Sustainability Plan for F1

by Percy Langa

Submission date: 06-Jan-2024 04:51PM (UTC+0000)
Submission ID: 220726556
File name: 13016_Percy_Langa_Sustainability_Plan_for_F1_226307_532853508.docx (44.63K)
Word count: 2613
Character count: 15327

ASSIGNMENT 02

MODULE: BMSP7003D

Student name: Percy Langa

Student number: 1808024

"I declare that this assignment is my own work and that all sources quoted have been acknowledged by appropriate references".

SUSTAINABILITY PLAN FOR FORMULA ONE

Section 1: Introduction

This assignment aims to outline the plan of action for the achievement of F1's sustainability long-term targets by implementing initiatives that seek to address the current negative impacts of environmental degradation. In 2019, F1 and its stakeholders committed themselves for a better future for the sports, host communities and the world. This was evidenced by the establishment of a sustainability strategy (F1, 2019). Hackenberg (2021) is of the opinion that F1, like many international brands, is facing changing world where race venues, fans, F1's race drives, investors and sponsors are demanding action when it comes to climate change and other social challenges (diversity and gender equality) in the same way that football community acted against racism through campaigns such as *Kick It Out* and *Show Racism The Red Card* and. Failure to act could result in negative consequences for F1.

Section 2: What is a Sustainability Plan and Why is it important?

Planning for sustainability is an deliberate set of steps established to achieve sustainability outcomes over a period of time (IBM, 2022). It is akin to a roadmap (OPA (2019, p. 8) in that it provides a predetermined direction to achieve sustainable milestones through realistic, bite-size milestones along the way. These milestones can best be described as short-term, medium-term or long-term targets. Plans move from paper to reality when resources are allocated for action. These could include people, budgets, tools, access to data or information and so on.

Section 3: Description of the Sustainability Initiative

In late 2019, the new owners for F1, Liberty Media, working with race teams, partners, broadcasters, suppliers, promoters and F1's governing body, the Fédération Internationale de l'Automobile (FIA), set ambitious targets to significantly cut the sport's carbon footprint in two parts, firstly by ensuring that all race events to be sustainable by 2025 (FIA, 2019) and, secondly, to be become net zero carbon by 2030 (FI, 2022). In terms of the 2025 target, F1 has planned the following initiatives (Gallagher, 2021 and F1, 2022):

- ✓ 100% of single-use plastics will be replaced with reusable portable bottles, which are made from sustainable materials
- ✓ 100% of waste will be composted, recycled or reused
- ✓ 100% fossil fuel will be replaced by a sustainable, synthetic fuel. From 2023, F1 has tested a 55% version of this new fuel on F2 and F3 race cars (F1, 2023).
- ✓ Offering spectators with incentives and tools for travelling to race venues using green transport as well as ensuring that race venues caters for their wellbeing.
- ✓ Prioritising opportunities for the local communities in terms of work and business as well as supporting local causes.

In the past few years, F1 has implemented a number of initiatives towards in reducing its carbon footprint (F1, 2022). These include, but are not limited to, the establishment of remote broadcasting in the UK (due to the Covid pandemic, this initiative was brought forward to allow F1 to broadcast F1 race events between July and Dec 2020), the use of fuel-efficient cargo planes, switching F1 offices to 100% renewable energy, obtaining the FIA's highest sustainability accreditation and winning various sustainability awards (F1, 2022).

In order for F1 to have a meaningful impact on its sustainability drive, it is clear that it needs to focus on at least areas of its business that contribute to nearly three fourths of

its carbon footprint, namely transport logistics and business travel. The latter accounts for 28% of F1's total carbon footprint whilst the former contributes 45%. Interestingly, these two aspects occur in the background and therefore not visible to race fan's eyes.

For this assignment, the focus will be on unpacking the initiatives needed to address the challenge of transport logistics.

In terms of transport logistics, F1 has already achieved a 34% decrease in the transportation of race cargo through the introduction of remote broadcasting during the 2020 championship season (F1, 2023). Race cargo includes fuel, race cars, race tyres, equipment for hospitality and marketing replacement parts and broadcasting equipment) (DHL, 2022). Through this initiative, F1 also achieved a 36% decrease in staff travelling to race events(F1, 2023). However, more needs to be done to minimise the quantity of race cargo that moves between 24 race venues across the world, from March to November every year (Garcia and Briel, 2023). F1's logistics partner since 2014, DHL, moves approximately 1400 tons of F1 cargo between races.

