance, the International Association of Athletic Federations (IAAF) defined it in article 252 of the competition regulations as it follows:

Trail runs encompass a diverse range of terrains, including dirt roads, forest roads, and single-track trails, set within natural, open-field surroundings like mountains, deserts, forests, or plains. These runs predominantly occur off-road. While paved or concrete pathways are allowable, they should be kept to a minimum necessary for the run's intended route, not exceeding 20% of the total running distance. There are no constraints on the distance covered or the elevation gained, whether uphill or downhill.

Federation., I.S. International Skyrunning Federation Rules

² More information available here: www.i-tra.org

ITRA, the IAAF's associate, defines trail running as a foot race in natural settings with limited asphalt or paved sections, not exceeding 20% of the course³. The same sort of definition is provided by the Royal Spanish Athletics Federation that under the protection of the IAAF regulations define the trail running as:

Activity which consists of running in a natural environment in the open field (mountains, deserts, forests, beaches, or plains) where no more than 20% of the surface can be asphalted or paved. The path can be diverse (roads, trails, tracks...) and the route must be properly marked. Trail Running allows a great variety of distances, slopes, terrains, and landscapes.

Royal Spanish Athletics Federation - Competition Regulations 2018-2019; Spain, 2017

In contrast, the American Trail Running Association (ATRA) provides a more comprehensive description of trail runs, encompassing off-road trails as well as paved roads in both rural and urban areas, as long as they remain inaccessible to motor vehicles. Unlike traditional road running, trail running incorporates various degrees of elevation change, technical challenges, and uneven surfaces, requiring runners to navigate through diverse landscapes and obstacles while enjoying a connection with nature.

In the last few decades, trail running started to become more specialized, with different formats such as Skyrunning, Classical Skyrares, and Vertical Kilometers gaining popularity, attracting elite runners like Kilian Jornet, Emmanuela Brizzio, and Marco De Gasperi (mtnath, 2022). The sport has seen a new and notable upsurge in popularity between 2016 and 2022, primarily attributed to the influx of enthusiastic practitioners eager to explore the sport. Moreover, as highlighted by the Elite Trail Runner interviewed, the Covid-19 pandemic has further fuelled interest and motivation among individuals to engage in the sport.

This growing interest in the last few years might be attributed, in part, to the significant urban migration that has taken place, leading to a desire among individuals to seek calm and connection with nature. On the other hand, the increasing recognition of the multiple benefits of spending time in natural environments, including stress reduction, improved short-term memory, mental energy restoration, enhanced cognitive abilities, and increased creativity, has contributed to the widespread appeal of trail running as a favoured recreational activity (Molz, 2021).

Although the long history and the growing attention received by trail races, also in light of the Covid-19 pandemic (Aypar et al., 2021, Molz, 2021), scholarly inquiry into these specific events is still quite limited. To this extent, this document aims to bridge this gap by drawing upon an overview with valuable insights derived from interviews, and employing a consortium approach with a multidisciplinary team, to broaden the existing literature review. The objective **is to address sustainability within a realm that still has much progress to make**, thereby positioning this analysis as a foundational resource for future investigation on this matter.

³ For more information check: <https://itra.run/About/DiscoverTrailRunning>

The focus on environmental protection has played a significant role in organizing more sustainable races. However, the organization and governance of mountain races exhibit significant variation across different regions and countries. For instance, in the case of Sweden, a Chief at the Skåne Region interviewed, shed light on the unique **Right of Public Access**, a legal principle that grants individuals the freedom to explore and enjoy nature without charge.

This right, known as *Allemansrätten* (in Swedish), allows people to roam, hike, bike, camp, and more on most lands, excluding private gardens and cultivated areas. It emphasizes respecting nature, wildlife, landowners, and fellow nature enthusiasts.

Chief at the Skåne Region

Race organizers, being aware of the possible impact on the environment, are inspired to create events that minimize their ecological footprint, preserve natural landscapes, and foster a sense of responsibility among participants to respect the flora and fauna.

The organisation of an outdoor event involves **certain challenges** since mountain areas must be protected for its environmental richness. Natural locations not only provide attractions for the athletes, but also for their companions and the spectators (Botella-Carrubi et al., 2019). In addition, it is important to consider not only the environmental consequences of these events but also their impacts on **all aspects of sustainable development**, encompassing the economic and social dimensions of the events as well.

Another aspect to take into account is that, in contrast with the structured regulations often seen in standardized road races, the realm of mountain races lacks common standards. Consequently, the **absence** of a globally **unified legal framework** presents some barriers or obstacles to the institution of a certification system for more environmentally sustainable events within this sphere. The interplay of diverse terrains, local ecological considerations, cultural norms, and logistical matters related to the specific context increase the complexity of arranging mountain races with common standards.

As mentioned before, the landscape of trail sports evolved rather quickly and, in the last few years trail running has been growing considerably, either in the number of annual competitions, in number of participants or in financial resources at stake by public actors and the private ones. On the other end, this evolution can be traced also with the emerging ultra-trails that together with mountain trails (Long-Distance Running, LDR) led to the creation of numerous organizations, especially in the US. Nevertheless, in contrast with more traditional sports, trail running still lacks a consolidated body or federation of stakeholders. For instance, ITRA comprises a mix of private event organizers and athletics clubs as members. Among them, the Mountain Ultratrail Running Council organizes its competitions under the auspices of USATF (USA Track & Field)⁴. One of their main

⁴ This organism is working in conjunction with the International Association of Ultrarunners (IAU) under the patronage of the IAAF.

objectives is to develop long-distance running worldwide by encouraging activities in each of the IAAF Continental Areas. As Cernaianu & Sobry (2015) report, the **associations developing trail running** play a very important role in both the management and popularization of this sport, but also in trying to take into consideration common factors (i.e., trail preservation, waste management, participant safety, and ecological impact mitigation) to establish a certification scheme for sustainable mountain races.

1.3. Framework with SDGs and sustainability

Sport plays a pivotal role in fostering sustainable development. The UN recognize its increasing contribution to development and peace by promoting tolerance and respect, empowerment of women, young people, and communities as well as advancing health, education, and social inclusion objectives. As highlighted by Lemke (2016), sport promotes well-being across age, gender and ethnicity and directly supports the achievement of different SDGs including:

- **Goal 3:** Ensuring healthy lives and promote well-being for all at all ages.
- **Goal 4:** Ensuring inclusive and quality education for all and promote lifelong learning.
- **Goal 5:** Achieving gender equality and empower all women and girls.
- **Goal 11:** Making cities inclusive, safe, resilient, and sustainable.
- **Goal 16:** Promoting just, peaceful, and inclusive societies.
- **Goal 17:** Revitalizing the global partnership for sustainable development.

The transformative power of running has the potential to drive social change and create tangible impacts in communities worldwide, aligning with the fulfilment of the Sustainable Development Goals (SDGs). As a result, during the last few years, some initiatives have started to focus on how implementing SDGs at the local scale in the field of sport events. In this sense, the Kilian Jornet Foundation (KJF), as part of the initiative Outdoor Friendly Pledge (2020), produced a guide⁵ that outlines the objectives and tips for achieving the SDGs during the organization of sport events at different levels and for different stakeholders (events, athletes, brands, and federations).

Hence, the integration of the SDGs in the organization of trail races serves as a foundational framework shaping our engagement strategy. Recognizing the importance of aligning with these global benchmarks, the GTC approach seeks to cater to diverse audiences with the aim of extending beyond the mere sports participation and supporting race organisers to reach higher standards in sustainability, inclusivity, and lasting impact.

In the context of discussing sustainability, the subsequent section will delve deeper into the **Triple Bottom Line framework**, a theory that sheds insight on the importance of harmonizing the environmental, social, and economic factors. As emphasized also in the

⁵ More information available here: https://outdoorfriendly.org/wp-content/uploads/2020/10/Outdoor-Friendly-Pledge_EN.pdf

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guidelines of the Skåne Region⁶, these three dimensions offer a comprehensive viewpoint, acknowledging the dynamic interplay among individuals, the economy, and the environment during the planning of events such as a trail race. Building upon this foundation, the GTC project formulates an engagement strategy that respects and values both human and non-human entities.

⁶ More information available here: https://projects2014-2020.interregeurope.eu/fileadmin/user_upload/tx_tevprojects/library/file_1587382131.pdf

2. Engagement strategy methodology

This section serves as a comprehensive guide aimed at fostering heightened environmentally sustainable behaviours within the runner community. It employs a user-centred approach to engagement, focusing on the preferences and needs of the runners, rendering it a valuable resource for race organizers seeking to integrate all participant categories into the blueprint of more ecologically responsible outdoor sports events. More precisely, this section outlines a systematic methodology for formulating engagement strategies tailored to events that aspire to encompass runners' preferences, interests, and their awareness of potential obstacles to long-term participation, incorporating these factors into the final configuration and substance of the initiatives.

The methodology employed in the GTC project to achieve the objectives mentioned above, is structured in 4 distinctive phases, as it is possible to see in Figure 1.

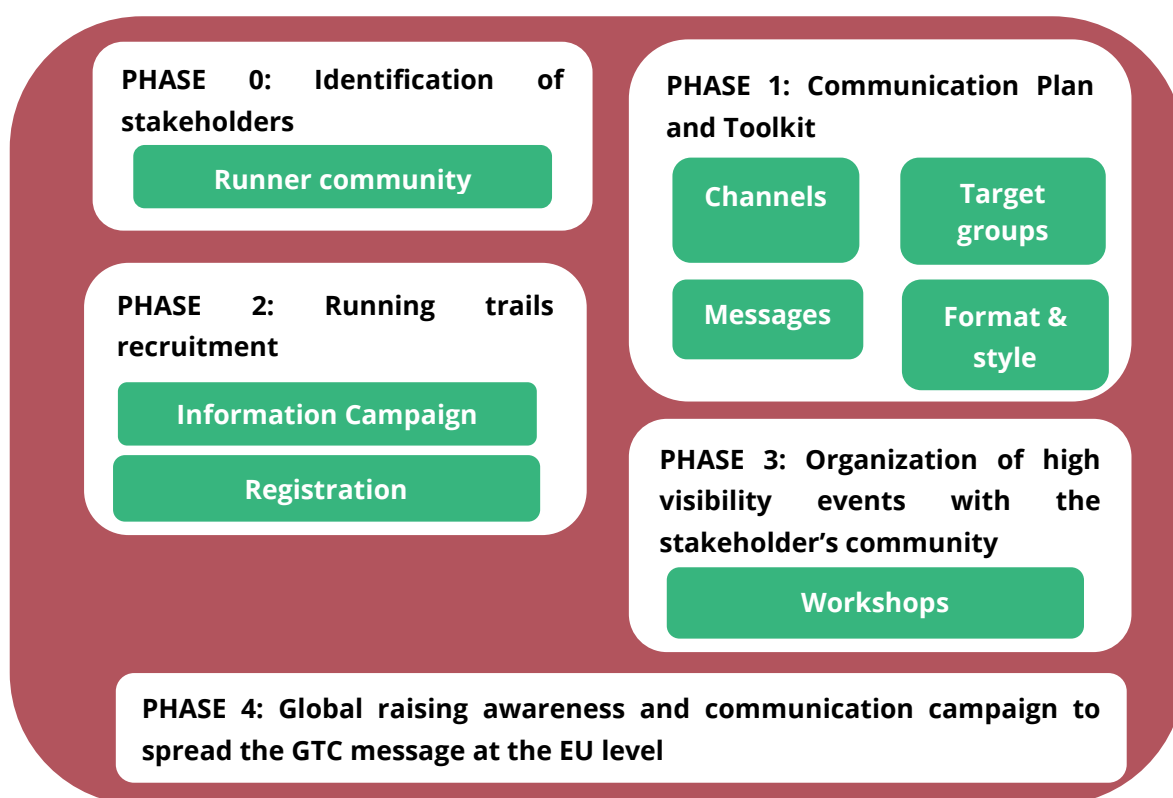


FIGURE 1: ENGAGEMENT STRATEGY PHASES

The following sections of the document: *2.1 Segmentation study* and *2.2 Communication Plan and Toolkit* are the result of Phase 0 and 1 respectively of the methodology. Their aim is to identify all the target groups that will be engaged, the communication channels the messages that can be addressed to them proposing models of format and style, in order to proceed with Phases 2, 3 and 4.