At present, Shanna (2023) described the logistics of the F1 calendar as two categories, namely:

- ✓ European race events: UK, Spain, Belgium, Netherlands, Monza, Monaco, etc.
- ✓ Flyaway races : Australia, China, Mexico, US, Qatar, Abu Dhabi, Japan, etc.

The European leg is fairly straightforward in that cargo is moved by road with less complications. On the contrary, the flyaway leg is more complex and requires more planning (Shanna., 2023).

Section 4: Timeframes for the implementation of sustainability

Given the short period of time that F1 has committed itself to achieving its sustainability goals of achieving carbon neutrality by the end of this current decade, it makes sense for F1 to start tackling the areas of the business that have contribute the largest to its carbon emissions. As stated earlier, the logistics function is the highest contributor. Therefore, for the purpose of the assignment, the following initiatives are proposed:

- ✓ A detailed analysis of the race cargo (type and quantity)
- ✓ A breakdown of the different modes of transport used to transport the cargo
- ✓ Investigate an alternative race calendar that reduces both the number of trips required between race events and the total distance travelled by the race cargo

See below a detailed outline.

A. Provide a detailed analysis of the type and quantity of race cargo

A1. Rationale for the initiative:

The transportation of race cargo is without doubt the biggest environmental challenge for F1. It therefore imperative to start addressing this aspect so that both environmental and financial benefits are realized. Reduced environmental impacts are a positive for F1's strategic targets. For example, reduced quantities of cargo will result in cost savings. To provide solutions to the challenge, every item of cargo must the indexed and understood.

A2. Who will do this analysis and how will it be monitored? For how long?

Working together with role players (race teams, sponsors, tyre supplier and so on), F1's Sustainability Office will lead this task. The results of the analysis and recommendations for improvement will be presented to the management of the role players for verification and adoption. This can be done on a monthly basis for a period of 12 months. It will be important that the solutions proposed take into account any upcoming future changes in F1 that may a negative or positively influence on logistics e.g. proposed changes to the race calendar (new venues, non-renewal of existing venue contracts and so on). The results will also assist the F1 community to start investigating alternative materials for equipment, tools, consumables, etc.

A3. Resources required?

The following human and other resources will be required -

- ✓ Access to race cargo data
- ✓ Allocation of dedicated personnel to this project
- ✓ Availability of race partners and their management
- ✓ Access to technology (hardware and software) to capture the data and undertake analysis

A4. Possible Performance Indicators

To measure progress against the targets, the following indicators are suggested –

- ✓ Number of research and development activities looking into alternatives materials of cargo, etc.
- ✓ Number of pilots / trails implemented to test new solutions
- ✓ The quantity of cargo reduced annually (against the established baseline)
    - o A reduction in cargo weight results in less effort (fuel, etc.) required for the movement of cargo, leading to lower carbon emissions.

B. Provide a breakdown of the different modes of transport used to transport the cargo

B1. Rationale for the initiative:

Further to the analysis, it will be important to also breakdown the different modes of transport used for the movement of cargo e.g. road and air. A key aspect of this task to assess the best way to implement various modes of transport, including land, air and sea, to move F1's freight as effectively as possible.

B2. Who will do this analysis and how will it be monitored? For how long?

F1's Sustainability Office together with their logistics partner, DHL. will lead this task. This task can be completed in parallel with the analysis of the total cargo.

B3. Resources required?

The information requirements are –

- ✓ An inventory of all the race cargo
- ✓ Access to information about the specific mode of transport used and its route

B4. Possible Performance Indicators

To measure progress against the targets, the following indicators are suggested –

- ✓ Percentage of cargo transported by road and air

- ✓ The number of research, development and innovation activities looking into the best means of transporting cargo including:
    - Short-term vs long-term storage of cargo in certain regions
    - Use of greener fuels for road and air transport (In 2023, DHL (F1's logistic partner) introduced eighteen new cargo trucks that are powered by biofuel, which originated from waste oils and fat residue (achieving a 83% decrease on carbon emissions against standard fuels) (DHL, 2023)
- ✓ Number of pilots / trails implemented to test new solutions

C. Investigate an alternative race calendar that reduces both the number of trips required between race events and the total distance travelled by the race cargo

C1. Rationale for the initiative:

The 2023 race calendar was a record-breaking season with twenty-four race events, which features one new race in the streets of Las Vegas, USA (Wikipedia, 2023 and Benson, 2022) . F1 is likely to benefit from a longer racing season, however this translates to additional trip for the logistics team, which will adversely impact on the drive to lower F1's environmental footprint.