2.1. Phase 0: Segmentation study

To accomplish the objective outlined in the introduction, Phase 0 presents a brief theoretical overview of research conducted on various typologies of runners, highlighting distinct needs, interests, barriers, and behavioural patterns. The typologies of runners has been delineated using macro profiling theories to narrow the primary focus of this study, which centres on trail runners.

Given the distinctive characteristics and diversity inherent in running sports, the classifications derived from the literature review will lay the foundation for delving deeper into the insights offered by experts who have been interviewed. While this perspective does not aim to assert its comprehensiveness, it aligns with the specific objectives of the GTC project as outlined in this document.

2.1.1. Methodology for runners' segmentation

To segment runners, GTC project has used **triangulation**, a research approach that combines multiple sources and methods: 1) existing scholarship, 2) semi structured interviews, 3) post-races surveys examining the perceived experiences of participants of the four trails events (recollecting socio-demographic data) and thereafter 4) the analysis of quantitative data coming from the races that will lead to environmental, social, and economic impact assessment.

This multidimensional approach allows to gather a diverse perspective, validate findings, and gain a comprehensive understanding of the sustainable practices, challenges, and impacts within the trail running community. By using triangulation, the GTC project can **overcome the limitations** and provides a robust and well-rounded analysis of sustainability in trail races that will be used for the validation of the certification.

The GTC and trail running ecosystem comprises **three potential segments**:

- the general audience, encompassing individuals reached by marketing efforts and athletes;
- the host of the races, representing communities and public administrations involved in organizing events;
- and lastly, the event/race organizers.

Four semi-structured interviews have been conducted to ensure a diversity of viewpoints fostering a **holistic understanding of the topic**.

Their purpose was threefold:

1. They provided with an in-depth insight on the values, social norms, and practices that would allow people to participate in a running event fostering sustainability.
2. They constituted a key element to learn about the most successful engagement strategies applied in similar events in both Spain and Sweden and the possible incentives.

3. Furthermore, these interviews casted light on the most effective communication channels through which to engage different social clusters.

The experts have been selected among the list of experts provided by GTC project partners. Specifically, ADP and KJF, as for their knowledge and expertise, suggested the profiles to interview within their network (in Spain and Sweden), that better suit the needs of runners' profiling. These experts have been proposed on the basis of their professional experience in trail runs, races organization and management, marketing strategies, engagement for sport and eco-sustainable events.

Pilot area	Expert interviewee	Contact of (GTC partner)
Spain	Race organiser	KJF
Spain	Elite trail runner	KJF
Sweden	Chief at Operations at the Skyrunning World Series	KJF
Sweden	Chief at the Skåne Region	ADP

TABLE 1: LIST OF EXPERTS INTERVIEWED

Each interview, ranging from 30 to 45 minutes, was conducted with careful consideration of a balanced gender representation. Ecoserveis developed an interview guideline (refer to Annex), addressing specific topics. The guideline encompassed a shared set of fundamental questions, categorized by specific themes, with an additional 4 to 5 questions tailored to each expert's profile to ensure comprehensive coverage. The interviews took place in a virtual setting and were recorded. The significant insights extracted from the interviews were transcribed and inserted in the text to provide some primary source data.

2.1.2. Typologies of runners

The exploration of runner typologies is a significant element in understanding the multifaceted landscape of running culture. As a premise, recognizing that these typologies can significantly vary from one country to another due to a wide range of factors, such as cultural preferences, geographical contexts, and demographic influences is fundamental, despite the nuanced differences between regions and contexts.

Runner's profiling, according to sociological and sport scholarship, is explained in different ways and through typologies classification. According to Yair (1992) and Hallmann et al. (2012) runners can be conceptually categorized in two groups: *professionals* versus *joggers*, and *serious* versus *fun runners*. The first group has a professional approach to running, whilst the latter might be interested in specific aspects of the participation in the sport event. According to this, runners may have different preferences and degrees of commitment (Carmack & Martens, 1979).

As mentioned by Stewart et al. (2003) and Janssen et al. (2020), consumer segmentation in sport events has been widely researched and is based on the **identification of consumers profiles (participants, and spectators) or socio-demographic factors**. Specifically related to participants profiling, scholarship has focused on sport clubs' members, general runners, triathletes, and endurance athletes (Luna-Arocas & Tang, 2005; Chapman & De Castro, 1990; Funk et al., 2007; Johnsgard, 1985; Summers et al., 1983; Clingman and Hilliard, 1987). On the other hand, since trail running is considered as brand-new branch defining the physiological characteristics of its participants is still complex (Ehrström et al., 2018). For its increasing popularity, it has attracted a wide range of runners, "*from amateur athletes to elite-level competitors, and from short distance athletes to ultradistance enthusiasts*", as Molz (2021) defines them in her article. In contrast, general demographic segmentation is used **as gender and age** can significantly change and influence running preferences (Janssen et al., 2020).

Runners participating in trail events in rural and mountainous areas can be classified also according to their **motivations** or **running goals** (if they engage for competition or just for enjoyment), or as for their **experience and frequency** of participation in trails and **skill level** (Alexandris, 2016; Moltz, 2021). For instance, although women's participation in trail races is increasing, female trail runners still constitute a minority for social and safety reasons, while the most common profile is young and master male athletes (Navalta et al., 2018; Moltz, 2021).

Hoffman & Fogard (2012) drew a specific profile of mountain ultramarathon runners: men with a high level of education, middle-aged, married, who often use vitamins and/or supplements, maintaining an appropriate body mass adjusted to their age. According to Baena (2008), in **non-urban environment** most of the runners are males between 26 and 30 years old, single, salaried, or physical education teachers, with university studies, belonging to a club, and who perform daily training and compete at national level. In contrast, in popular races on concrete, the general runner profile is young individual between 18 and 34 years old, with university studies, high or medium-high social class (Llopis & Llopis, 2012; Llopis & Vilanova, 2015).

The scholarly discussions on various conceptualizations of runners provided above cast light on the wide spectrum of meanings and characteristics that contribute to shaping runners' profiles. What can be inferred from this brief literature overview is that **typologies of runners can exhibit slight variations** based on race types and geographical locations, posing challenges in establishing a universally applicable "typical" typology specifically for European runners. Within the context of the two GTC races, significant differences may emerge in the target demographic, potentially manifesting disparities in age groups or heterogeneity in gender participation and distribution.

Due to these variations, the insights of three different experts interviewed are useful to provide more accurate definitions and classifications. All the experts interviewed agreed, with some slight difference, that the profile of runners on average, still consists of around **70% men and 30% women**.

[...] the different population profiles that typically participate in trail running events depend on the distance, which is a significant variable.

However, specifically in long-distance races like ultramarathons, 90% are amateur middle-aged men (35 to 55 years old), predominantly white, from a middle to upper-middle-class background, who participate in trail running events as a way of redemption in life.

CEO of a Trail Running Organization in Catalonia

Although trail running is not gender balanced, the representation of women in this sport has been evolving and, in some races, there has been some a successful effort to achieve a 50/50 participation. Yet, the numbers drop in ultra-running events. As the Head of Operation of an International Elite Race Organization and also trail runner reports, in 2016 there were very few women at the starting line, only 30 to 40 women out of 250 participants. In terms of inclusion, language is the main variable, as in the case of *UltraPirineu* which has a high component of international participants.

One of most relevant variables, according to all the experts interviewed, is also the socioeconomic status, whilst age and gender are more readily available through race classifications. As for level of professionalism, according to the Elite runner interviewed, segmenting professional runners is easier. The Head of Operation of an International Elite Race Organization and also trail runner, profiles runners as follows:

-Athletes at the very top: these individuals have no regular jobs and are sponsored athletes who receive bonuses. Their main focus is on racing and achieving top-level performance.

-Semi-professional athletes: this category includes individuals who still have jobs but also participate in trail running events. Their main focus is not solely on races, as they balance their running pursuits with other aspects of life.

-Fun joggers: these are individuals who participate in trail running events for recreational purposes and enjoyment, without a strong competitive drive.

Head of Operation of an International Elite Race Organization

Trail running events exhibit a clear segmentation based on the type of race, catering to diverse preferences and abilities of participants. The categories include KV/Vertical races, Short Trail/Trail races, Marathons, and Ultramarathons. Each race type presents distinct challenges, attracting runners with varying levels of expertise and endurance. This comprehensive segmentation enhances the inclusivity and appeal of trail running events for a wide range of participants.

As for the easiness of **access** and **data collection**, the experts interviewed report that participation data is quite accessible and can be collected from various studies in magazines specialised on running sports and **surveys**. The latter are typically conducted at the end of the season and are sent to runners through social media or email. Nevertheless, according to the elite runner interviewed, **the best time to collect data is during the race**, as it ensures higher response rates. In recent years, the trail running experts state that the trail running community has witnessed two noteworthy trends:

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- An increase in new and younger runners, particularly in the age range of 20 to 35 years old. This emerging group of runners adds vibrancy and diversity to the sport. Efforts are being made to support and encourage young runners to nurture their interest in trail running.
- And a sort of rejuvenation in longer races, as a matter of fact the predominant portion of runners in these events falls within the 30 to 50-year-old age group.
- Low tolerance but growing interest in trail running, like for example in older women (55+). This trend exhibits a limited capacity for intense physical exertion but still an increasing engagement and passion to participate.

Head of Operation of an International Elite Race Organization

However, it should be noted that in more professional teams, age and participation patterns differ. In such elite settings, the demographic dynamics may not strictly follow the broader trends observed in the wider trail running community.

The classifications derived from the literature review gain further validation through the insights provided by the interviewed experts. Key variables highlighted in this process include race distance, gender, age, income, level of professionalism and type of race. This information is useful to draw a comprehensive understanding of the diverse social segments interested in trail running and their willingness to participate.

Therefore, with the aim of aligning with the GTC's specific standards and communication toolkit, a common macro clusters classification will be adopted according to the level of practice as identified by both the aforementioned authors and interviewees. This adaptive approach ensures that the engagement strategy and communication plan cater in an efficient manner to the specific needs and preferences of the target audience within the trail running community.

2.1.3. Motivations, behaviours, and implications to participate

Since directly related to the different types of runners, motivations that drive individuals to participate in running events must be explored. Previous research on trail races has already brought attention to the positive aspect nature induces (Ogles & Masters, 2000). Studies examining the **engagement and motivation** of runners have revealed that essential factors encompass not only the aspiration to achieve victory, but also participants' physical well-being, pushing oneself beyond limits, or enhancing mental health and self-esteem (Lamont & Kennelly, 2012; Ogles & Masters, 2013). Moreover, the social aspect of connecting with individuals with common interests and establishing relationships with peers is also a noteworthy aspect (Masters & Ongles, 1993).

The motivations behind participation in trail running events lack consensus among scholars (Lamont & Kennelly, 2012) and it is not obvious why individuals choose to engage in this sport. For instance, various motivating factors have been identified for marathons runners including mood control, self-concept enhancement, fitness/health and psychological well-being, competition, weight control, and social status. This extensive range of potential motivations suggests that marathon runners are unlikely to be a homogeneous group in terms of motivation (Ogles & Masters, 2003). For such reason,

analysing patterns or profiles of motivations using a combination of variables can help identify differences among runners.

Within the literature focused on endurance sports, the **physical advantages** of exercise emerge as a prominent theme. These advantages encompass weight loss, improved body image, and the maintenance of physical fitness. To this extent, **mental well-being** has been identified as a motivation among participants both in endurance sports and specifically trail running events. Engaging in physical contests and pursuing performance-related goals have been found to be significant reason in some studies.

However, it has been suggested that **competition** as a motivation may be less prevalent among older athletes (Lamont & Kennelly, 2012). On the other hand, **social benefits**, such as ego-enhancement, sociability, and improved status seem to be more valid motivations among older athletes. The construction of a **social identity** and the enhancement of social status have been recognized as drivers for participation in running events (Lamont & Kennelly, 2012).

Despite the existing general approach towards understanding the motives of trail runners, **there is a need for further exploration of variations in motivational factors** among different sub-groups of runners. Age, for instance, has often been ignored as a potential motivational variable. Recently, a self-report tool has been developed to measure running motives, comprising nine internally consistent scales: health orientation, weight concern, personal goal achievement, competition, life meaning, psychological coping, self-esteem, affiliation, and recognition.

By improving measurement precision, examining the specific running sub-groups, and acknowledging the multifaceted nature of motivations, significant progress can be made in advancing the methodologies used to study the motivations of runners (Ogles & Masters, 2000). In this sense, in another study, the same authors claim that further investigation of how the motivations match with the psychological aspects of runners is needed to better target sustainability aspects (Ogles & Masters, 2003).

To this extent, the **general categories and scales for the motivations** elaborated by Masters & Ongles (1993) result to be a good baseline to adjust to the specific needs of the GTC project. Furthermore, building upon the indicators that will be outlined in *D2.1 Data collection methodology and indicators* and particularly focusing on the third environmental pillar, Table 1 below introduces a fifth category specifically designed to measure **environmental reasons**.

General Category	Scales
Physical Health Motives	Health Orientation
	Weight Concern
Social Motives	Affiliation
	Recognition
Achievement Motives	Competition
	Personal Goal Achievement

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Psychological Motives	Psychological Coping
	Self-Esteem
	Sense of purpose
Environmental Motives	Connection with nature
	Discovering new places
	Adventure spirit

TABLE 2: GENERAL CATEGORIES AND SCALES FOR RUNNERS' MOTIVATIONS

The decision to include this category is based on a distinct observation derived from the interviews, where all the experts unanimously emphasized the high significance of environmental factors in motivating runners to participate in trail running events. The scales within this category primarily gauge participants' connection with nature and its influence on their engagement in the sport.

Among the scales discussed in Masters & Ongles' study (1993), the one most emphasized by the interviewed experts is "recognition", which is closely tied to the influence of social media. Additionally, one of the experts interviewed proposed two distinct groups for runner segmentation based on their motivations. The first group comprises individuals aged over 30, who engage in trail running to challenge themselves physically and improve their overall health, while also seeking a closer connection with nature. In contrast, the second group consists of younger profiles who often come from other sports and aim to achieve impressive performances in trail running.

2.1.4. Impact on communities of sustainable sport events

Sport events are commonly used in the **tourism** industry to enhance the visibility and attractiveness of destinations, generating a positive impact on economic and social development. As Maditinos & Vassiliadis (2020) and the United Nations (2020) highlight, these events attract tourists, and as consequence constitute an impulse to increase tourism revenues and while contributing to the overall welfare of the destination location.

To this extent, communities host sport events for three main reasons: to provide local entertainment, to enhance community pride, and to stimulate spending in the host economy (Turco, 1997, Daniels & Norman, 2010).

In general terms, sports events have become an integral component of the policy agendas of host communities to achieve a diverse range of economic and social advantages (Ziakas & Boukas, 2020), such as an increased visitor expenditure and the need for infrastructure and facilities development (Plevnik et al. 2015). These two aspects enhance the region or specific locality's reputation particularly in medium-sized communities that contend with larger communities bidding to host sporting events.

As per the Chief at the Skåne Region responsible for hiking trail development, successful race organization relies on strong communication across all stakeholders. In the context of Sweden, where the Right of Public Access is upheld and a significant portion of land

remains privately owned, the need for comprehensive communication becomes fundamental. Communication aims to synchronize recreational land usage with the tenets of sustainable development, fostering a unified approach aligned with policies.

Research indicates that sports events offer notable **social and economic benefits** such as increased sense of community, instilling local pride and nurturing community spirit (Crompton & McKay, 1994; Thrane, 2008). Moreover, these events contribute to increasing the economic advantage, through the distribution of expenditure across multiple sectors such as restaurants, transportation, lodging, entertainment, and other support services (Crompton and McKay, 1994).

As a counterargument, the Chief at Skåne region stated during the interview that although trail races can potentially contribute to the socio-economic well-being of the communities, with a proper implementation and community involvement, it is not an innate outcome. The case of Sweden, although being quite unique sheds light on the importance of giving incentives to the communities involved:

Although the lands in which trail races are organized are substantially private, these do not generate economic advantages or incentives due to their public utilization. It is vital to establish productive communication with landowners and find feasible solutions for remuneration, as for instance allocating a portion of earnings as compensation.

Chief at the Skåne Region

Specifically related to the economic benefits of macro sports events, scholarship has significantly focused on the **social impact**, meaning non-monetary benefits produced on the residents in local communities as Hautbois et al. (2020) and Parra-Camacho et al., (2020) report. Among the most investigated social impacts, there are: tourism promotion, encouraging sport, fostering community development, urban regeneration, and environmental infrastructure, and improving the overall quality of life in host communities (Ziakas & Boukas, 2020) or the subjective well-being, and the social capital (Wallstam, Ioannides & Petterson, 2020).

Following up on the social impact of events, they can be interpreted through the **social exchange theory**, based on the suggestion that we can measure large-scale social impacts by looking at the respective small-scale social exchanges between individuals and their surroundings (Ap, 1990; Emerson, 1976; Wallstam, Ioannides & Petterson, 2020). In other words, if the residents of the community hosting a mega-event perceive the individual benefits derived from the ongoing event, equal or greater to the personal costs imposed by such event, they will be more inclined to view an overall positive social impact (Wallstam, Ioannides & Petterson, 2020). Another interesting point of view to analyse social impacts is given by the **social representation framework**. This theory suggests that host communities collectively construct and share local knowledge regarding external visitors or an event. As a consequence, they shape an image or a specific way according to which they represent themselves. The shared image that host communities create of external visitors or the event itself, since the social representation

suggests that members of a society collectively create and share local knowledge (Wallstam, Ioannides & Petterson, 2020).

The two theories reveal a critical aspect concerning the impact of an event, specifically emphasizing the role of an individual's perception. The elite runner interviewed further supports this notion by asserting that the **positive or negative impact of a race is intimately connected to how each participant perceives it**. When an event is organized in collaboration with the local community, taking into account their interests and concerns, the impact tends to be positive. In contrast, if the event is externally organized without due consideration for the community's involvement, it may lead to a negative impact. This underscores the significance of community engagement and inclusivity in event organization to ensure a positive and meaningful experience for all involved.

Engaging the community becomes feasible by taking into consideration the organisation of such sport events. A successful example is the *Österlen Spring Trail (former Eko Trail)* organised in Sweden, an example for a best practice of a rural community positively impacted by hosting a race. In Sweden, given the significant summer tourism, the races are strategically scheduled for spring. This not only optimizes the events but also opens avenues for local businesses to actively participate in their execution.

Chief at the Skåne Region

Few studies have focused on the impact of trail running races on the **environment** (Getz & McConnell 2014; Ingles et al., 2016; Brymer et al. 2009) and there is apparently limited understanding of how organizers of trail races promote sustainable development of these areas (Ng et al., 2018). Some scholars have shed light on the need for specific regulations for sports activities in natural areas to ensure their sustainability (Havlick et al. 2016).

Lastly, to provide a more holistic literature overview of the impacts of a sport event, the **TBL framework (Triple-Bottom-Line)** elaborated by the consultant John Elkington will be taken into consideration. Elkington (2008) in its framework distinguishes between the **three pillars of sustainable development**, assuming that it is desirable to achieve positive outcomes within all three areas since they directly and indirectly influence each other. For example, a short-term environmental cost in the form of air pollution, can translate into long term social and economic costs in the form of poor health amongst community residents (Elkington, 2008 & Wallstam, Ioannides, Petterson, 2020). To conclude, the Elkington TBL framework seem to perfectly match with the GTC project values, and hence has been taken as baseline to both investigate trail running impacts and dive into a more detailed definition of the three pillars.

2.1.5. Remarks on runners profiling

To conclude these preliminary findings, considering the comprehensive bibliographic search and the insights gathered from the interviews, the most prevalent variables that should be taken into account when categorizing runner profiles are:

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The three interviews with race organizers revealed a consensus that **the most typical profile of non-elite trail runners comprises middle-aged, men with upper-medium income**. This observation could be attributed to the financial limitations that races may pose for many potential participants, given the substantial costs involved. Despite efforts to achieve gender equality in trail races, there is still a disparity in women's participation.

The interview with a local community representative, shed light on various factors that need consideration like establishing **collaboration among different administrative levels**, ensuring **effective communication** with significantly impacted individuals such as landowners, accounting for potential delays in acquiring administrative permits, and aligning event timelines with sustainable practices. Additionally, the creation of a certification framework should align with the sports and event organization policies within the country while maintaining a clear purpose.