C2. Who will do this analysis and how will it be monitored? For how long?

F1's Logistics Office, F1's logistics partner, race promoters, race sponsorships working together F1 team's logistic teams. This work is likely to be extensive in terms of consultation between F1 and the F1 community. It will be difficult if not possible change certain races in the calendar mainly to contractual obligations. Due to this complexity, it is likely that F1 will make sluggish progress. Undertaking an analysis o the race calendar is likely to take 12-18 months to complete.

C3. Resources required?

The following human and other resources will be required -

- ✓ Allocation of dedicated personnel to this project
- ✓ Availability of F1's Logistics Office and F1 team's logistic teams

C4. Possible Performance Indicators

To measure progress against the targets, the following indicators are suggested –

- ✓ The length of distance travelled in a race calendar (expressed in kilometers)
- ✓ The percentage of carbon emissions reduced (against the 2019 baseline)
- ✓ Research and development in greener transportation of cargo
- ✓ Progress towards attaining the goals of regional races

When the 2024 race calendar was first announced, it was natural for skeptics to question F1's real commitment to sustainability (Shanna C., 2023). There is some good news though, the 2024 calendar avoids the 2023 scenario where the whole F1 community were required to switch to 12-hour time zone in a matter of days between two races (F1 Initiative, 2023). Apart from the undesirable environmental impact, this resulted in many personnel getting ill (F1 Initiative, 2023).

Shanna C., (2023) estimates that the new race calendar will result a decrease of 6% in distance travelled and 3,6% decrease in carbon emissions. The main challenges working against finding the most environmentally-friendly race calendar are contractual obligations, suitable weather and time zones.

In terms of making progress, this is positive from F1 and its partners. This is the type of forward thinking and innovation required to propel the F1's strategic plan into high gear.

D. Assessment Plan

By using a decision-support tool, F1 can demonstrate its commitment to sustainability (Waas et al, 2014, p. 62). The tool will assist the various workstreams listed in A-C above to tackle challenges that face decision-makers such as the structuring of information, interpretation (trend, etc.) and influencing others (Waas et al, 2014, p. 62).

To this end, see below an assessment tool -

Sustainability Initiatives	Rationale for the initiative:	Who will do this analysis and how will it be monitored?	For how long?	Resources required?	Possible Performance Indicators / Recommended for improvement
A Provide a detailed analysis of the type and quantity of race cargo					
B Provide a breakdown of the different modes of transport used to transport the cargo					
C Investigate an alternative race calendar that reduces both the number of trips required between race events and the					

total distance travelled by the race cargo					

Section 5: Conclusion

To achieve sustainability, F1 has its work cut out as many challenges stand in the way between now and the target date to achieve zero neutrality. However, history has proven that F1 can innovate and become a leader with the motorsport. Some of the F1's innovations in the last decade or two, which have benefited the wider automotive and other sectors, includes safety development, energy recovery systems, composite materials and navigation tools (FIA, 2019). With this mind, F1 needs to harness its power of innovation and specialised knowledge as well as financial muscle to lead the motorsports industry for a greener future.

Section 6: References

1. Benson, A. (2022). *Formula 1: 2023 season to have record 24-race calendar* [Online] BBC Sports. Available from: https://www.bbc.com/sport/formula1/62974075 [Accessed: 28 December 2023].
2. DHL, (2022). *DHL and Formula 1 kick off the 2022 racing season with sustainability in focus* [Online] DHL. Available from: https://www.dhl.com/global-en/home/press/press-archive/2022/dhl-and-formula-1-kick-off-the-2022-racing-season-with-sustainability-in-focus.html [Accessed: 2 December 2023].
3. DHL, (2023). *What Fuels You?* [Online] DHL. Available from: https://inmotion.dhl/en/formula-1/sustainability [Accessed: 5 January 2024].
4. Formula One, (2022). *F1 continues push to hit Net Zero Carbon by 2030 target* [online] Formula One. Available from: https://www.formula1.com/en/latest/article.f1-continues-push-to-hit-net-zero-carbon-by-2030-target.7fGtPCNCwOnMFFt9Ys1HAa.html [Accessed: 5 December 2023].
5. Formula One, (2023).*Countdown to Zero* [Online] Formula 1 Corporate. Available from: https://corp.formula1.com/countdown-to-zero/ [Accessed: 1 January 2024].