Establishing a universally applicable event framework is challenging, given the need to balance participant enjoyment with the preservation of flora, fauna, and community well-being. This is particularly complex when organizing events in ecotourism-focused areas.

The literature overview and qualitative data extracted from the interviews highlighted a diverse range of motivations associated with mountain race participation. Among these, a significant topic was the **deep connection with the mountains** and the sense of belonging to nature, driving runners to prioritize the preservation and conservation of these natural environments. Table 3 serves as a summary of the analysed variables, which will guide the GTC consortium in developing messages and strategies to enhance environmental awareness among trail runners.

VARIABLES	Measurement	RUNNERS' CLUSTERS			
		Novice trail runner	Casual trail runner	Intermediate trail runner	Advanced trail runner
Socio-demographics					
Gender	Male/Female/Other				
Age range	youth, adults, or seniors				
Education	High school, College/University				

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Socio-economic capital⁷	Low income, lower-middle income, upper-middle income, high income				
Skills and training					
Race distance	short, medium, or long distances.				
Training level	Leisure, fitness, competition				
Training frequency	<1 week, 2 a week, >3 week				
Trail races participation	<1 year, 2 a year, >3 year				
Motivation					
Physical Health	Health Orientation; Weight Concern				
Social	Affiliation; Recognition				
Achievement	Competition; Personal Goal Achievement				
Psychological	Psychological Coping; Self-Esteem; Life Meaning				
Environmental	Strong connection with nature; responsibility to protect and preserve; Sustainable Practices (willingness to reducing waste, minimizing ecological impact, and promoting eco-friendly practices)				

TABLE 3: GTC RUNNERS' SEGMENTATION METHODOLOGY

To conclude, the process of runners' segmentation is complex due to the multitude of factors to be considered. To gain deeper insights, it would be valuable to undertake comprehensive **monitoring** of all races, not just the most professional ones, to gather data on diverse participant profiles and motivations.

2.2. Phase 1: Communication Plan and Toolkit

The segmentation study on trail runners, coupled with the typologies, motivations, and impact on communities identified through the literature overview and interviews, represents the foundation for developing a comprehensive communication plan and toolkit within GTC project. By understanding the diverse profiles of trail runners and their intrinsic motivations, the communication strategies can be tailored to resonate with specific audience segments, effectively engaging them in the events that will be organised during the project.

Moreover, the insights into the positive impact of community involvement in event organization underscore the significance of fostering strong relationships with host

⁷ This specific socio-demographic indicator may vary according to the average income ranges in the selected country.

communities to ensure a mutually beneficial and sustainable approach to trail running events. The methodologies used to gather data and analyse participant behaviours and marketing strategies help in tailoring targeted messages fostering a higher level of engagement.

The **communication toolkit and strategy** consists in a series of communication guidelines, messages and materials that are available for trail running event organizers, local municipalities and other relevant stakeholders willing to reduce the environmental, social, and economic impacts of trail running events by successfully achieving the following communication objectives:

- **Raising awareness** about these impacts and promoting good practices among participants (runners), audience, race organizers, local municipalities, and other relevant stakeholders.
- **Ensuring the active participation of the runners and audience** in indicator monitoring surveys that allow for quantification and subsequent correction of the impact of the trial running events.
- Identification of **barriers and opportunities** for the improvement of the sustainability of the trail running events.

To ensure the effectiveness of this communication plan and toolkit, careful consideration has been given to the insights gained from the interviews with experts. These references have played a key role in shaping the key elements of the plan, with a focus on the most relevant aspects such as communication channels, messaging strategies, and influencer engagement.

By integrating the perspectives and recommendations of experts, the plan aims to leverage the most effective channels to reach the target audience, propose compelling and resonant messages, sustainability and environmental awareness within the trail running community.

2.2.1. Target groups and communication channels

The communication objectives are to be attained using the following communication channels:

- Through the organization of workshops, co-creation events and face-to-face meetings that allow for the creation of spaces for discussion and sharing information with stakeholders, providing the opportunity among stakeholders to raise awareness, identifying barriers and opportunities for improvement.
- Through media channels (website, social media, press, newsletters, mailing, etc.) that will allow for the dissemination of:
 - Awareness messages that call for action and change.
 - Messages calling for the participation in the before mentioned workshops and monitoring surveys.

To ensure effective communication, it's essential to choose the right communication channels that will best resonate with and reach the intended target audience. The target groups and their relative communication channels are described below and in Table 4.

Runners:

As participants of the race events, their decisions regarding transportation and consumption have a clear effect into the overall environmental, social, and economic impact of the race. Therefore, to minimize the events' impact, it is essential to establish communication channels to raise awareness among them and ensure their participation in the monitoring of their impacts.

Runners have access to **specific communication channels (mailing, newsletters, specific social media profiles and influencers, social media groups, etc.)** that facilitate interaction with the event organizers. These channels are used in the pre-event phase to communicate useful guiding information for the participation, and in the post-event phase to share the outcome and visual content. Runners have a very high engagement with these channels, as it is in their interest to be informed about all the news and latest developments in the organization of the event. The specificity and high engagement of these channels can be exploited to share relevant messages about awareness, call to action, and participation in indicator monitoring. Using these specific channels with the runners, allows the messages tailoring to different runner profiles, leading to increased engagement. When adapting these messages some of the most important aspects to consider are:

- The sociodemographic profile of the runners (i.e., gender, age, education, and employment).
- The skills and training (i.e., training level, motivation, running modality, years of participation)
- The motivations for practicing trail running and participating in the races (i.e., physical health motives, social motives, achievement motives, psychological motives).
- The runners' nationality: this includes not only adapting the messages to the national and regional languages, but also adapting and aligning them to the national and regional culture to ensure the appeal to the public (i.e., using the appropriate cultural references, shifting the focus to culturally relevant issues).

Audience:

The audience encompasses fans, families and friends of the runners who will take part in the trail running events. Therefore, their transport and consumption patterns contribute to the overall impact of the events in a similar way as the runners do. The communication with the audience is done through more **general channels (website, social media, press)** that have a lower engagement rate than with runners. Therefore, tailored messages to general audience is not as effective as with runners.

Event organizers:

Engaging event organizers in the sustainability improvement of trail running races is crucial, as they are the main decision makers responsible for the design and organization of the race, thereby significantly determining the race's environmental footprint. **Networking** is the main and more successful way to reach and engage event organizers. The following tools are recommended for reaching out to race organisers:

- **Mailing:** Making personalized mails (phone or videocalls) and creating a list of contacts to keep track of the communication. Using newsletters is also an option if the newsletter mailing list is very targeted towards event organizers.
- **Face-to-face meetings, workshops, and presentations in conferences:** Organizing meetings and workshops where to communicate the messages in a more personal way to a targeted audience. Also, events and conferences involving trail running event organizers and sports organizations are a very good opportunity to present the messages to a targeted audience. In these cases, the communication is bidirectional, being a good opportunity to gather information on barriers and opportunities.

Local municipalities and policy makers:

Local municipalities and other governmental entities are directly involved in the organization of the trail running events by providing the permits required for their celebration, sponsoring them, or even co-organizing them. Therefore, they share decision making power in the process of design and organization of trail running events, also determining the impact of the event. It is important that local authorities are well informed and aware of the impacts of the trail running events, so they can properly define the conditions under which the events will be held. As for event organizers, **networking** is the main and more successful way to reach and engage local municipalities, so the same communication tools are used: contacting local municipalities by mail or phone, and organizing meetings, workshops and informative events or sessions.

Other companies and organizations:

Other companies and organizations are involved in the celebration of sport events: sponsors, providers, sport federations, local associations, protected areas' managers, etc. It is important to communicate with them to ensure that they aligned with the sustainability values of the events' organization. The celebration of **face-to-face meetings, workshops, and mailing exchange** are the main channels to raise awareness among these relevant stakeholders and ensure their engagement in the sustainability objectives of the trail running events. On the other side, **general communication through social media, website, press, and newsletter** is also useful to highlight and assert the values of the planned trail running events and to show off the positive results, so these stakeholders can be influenced and motivated to participate and engage in good practices.

Influencers and ambassadors:

Influencers and ambassadors have a big impact in the awareness of runners and audience of trail running events. If they share the sustainability values of the event and

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the organizer, they can inspire runners and audience to take the more sustainable decisions when participating in the event. Influencers and ambassadors can be prospected and contacted through social media and mailing.

It is essential to ensure their participation in face-to-face meetings and workshops to raise their awareness and ensure their engagement in the sustainability objectives of the trail running events. On the other side, general communication through social media, website, press, and newsletter is useful to highlight and assert the values of the planned trail running events and to show off the positive results, so these stakeholders can be influences and motivated to partner and support in the dissemination of the good practices.

TARGET GROUPS	COMMUNICATION CHANNELS
Runners	<p>Main Specific communication channels: mailing, newsletters, specific social media profiles and influencers, social media groups.</p> <p>Secondary Website, press and newsletters.</p>
Audience	<p>Main Social media, website, press and newsletters.</p>
Event organisers	<p>Main Personalized mails, phone and videocalls, targeted newsletter mailing lists. Face-to-face meetings, workshops, and conferences.</p>
Local municipalities and policy makers	<p>Main Personalized mails, phone and videocalls, targeted newsletter mailing lists. Face-to-face meetings, workshops, and conferences.</p>
Other companies and organisations	<p>Main Personalized mails, phone and videocalls, targeted newsletter mailing lists. Face-to-face meetings, workshops, and conferences.</p> <p>Secondary Social media, website, press and newsletters.</p>
Influencers and ambassadors	<p>Main Personalized mails, social media messaging, phone and videocalls. Face-to-face meetings, workshops, and conferences.</p> <p>Secondary Social media, website, press and newsletters.</p>

TABLE 4: TARGET GROUPS AND COMMUNICATION CHANNELS

2.2.2. Key concepts and messages

A series of messages are presented responding to the forementioned dissemination goals: raising awareness, ensuring active participation in indicator monitoring, and identifying barriers and opportunities in trail running sustainability. The messages are adapted to the different target groups and are organized in key awareness concepts (transport, waste, protection of biodiversity and mountain activities, socioeconomic aspects, general sustainability, etc.). By fitting the interests and context of each group, the effectivity in the engagement of the messages is increased.

The **messages** are presented in a short text format that fits approximately to a Tweet length. They are **designed as templates** to be adapted to the different communication channels, by modifying their length, format and accompanying information, emoticons,

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hashtags, visuals, and other information. These message templates present the essential information to speeding up the design process for building the final communication products. They also incorporate the key awareness messages, as well as different expressions and sentence structures to be used in the final communication products. Finally, some recommendations will be provided for optimizing the practical usage of these templates and offer guidance on important considerations to keep in mind when disseminating information.

Runners and audience

The messages for runners and general audience are designed to make them aware of the impacts of a conventional trail running race and motivate them to collaborate and participate in reducing the environmental impact of the race. The participation in a sustainable trail running event can be used also as a call for participation of runners.

Race call engaging phrases for runners (RC01):

By participating to [race name], you will be contributing to [X]!

Help us protect the mountain environment, participate to [X]!

Do you want to participate in a low environmental impact race? Sign up for [X]!

Transport messages for runners (TR01)

Did you know that if you use private transportation to come to the race, you will be producing up to [X] more of CO₂? Use public transport or share your car and help reduce the [race name] environmental footprint!

Are you coming by car? By using public transportation, you can greatly reduce your CO₂ emissions and minimize the [race name] contributions to Climate Change.

Do you come the [race name] alone? Share your car! Reduce your CO₂ emissions. Here are some car-sharing options: [list the options]

Transport messages for audience and interested stakeholders (TR02):

By avoiding private transportation, participants, and audiences of the [race name] can cut [X] CO₂ per person and contribute to reducing the race's environmental footprint!

The [race name] will take place this next [XX/XX/202X] and wants to fight Climate Change. Participants and audiences can help by using public transportation and greatly reduce their CO₂ emissions!

Car-sharing options are available for both runners and audience coming to the [race name]! Together let's reduce CO₂ emissions!

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Waste messages for runners (**WM01**):

Participating in the [race name] means to be part of some of the [mountain name] greatest landscapes! Help us keep them as clean as you would like them to be. Leave no trace behind.

Don't allow your rubbish to end in the middle of the mountain or in a landfill! For the [race name] we have prepared recycling bins, please use them, and help us protect the mountain that you love and enjoy.

The [race name] uses minimal trail marking to avoid any kind of pollution and disturbance to the environment. Download the track digitally via our platform, and you will be helping us to protect these precious mountains!

Waste messages for audience and interested stakeholders (**WM02**):

Using the recycling bins disposed in trail running races is fundamental to help protecting the mountains that you love and enjoy. Don't allow your rubbish to end up in the forest or in a landfill!

The [race name] takes place in some of the [mountain name] greatest natural environments. Let's work together to preserve them! Keep them as clean as you would like to find them. Leave no trace behind.

Using minimal trail marking in trail running events contributes to reduced pollution and disturbance to the mountain environment. During the [race name], runners are downloading the track digitally via our platform to help reduce waste!

Waste common messages (**WM03**):

In the [race name], always refill! Avoid single use water bottles!

Not only cigarettes can start a fire! Don't throw litter in the mountains! Remember to always keep the tracks clean, during the [race name] and beyond! Let's protect what we love!

Did you know that the [race name] uses recycled [materials' name]? If you are coming to the race, do like us! Avoid using single use products and recycle all your litter!

Protection of biodiversity and mountain activities messages for runners (PB01):

Did you know that you will be running in a protected area? Help us protect the flora and fauna of this special place that you will enjoy! Together we will be respectful towards plants and animals and minimize any disturbance!

Do you know about erosion? If you want to preserve the landscape for the next generations of runners, stay on the path! By staying on the trail, we will allow future [race name] runners to enjoy the mountain as fully as you do!

Protection of biodiversity and mountain activities messages for audience and interested stakeholders (PB02):

Did you know that some trail running events take place in protected areas? Help us protect the flora and fauna of these special places that you enjoy! Together we will be respectful towards plants and animals and minimize any disturbance!

The [race name] uses already existing trails for its track! This contributes to preserve the mountain environment from the erosion caused by the impact of sneakers on the ground! Not stepping out of the track means preserving the mountain for future generations!

Are you coming to the [race name] to watch family and friends participate? If you are coming with your dog, keep it on a leash! Make sure not to disturb the cattle and the shepherds' work!

Socioeconomic impact messages for runners (SE01):

By participating in the [race name], you are contributing to social justice! This event promotes the access and participation of people at risk of discrimination or with low income!

By participating in the [race name], you are contributing to [project name] project/initiative! [X]% of your inscription fee goes to financing [project name] project/initiative.

Are you excited for running in the [race name]? You don't have to visit it only for racing! They will be waiting for you with open arms! Check these local options for a fantastic holiday: [local options list]

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Socioeconomic impact messages for audience and interested stakeholders (SE02):

Trail running races can contribute greatly to social justice by promoting the access and participation of people at risk of discrimination or with low income! You can promote social inclusion by supporting races that share these values!

The [race name] is contributing to [X] project/initiative! Thanks to this contribution, the [race name] helps with (the development of rural areas / social inclusion / fighting gender inequalities /...).

The [race name] will take place in [mountain name]! But you don't have to visit it only for racing! They will be waiting for you with open arms! Check these local options for a fantastic holiday: [local options list]

Socioeconomic impact common messages (SE03):

We hope you enjoy the [race name] and your stay in the [mountain name]! For a fuller experience, GO LOCAL! Try the local cuisine, buy local products, and choose green tourism alternatives! Thanks for participating in the development of mountain and rural areas!

The [race name] has been organized with the contribution of the local community. All the suppliers are local! Be part of it and buy local! Let's contribute to the local development of rural and mountain areas!

General sustainability messages for runners (ST01):

Are you running in the [race name]? By participating in the race, your environmental footprint will be lower than in other races and you will be helping to develop new measures for improving the sustainability of trail running races. Be part of it and take action!

The organizers of the [race name] want to improve its environmental, social, and economic impact! Help them! Be respectful with the environment and buy local!

Do you want to know the environmental footprint of the [race name] and how much have you contributed to it? Are you interested in how well the race has done in its quest for sustainability? Follow us on social media and sign up for the newsletter to access all the graphs and statistics!

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General sustainability messages for audience and interested stakeholders (ST02):

Did you know that the [race name] is working to reduce its environmental footprint and is participating in a program for the development of new measures for the sustainability of trail running races? Help us! Take action!

The organizers of the [race name] want to improve its environmental, social, and economic impact! Help them! Be respectful with the environment and buy local!

Do you want to know the environmental footprint of the [race name]? Are you interested on how well the race has done in its quest for sustainability? Follow us on social media and sign up for the newsletter to access all the graphs and statistics!

Gender equality and inclusion messages for runners (GE01):

Trail races are not just about conquering nature's challenges, they're also about breaking free from boundaries and fostering a community where everyone thrives. Hit the [race name], break barriers, because gender has no limits! Let's run for equality together!

Are you into trail running but also committed to preserving our planet? Join our community of like-minded women who channel their passion for trail running into environmental action. Come to run in [race name] and make a positive impact together!

Picture yourself enjoying a run while your kids have a great time at [race name]'s kindergarten! Join [race name] for a family-friendly trail race. Together, we can make trail running easy for families, removing gender obstacles, and helping with family responsibilities.

Gender equality and inclusion messages for audience and interested stakeholders (GE02):

[race name] and [stakeholder name] are envisioning trail races as catalysts for gender equality! We're working to make family-friendly trail races a reality, empowering moms, and nurturing kids' love for nature. Stay tuned!

Everybody counts! All races and categories are equally important! Show support for all participants! [race name] welcomes everyone! Let's fight together discrimination!

Did you know that more women are embracing trail races than ever before? [available stats] women took part to the last [race name]! Come to [race name] to show your support!

Event organizers, local municipalities, and policy makers

The messages and key concepts for organizers and local municipalities are designed to make them aware of the impacts of trail running events, increase their interest in becoming more sustainable, and give them solutions and strategies to succeed in achieving this objective. The messages are focused in motivating their participation in workshops and meetings where the topic can be developed further, and they can acquire a better knowledge on how to improve the sustainability when organizing trail running events. The messages are composed by a **catch** and a **call**.

Catch

Travel & Waste

- * Did you know that a trail running race can produce up to [X] of CO₂/waste? Let's learn how to reduce them/it!
- * Did you know that you can save up to [X] of your race's CO₂ emissions / waste production by applying some simple sustainability measures?
- * Have you ever wondered how much waste produce the trail running events you are organizing?

Social economic impact:

- * Do you want your race to make a positive impact to rural and mountain areas?
- * Do you want your race to contribute to the development of rural and mountain areas?
- * Discover the potential of trail running races for integration and social inclusion!
- * Local businesses are thriving to partner with you in the organization of mountain trail races! Make the step towards social sustainability!
- * Promote local businesses and ecotourism options to your attendees! They will be more satisfied, and you will contribute to the preservation of the mountain

Protection of biodiversity & mountain activities

- * Are you concerned about the preservation of mountain areas? Do you agree there is another way to approach trail running mountain events?
- * No mountain, no trail running! How to preserve the environment that you depend so much on?
- * Are you aware on the effects of trail running races on wildlife and protected areas? Are you respecting them? Do you want to contribute to its preservation?

General sustainability

- * Making you race more sustainable, will not only attract more runners to participate, but also will contribute to preserve the mountain environment and the local communities!
- * Did you know that you can save up to [X] % of your race cost by being more sustainable?
- * Are you worried about the (environmental impact/CO₂ emissions/...) of your race?
- * Without the mountain, its nature and the rural communities that keep it alive, no trail running race could be possible! Contribute to preserve them! Make conscious decisions when organizing trail running events!
- * Are you struggling to minimize the impact of your race?
- * Another way is possible!
- * Position yourself as a referent for sustainability in the sector of trail running events! Grow your network!

Call – specific for workshop / conference / meeting

- * Participate in the [X] workshop to learn how to make you race more sustainable!
- * Join the [X] workshop and learn how!
- * Do you want to know how to [X]? Come to the [X] workshop!
- * Come to the [X] workshop and we will explain you how!
- * In [X] workshop we will teach you how to...
- * We will show you have in the [X] workshop!
- * The [X] workshop...
 - o will provide you with all the information necessary to make your race more sustainable.
 - o will guide you to overcome the challenges faced for the sustainability of mountain running events.
 - o will be an opportunity to meet relevant stakeholders of the sector and work together to define sustainability solutions.
 - o will allow you not to get left behind in the sector as you will be able to network with relevant actors working in sustainability in trail running events.

Other companies and organizations, influencers, and ambassadors

Messages for other companies and organizations involved in the organization (like suppliers, sponsors, etc.), and also for influencers and ambassadors, have to make sure that they are aligned with the sustainability values of the trail running race events. These messages will be focused in making them aware about the sustainability challenges of the sector and the impacts of the trail running events, as well as they will allow for motivating the participation of these stakeholders in workshops and informative sessions for a more in-depth engagement in sustainability actions and to motivate them collaborating in the promotion and organization of the race and its values.

- **Awareness:** the same messages as for runners and audience are to be used, focusing on raising awareness among influencers and ambassadors.

- **Engagement for participation in workshops and informative sessions:** the same messages as for race organizers and local municipalities can be used, adapting them to the target.

2.2.3. Dissemination recommendations

When adapting the messages defined above to suit the **format** and **style** of various communication channels, users of the toolkit should consider several key aspects. The following **specific guidelines** will serve this objective for each communication channel.

General communication recommendations

Choose wisely the messages and the channels by identifying the target group.

Adapt the given messages to your needs and to what you want to convey. It is recommended to select concepts, elements, and expressions from several of the proposed messages in the toolkit and **combine them with your own messages to create your own content**.