6. FIA, (2019). *Formula 1 Announces Plan to be Net Zero by 2030* [Online] Fédération Internationale de l'Automobile. Available from: https://www.fia.com/news/formula-1-announces-plan-be-net-zero-carbon-2030 [Accessed: 1 December 2023].
7. Formula One Initiative, (2023). *2024 F1 calendar's impact on health underscores 'unsustainable' toll* [Online] Formula One Initiative. Available from: https://f1initiative.com/2024-f1-calendars-impact-on-health-underscores-unsustainable-toll/ [Accessed: 29 December 2023].
8. Gallagher, M. (2021). *The climate race: Sustainability lessons from Formula One* [Online] Chartered Management Institute. Available from: https://www.managers.org.uk/knowledge-and-insights/article/the-climate-race-sustainability-lessons-from-formula-one/ [Accessed: 22 December 2023].
9. Garcia, I. and Briel, P., (2023). *F1 calendar 2024: All dates at a glance*. [Online] World of Red Bull. Available from: https://www.redbull.com/au-en/formula-1-schedule-race-calendar [Accessed: 16 December 2023].
10. Hackenberg, J. (2021). *Why We Need To Make Sport More Sustainable* [Online] Forbes Media LLC. Available from: https://www.forbes.com/sites/jonquilhackenberg/2021/09/09/why-we-need-to-make-sport-more-sustainable/?sh=7691d3dc165c [Accessed: 3 January 2024].

11. IBM, (2022). *Sustainability Action Plan: guidance and template* [Online]. Available from: https://www.ibm.com/blog/sustainability-action-plan-guidance-and-template/ [Accessed: 3 January 2024].
12. Office of Population Affairs (OPA), (2022). *Resource guide for building sustainable programs – Revised 2019* [Online] U.S. Department of Health and Human Services. Available from: https://opa.hhs.gov/sites/default/files/2020-08/sustainability-guide-revised-2019.pdf [Accessed: 5 January 2024].
13. Shanna, C (2023). *Will the 2024 f1 race calendar make the difference? — Sustainability in Formula 1* [Online] Medium. Available from: https://medium.com/@imshan.c/will-the-2024-f1-schedule-make-the-difference-sustainability-in-formula-1-eba7dbd1f07d [Accessed: 5 December 2023].
14. Waas, Tom & Hugé, Jean & Block, Thomas & Wright, Tarah & Benitez-Capistros, Francisco & Verbruggen, Aviel. (2014). *Sustainability Assessment and Indicators: Tools in a Decision-Making Strategy for Sustainable Development*. Sustainability. 6. 5512-5534. 10.3390/su6095512. Available from: https://www.researchgate.net/publication/277673696_Sustainability_Assessment_and_Indicators_Tools_in_a_Decision-Making_Strategy_for_Sustainable_Development [Accessed:24 December 2023].

15. Wikipedia, (2023). *2023 Formula One World Championship* [Online] Wikipedia – The Free Encyclopedia. Available from: https://en.wikipedia.org/wiki/2023_Formula_One_World_Championship [Accessed: 4 January 2024].

Sustainability Plan for F1

ORIGINALITY REPORT

3%	1%	2%	0%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	Ramon Farreny, Xavier Gabarrell, Joan Rieradevall. "Energy intensity and greenhouse gas emission of a purchase in the retail park service sector: An integrative approach", Energy Policy, 2008 Publication	1%
2	www.forbes.com Internet Source	1%
3	Submitted to University of Wales, Lampeter Student Paper	<1%
4	f1initiative.com Internet Source	<1%
5	timesofindia.indiatimes.com Internet Source	<1%

Exclude quotes	On	Exclude matches	Off
Exclude bibliography	On		