For articles in blogs and newsletters, extend the length of the messages by elaborating more deeply into the different key concepts and by researching information to complement them (i.e., explaining about the trail running context and its relationship with the environmental, social, and economic pillars of sustainability, delving into sustainability initiatives in trail running like GTC...). **For visuals and social media posts**, if necessary, the messages can be simplified to the point of using the very basic key concepts (i.e., "Protect flora and fauna", "Use reusable bottles", "Go local", "Choose sustainable tourism options", "Everyone counts in this race" ...).

Address directly the reader by writing in the second-person perspective to create a more compelling message. **Be careful not to be overly imperative**, avoid coming across as angry or bossy, and avoid from introducing guilt to the reader.

Put your message in a positive light: avoid criticism. **Use constructive messages that emphasize room for improvement** rather than implying wrongdoing in sustainability efforts. Again, keep a positive tone that doesn't make readers feel guilty for their actions.

Use call-to-action: encourage the audience to join an event, to take sustainable actions, to search for more information on sustainability in trail running, to explore further initiatives like Green Trail Concept, etc.

When sharing images, make sure always to **respect the copyright** and the ownership by mentioning the authors or avoiding publishing images that you are uncertain about owning the rights to use them.

Make sure to respect the European and national data protection regulations. Inform yourself properly about these regulations and apply them. Always **obtain the necessary consent** from individuals when sharing a photo that you have taken.

Newsletter and blog recommendations

When including the messages in a newsletter, keep them concise and **develop them into a fuller extent in an article to be accessed** in the newsletter through links and call-to-action buttons.

Accompany the messages with images and infographics that make the newsletter more visually appealing and that flash out the topics discussed. Use compelling images and include short texts in the visuals that allow for the viewers to quickly identify the messages.

When using the messages to write articles for newsletters and blogs, make sure to use **short and comprehensible headlines and section headings** to allow the reader to easily identify the topics covered in the different article sections and to grab its attention. Also, make sure to **write an engaging introduction** that hooks the readers in continuing reading the articles.

Include **links to resources to allow the viewers to access additional information** about the discussed topic. Use call-to-action buttons to access these resources and for the readers to be able to sign up to the newsletter or blog notifications.

When mentioning and communicating about the Green Trail Concept project or any related event and output from the project, make sure to **add a link towards the [Green Trail Concept website](#)** and invite to sign up to the Green Trail Concept blog notifications through the same website. When sharing visuals created by the Green Trail Concept project, make sure they **include the project logo and EU logo and disclaimer** that can be found in <https://greentrailconcept.eu/>.

Social media recommendations (Twitter, Instagram, Facebook, LinkedIn, etc.)

When sharing the messages on social media, **accompany the text with an image** that complements and helps to make the messages more understandable and engaging. Use compelling images and include short texts in the visuals that allow for the viewers to quickly identify the messages.

Use emojis to make your text more visually appealing and to help visually divide and identify ideas and concepts inside the text. Avoid overusing emojis, the final post could risk looking like clickbait and too childish.

Add links towards related articles, websites, blogs, videos, and other resources. This provides an option for the viewers to access additional information about the discussed topic, increases the reliability perception of the information shared, and improves the reach and the engagement of the post and the linked resources.

Use call-to-action: encourage the audience to share and like a post, to visit the provided links and videos, to search more information in a website, etc.

To increase the reach and engagement of the messages, **develop a posting schedule** that follows a time consistent posting. Make sure to prioritize quality over quantity of posts and ensure that the posts are consistent in style.

When sharing awareness messages on social media make sure to **add relevant hashtags that give visibility to the posts shared** and that allow the posts to be easily found when being searched or filtered. Use hashtags related to the environmental, social, and economic key concepts of the toolkit (i.e., transport: #zeroemissions, #stopclimatechange, #usepublictransport).

When communicating specifically about the Green Trail Concept project or any related event and output from the project, make sure to **use the hashtag #greentrailconcept**, tag the project (@greentrailncpt in Twitter and @greentrailconcept in Instagram) and, if possible, tag the members of the consortium: Associació Ecoserveis, Kilian Jornet Foundation, GRID-Arendal and ADP Sport Events AB (Österlen Spring Trail). When sharing visuals created by the Green Trail Concept project, make sure they **include the project logo and EU logo and disclaimer** that can be found in <https://greentrailconcept.eu/>.

2.3. Phase 2: Recruitment

The recruitment phase aims to increase general knowledge about the benefits of a more sustainable outdoor event following a dual purpose: **(1)** to enhance environmental awareness among the existing runner community about the advantages of more sustainable outdoor events; and **(2)** to attract new participants seeking to engage in eco-friendly sports activities.

The recruitment process can be divided into two distinct stages: an **informational** phase followed by a **registration** phase, with the latter being a pivotal achievement in the engagement strategy's success.

A concise overview of the key recruitment strategies is presented in Figure 3.

Engagement Strategy

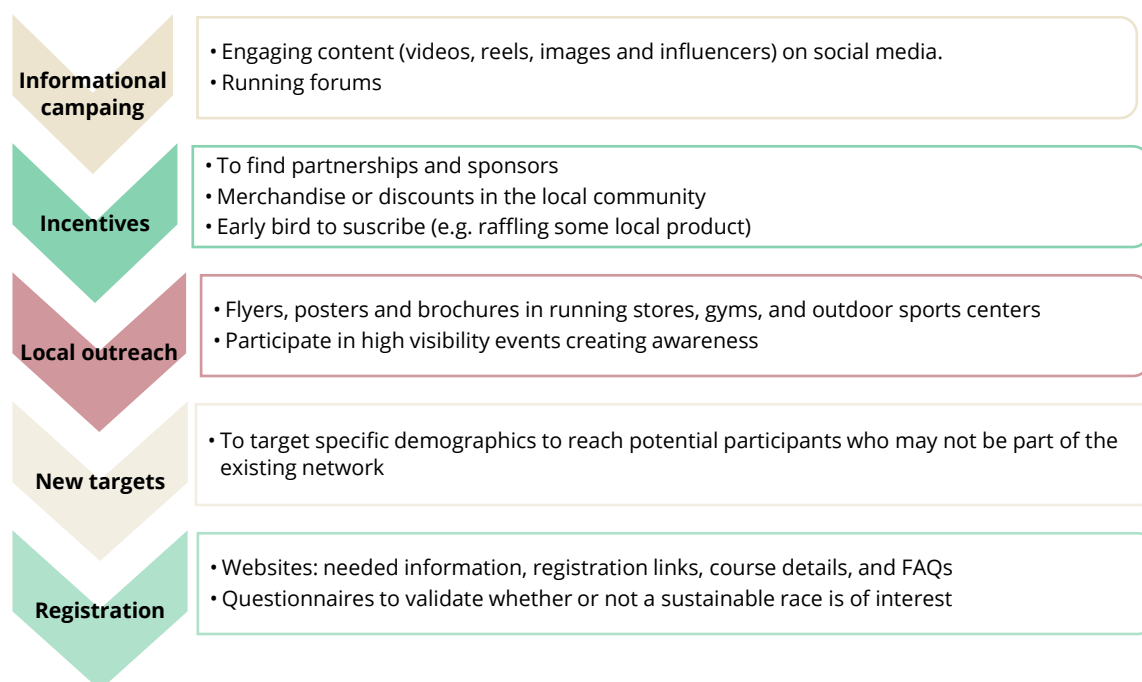


FIGURE 2: STRATEGIES FOR RECRUITMENT

2.4. Phase 3: Organization of high visibility events

Workshops play a crucial role in involving the whole ecosystem to test trail races in increasing environmentally sustainable actions. These **4 interactive and participatory sessions** provide a platform for individuals sharing common interests to discuss, learn and expand their knowledge on specific subjects related to the GTC topics and are integral components of the recruitment strategies.

For the GTC project's aims, they address two purposes and will be tailored to align with the distinct contexts of the two pilot locations, Spain, and Sweden in a hybrid mode (2 onsite and 2 online).

1. Co-identification workshops

These workshops are designed to proactively engage the running community, fostering awareness, and facilitating discussions about the three sustainability pillars. Participants will have the opportunity to voice their insights, address challenges, and identify possible solutions in a collaborative manner.

2. Testing list of indicators and the methodology of the Deliverable 2.1.

This activity is scheduled for the initial phase of the project, within WP2. The goal is to gain hands-on experience with methodology and test the indicators of *D2.1* for the certification scheme.

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The following workflow indicates the steps necessary to follow when organising a high visibility event:

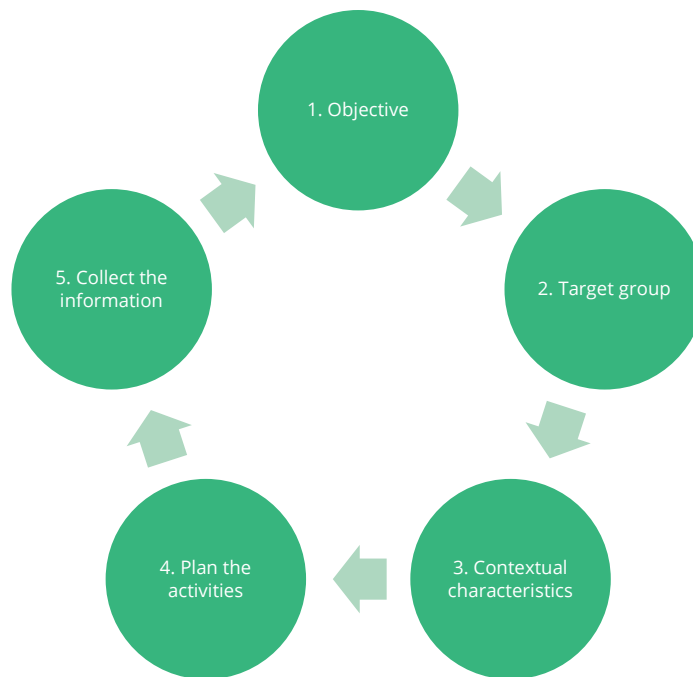


FIGURE 3: WORKFLOW TO ORGANISE A WORKSHOP

In brief the different steps need to:

1. Clearly outline the goals and purpose of the event.
2. Identify the specific target audience the event aims to engage.
3. Consider the unique traits of the event's location, environment, and cultural context.
4. Design a detailed plan of activities, sessions, and experiences for participants.
5. Gather relevant data and information to support event evaluation.

Specifically for the activities planning, some ideas could be taken from the following list:

Co-identification workshops

- Stand during races to inform about the GTC
- Activities to raise awareness
- Open discussion sessions with different stakeholders

Indicators and methodology

- Post races questionnaires and methods to gather data as will be explained in D2.1

FIGURE 4: WORKSHOPS' ACTIVITIES

2.5. Phase 4: Global raising awareness and communication campaign

As an integral component of the engagement strategy, Phase 4 aims to outline the methodology for a comprehensive global awareness and communication campaign. This initiative aligns with the fundamental objectives of the GTC project, aiming to disseminate its mission and the broader concept of sustainability within the realm of mountain outdoor running. Amid the context of climate change and nature preservation, the campaign seeks to convey a resounding message.

The workplan for the organisation of the event might follow the structure below:

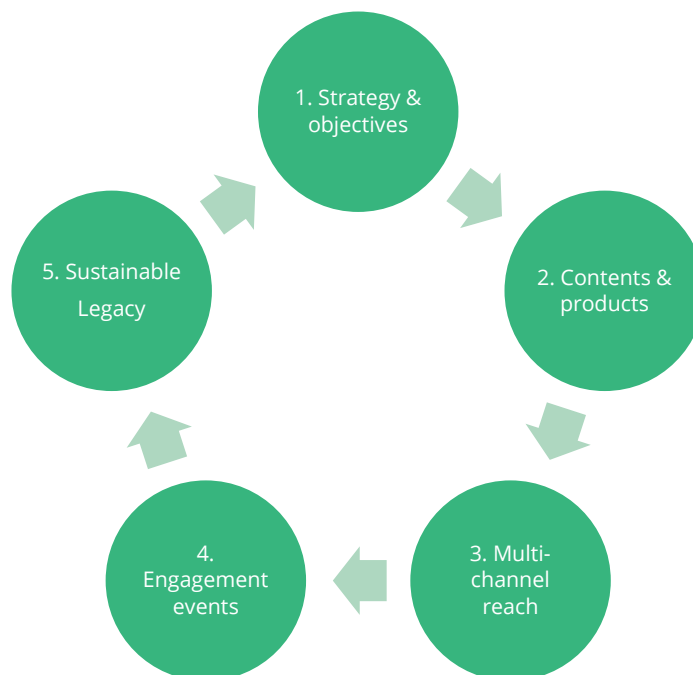


FIGURE 5: WORKFLOW FOR THE ORGANISATION OF THE GLOBAL CAMPAIGN

In the context of a far-reaching awareness campaign at the European Union level, the spotlight is directed towards promoting sustainable sports practices and advocating the utilization of the GTC certification tool. To make the workflow scheme easier to understand, some ideas and concepts are outlined below:

1. As for the **strategy**, this campaign should serve as a rallying call for individuals, communities, and race organizations to collectively embrace a more conscious approach to trail running while fostering a deep-rooted commitment to preserving our environment. That is the reason why having clear objectives, a determined target audience and key messages to deliver are essential to make impact.
2. Central to this campaign is the acknowledgment of the strict connection between sports and the environment, highlighting how the athletic pursuits impact the planet. Through **compelling narratives, videos, visual material, infographics and real-world stories**, the campaign should attempt to create a sense of responsibility

Engagement Strategy

among athletes, enthusiasts, and stakeholders alike. Herein, the utilization of the GTC certification tool, main product of the project, gains momentum with the endorsement of specialized media and organizations at the intersection of sports and sustainability. By showcasing the certification's tangible benefits, the campaign seeks to inspire a collective shift towards events that embrace nature preservation, efficient resource use, and community well-being.

3. Through a **multi-channel approach**, this campaign should aim to amplify its message across borders and cultures. In this sense, by partnering with specialized media outlets and reputable organizations dedicated to the cause of sport and sustainability, the campaign gains access to a dedicated and engaged audience. Media outlets⁸ can be useful to increase the credibility of the tool and the authority of the work done by the GTC project partners.
4. The **engagement activities** are a vital thread in the design of a global campaign. Webinars, world-café discussions, expert insights, and side initiatives can delve into facets of responsible and sustainable sport practices especially among individuals working in the industry. However, side initiatives like charity fundraising events, art and music performances or cultural experiences can not only rise awareness on the main objectives of the GTC but also foster a sense of community and enlarge it, producing a real impact. By aligning with the EU's vision for a greener future, these activities aim to be catalysts not only for a major interest in the organization of sustainable sport events but especially for change.
5. Finally, the concept of a **sustainable legacy** emerges as a cornerstone that echoes not only in the world of sport in general but also in the realm of a socially impactful global campaign and in the management of sport initiatives. A sustainable legacy should be based on a shared responsibility that sports federations, race organizers, athletes, and individuals involved have when designing events rooted in sustainable values. Understanding how to use best practices from other organizations⁹ is fundamental to establish a strong foundation for enduring growth, creating a culture of excellence and innovation that lasts beyond the project completion. On the other hand, partnerships with important sports federations (like ITRA or IAAF) increase the impact of our engagement activities to promote the certification tool. Their endorsement gives authenticity and credibility to GTC aim of sustainability in sports, paving the way for a general recognition of its certification.

⁸ Some Media Outlets suggested: [Green Sport Alliance](#), [Green Sports Blog](#), [Eco Athletes](#), [Anturus](#), [Champions for Earth](#), [Protect our Winters](#), [The Green Runners](#), [Trail Runner Foundation](#), [Sports Environment Alliance](#), Zatopek Magazine,

⁹ Within the GTC, initiatives like RAIL BY TRAIN TOUR (Belgium), Kullamannen (Sweden), Festival des Templiers (France), Trail du Meyboom (Belgium), Ultra-vasan (Sweden) might be considered for the effort in championing sustainability in trail running events.

3. Engagement and recruitment strategy guidelines

This section includes a comprehensive overview of the strategies discussed in earlier sections, tailored to each engagement phase. These engagement and recruitment strategy guidelines are essential for directing efforts, aligning objectives, and maximizing the impact of the campaign. They provide structure, optimize resource allocation, and foster connection with the general running audience. Moreover, these guidelines are designed to be adaptable, allowing other stakeholders aiming to implement their own engagement and recruitment strategies. The high level of customization of the GTC guidelines ensures that these can be tailored to specific needs, contexts and objectives, empowering diverse stakeholders to achieve successful outcomes in the organization of sustainable sport events.

To streamline the usage of this information and ensure the inclusion of essential elements when selecting appropriate strategies for each phase, two **infographics** have been crafted and completed with an illustrative example.



FIGURE 6: INFOGRAPHIC ON HOW TO USE THE ENGAGEMENT STRATEGY

Engagement Strategy

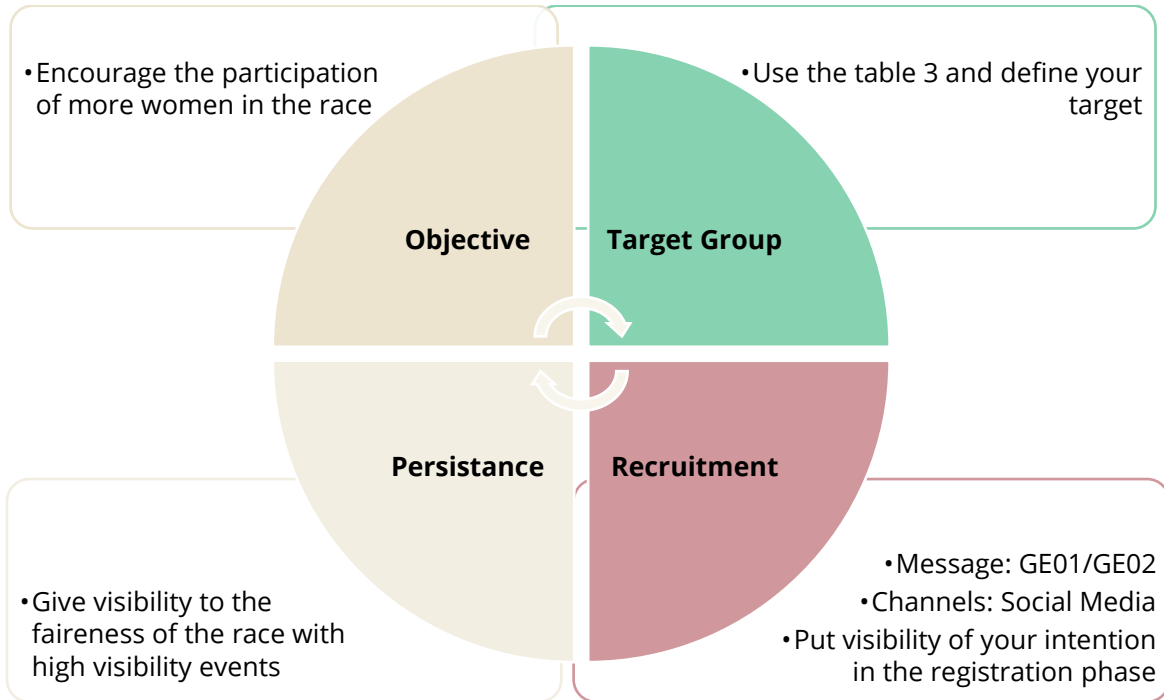


FIGURE 7: EXAMPLE ON HOW TO USE THE ENGAGEMENT STRATEGY

4. References

- Alexandris, K. (2016). Testing the role of sport event personality on the development of event involvement and loyalty: The case of mountain running races. *International Journal of Event and Festival Management*, 7(1), 2-20.
- Ap, J. (1990). Residents' perceptions research on the social impacts of tourism. *Annals of Tourism Research*, 17(4), 610-616.
- Aypar, S. A. T. I., Kurt, S. U., & Özgen, N. N. (2022). Sport events and Covid-19: Trail runners' attitudes and intentions during the pandemic. *Journal of Tourism Leisure and Hospitality*, 4(2), 4-4.
- Baena, A. (2008). Análisi del perfil sociodemográfico y deportivo de los competidores de raids de aventura en España. Granada. Retrieved from <http://0-hera.ugr.es.adrastea.ugr.es/tesisugr/17367359.pdf>
- Botella-Carrubi, M.; Currás Móstoles, MR.; Escrivá-Beltrán, M. (2019). Penyagolosa Trails: From Ancestral Roads to Sustainable Ultra-Trail Race, between Spirituality, Nature, and Sports. A Case of Study. *Sustainability*. 11(23):1-19.
- Brymer, E.; Downey, G.; Gray, T. (2009). Extreme sports as a precursor to environmental sustainability. *J. Sport Tour.*, 14, 2-3.
- Carmack, M. A., & Martens, R. (1979). Measuring commitment to running: A survey of runners' attitudes and mental states. *Journal of Sport and Exercise Psychology*, 1(1), 25-42.
- Cernaianu, S. & Sobry, C. (2015). Evolution and Impact on the Environment of Trail Running Sporting Events – The Case of France and Romania in Plevnik, M., Retar, I., Pišot, R. & Obid A (Eds.) *SUSTAINABLE development of sports tourism*. Koper : University of Primorska, Science and Research Centre - Institute for Kinesiology Research, Annales University Press- (Knjižnica Annales Kinesiologiae)
- Chapman, C. L., & De Castro, J. M. (1990). Running addiction: measurement and associated psychological characteristics. *The Journal of sports medicine and physical fitness*, 30(3), 283-290.
- Clingman, J. M., & Hilliard, D. V. (1987). Some personality characteristics of the super-adherer: following those who go beyond fitness. *Journal of Sport Behavior*, 10(3), 123.
- Crompton J.L., & McKay S.L. (1994). Measuring the economic impact of festivals and events: Some myths, misapplications, and ethical dilemmas. *Festival Management and Event Tourism*, 2, 33-43.
- Ehrström S, Tartaruga MP, Easthope CS, Brisswalter J, Morin J-B, Vercauysen F. (2018). Short trail running race: beyond the classic model for endurance running performance. *Med Sci Sports Exerc*;50(3):580-588.
- Elkington, J. (2008). The triple bottom line. In M. Russo (Ed.), *Environmental management: Readings and cases* (pp. 49-66). Thousand Oaks, CA: Sage Publications.
- Emerson, R. (1976). Social exchange theory. *Annual Review of Sociology*, 2(1), 335-362.
- Funk, D. C., & Bruun, T. J. (2007). The role of socio-psychological and culture-education motives in marketing international sport tourism: A cross-cultural perspective. *Tourism management*, 28(3), 806-819.

- Getz, D. & A. McConnell (2014). Comparing Trail Runners and Mountain Bikers: Motivation, Involvement, Portfolios, and Event-Tourist Careers. *Journal of Convention & Event Tourism* 15(1); 69–100.
- Hallmann, K.; Wicker, P.; Breuer C. & Schönherr, L. (2012) Understanding the importance of sport infrastructure for participation in different sports – findings from multi-level modeling, *European Sport Management Quarterly*, 12:5, 525-544.
- Hautbois, C.; Djaballah, M.; Desbordes, M. (2020). The social impact of participative sporting events: A cluster analysis of marathon participants based on perceived benefits. *Sport Soc.*, 23, 335–353.
- Havlick, D.G., E. Billmeyer, T. Huber, B. Vogt & K. Rodman (2016). Informal trail creation: hiking, trail running, and mountain bicycling in shortgrass prairie. *Journal of Sustainable Tourism* 24(7): 1041–1058.
- Hoffman, M. D., & Fogard, K. (2012). Demographic characteristics of 161-km ultramarathon runners. *Research in Sports Medicine*, 20(1), 59-69.
- Janssen, M., Walravens, R., Thibaut, E., Scheerder, J., Brombacher, A., & Vos, S. (2020). Understanding different types of recreational runners and how they use running-related technology. *International Journal of Environmental Research and Public Health*, 17(7), 2276.
- Johnsgard, K. (1985). The motivation of the long-distance runner: I. *The Journal of sports medicine and physical fitness*, 25(3), 135-139.
- Lamont, M. & Kennelly, M. (2012). A Qualitative Exploration of Participant Motives Among Committed Amateur Triathletes, *Leisure Sciences: An Interdisciplinary Journal*, 34:3, 236-255
- Lemke, W. (August 2016). The Role of Sport in Achieving the Sustainable Development Goals, UN Chronicles No. 2 Vol. LIII, Sport Aims for the Goals. Retrieved from: <https://www.un.org/en/chronicle/article/role-sport-achieving-sustainable-development-goals>
- Llopis, R., & Llopis, D. (2012). Una tipologia sociocultural dels corredors populars a Espanya. *Apunts Educació Física i Esports*, (108), 9–16.
- Llopis, R., & Vilanova, A. (2015). A Sociological Analysis of the Evolution and Characteristics of Running. In J. Scheerder & K. Breedveld (Eds.), *Running Across Europe: The Rise and Size of One of the Largest Sport Markets* (pp. 220–240). Basingstoke: Palgrave Macmillan.
- Luna-Arocas, R., & Li-Ping Tang, T. (2005). The use of cluster analysis to segment clients of a sport center in Spain. *European Sport Management Quarterly*, 5(4), 381-413.
- Maditinos, Z., & Vassiliadis, C. (2008, July). Crises and disasters in tourism industry: happen locally, affect globally. In *Management of international business and economics systems*, MIBES conference (pp. 67-76).
- Masters, K. S., Ogles, B. M., & Jolton, J. A. (1993). The development of an instrument to measure motivation for marathon running: The Motivations of Marathoners Scales (MOMS). *Research quarterly for exercise and sport*, 64(2), 134-143.
- Molz, P. (2021). The profile of demographics, training habits, and health of recreational trail runners: a comparative study among different distances. *Human Movement*, 22(3), 54-61.

Engagement Strategy

- Navalta JW, Montes J, Tanner EA, Bodell NG, & Young JC. (2018). Sex and age differences in trail half marathon running. *Int J Exerc Sci.*;11(6):281–289.
- Ng, S.-L., Y.-F. Leung, S.-Y. Cheung & W. Fang (2018). Land degradation effects initiated by trail running events in an urban protected area of Hong Kong. *Land Degradation & Development*, 29(3): 422–432.
- Ogles, B. M., & Masters, K. S. (2000). Older vs. younger adult male marathon runners: participative motives and training habits. *Journal of Sport Behavior*, 23(2).
- Ogles, B. M., & Masters, K. S. (2003). A typology of marathon runners based on cluster analysis of motivations. *Journal of Sport Behavior*, 26(1).
- Parra-Camacho, D.; Alonso Dos Santos, M.; González-Serrano, M.H. Amateur runners' commitment: An analysis of sociodemographic and sports habit profiles. *Int. J. Environ. Res. Public Health* 2020, 17, 925
- Plevnik, M., Retar, I., Pišot, R., Obid, A. (Eds.), (2015). Sustainable Development of Sports Tourism. Annales University Press, Koper.
- Stewart, B., Smith, A., & Nicholson, M. (2003). Sport consumer typologies: A critical review. *Sport Marketing Quarterly*, 12(4), 206-216.
- Summers, J. J., Machin, V. J., & Sargent, G. I. (1983). Psychosocial factors related to marathon running. *Journal of Sport and Exercise Psychology*, 5(3), 314-331.
- Thrane, C. (2008). Earnings differentiation in the tourism industry: Gender, human capital and socio-demographic effects. *Tourism management*, 29(3), 514-524.
- Turco D.M. (1997). Measuring the economic and fiscal impact of state high school sport championship. *Sport Marketing Quarterly*, 6, 49–53.
- Wallstam, M., Ioannides, D., & Pettersson, R. (2020). Evaluating the social impacts of events: In search of unified indicators for effective policymaking. *Journal of Policy Research in Tourism, Leisure and Events*, 12(2), 122-141.
- Yair, G. (1992). What keeps them running: the 'circle of commitment' of long-distance runners, *Leisure Studies*, Vol. 11 No. 3, pp. 257-270
- Ziakas, V. & Boukas, N. (2020). The emergence of "small-scale" sport events in "small island" developing states: towards creating sustainable outcomes for island communities, *Event Management*, Vol. 20, pp. 537–563

WEBPAGES

- Green Screen (2020). Regional guide for events & meetings of Skåne Region retrieved from: https://projects2014-2020.interregeurope.eu/fileadmin/user_upload/tx_tevprojects/library/file_1587382131.pdf
- ITRA, Discover Trail Running, retrieved from: <https://itra.run/About/DiscoverTrailRunning>
- Kilian Journet Foundation (2020). Outdoor Friendly Pledge retrieved from: https://outdoorfriendly.org/wp-content/uploads/2020/10/Outdoor-Friendly-Pledge_EN.pdf
- Mtnath, History of Competitions in the mountains, retrieved from: <https://mtnath.com/history-competitions/>

5. Annex

Semi-structured interview guideline:

Profile 1 - race organizer/ expert



Introduction and background:

- Can you please introduce yourself and provide a brief overview of your expertise/organization in trails sports/events?
- What led you/motivate you to pursue a career focused on mountains and rural sports?

Runner segmentation:

- In your opinion, which are the different population profiles who normally participate in trail running events?
- Have you conducted any previous research or studies on runner segmentation? If yes, could you briefly describe your findings?
- Is there any specific method/approach do you recommend for properly segmenting runners?
- Is there any specific criteria/characteristic/attribute that you believe are crucial for defining specific categories of runners? what are some of the key characteristics or attributes that differentiate runners?

Preferences and motivations:

- According to you, which are the most common motivations among different segments of runners in trail races?
- How do factors like cultural and social norms, or individual aspirations and sport patterns influence these preferences?

Challenges and barriers:

- Are there any barriers that specific types of runners face when engaging with trail races?
- In your experience, is there any specific challenge that running race organizers face in achieving sustainable events? If yes, could you elaborate?
- How do these challenges impact the long-term sustainability and success of running races in socio-environmental terms?

Marketing and communication:

- How can companies or organizations effectively target, reach, and communicate with different runners' segments?
- Do you know any successful example/strategy or best practice in this regard?

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- Based on your expertise, is there any trend influencing runner segmentation in trail races?
- If yes, could you explain how this trend will shape the industry and influence marketing strategies?

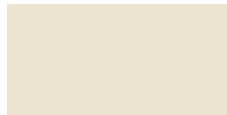
Certification tools for race organizers:

- Can you explain, according to you, how the trail running has been evolving as a sport practice in the last few years?
- Are you familiar with any existing certification or accreditation tools for running race organizers that focus on sustainability and sport events management?
- What do you think about a certification tool that promotes sustainability in trail races?

Specifically for races organizers

- Which are the limitations this certification may have, considering that there's no organised federation and regulation at the European level?
- Which are the aspects or criteria that, according to your experience, this certification tool should address and include?
- As a running race organizer, how interested would you be in adopting a certification tool that helps demonstrate your commitment to sustainability?
- What factors would influence your decision to adopt such a tool, and what benefits do you envision for your organization and the broader running sport community?

Profile 2 – local community representative



Introduction and background:

- Can you please introduce yourself and provide a brief overview of your expertise/organization in trails sports/events?
- How long has your organization been involved in community development in the field of sustainable sports events?

Impact of trail races:

- In your experience, what are some of the main concerns and interests of hosting communities in relation to trail races?
- Can you share any best practice of a rural community that was significantly impacted by hosting a trail race event?

Socio-economic considerations:

- Do you think that trail races contribute to the social and economic well-being of rural communities? If yes, can you provide some practical examples?

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- Is there any specific challenge or opportunity directly related to the hosting of these events? If yes, can you provide some practical examples?
- Can you explain if you faced unexpected challenges, and how did you handle them?

Community engagement and participation:

- How do you involve the local community in the planning and organization of trail events?
- Is there any strategy or initiative you deploy to ensure that trail events benefit the whole community?
- How do you ensure that the community continues to benefit in the long-term?

Environmental sustainability:

- How do you address concerns or possible negative effects related to environmental impact when organizing trail races in rural or mountain areas?
- Are there any specific measures or you consider fundamental to adopt in order to minimize the ecological footprint of these events?
- Can you provide examples of any sustainable initiatives or projects that have been implemented as a result of hosting trail races?

Collaboration with different stakeholders:

- Do you collaborate with other stakeholders to ensure a positive outcome for both the community and the trail race participants?
- Which kind of stakeholders do you collaborate with?
- Is there any specific partnerships or collaboration you want to highlight as best practice?

Lessons learnt and recommendations:

- Based on your experience, what are the lesson learnt or best practices that other local communities should consider when hosting trail races?
- Do you have any recommendations or advice for organizations or communities looking to engage in similar initiatives?

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