

**Creating and Developing Low Carbon Runs for HKDRC
2011 – 2016 – ‘Run hard, tread lightly’**

Project outline

Civic Exchange has been asked to advise how to ‘green’ two annual races organized by the Hong Kong Distance Runners Club (HKDRC). The aim is to reduce the carbon footprint associated with each of the races, the runners and organisers without affecting sign up numbers or the race experience. The process should be gradual but effective. The proposal below is a five year plan, focusing on the *Mount Butler Heritage Race* in March and the *Hong Kong Green Half Marathon* in November. But this should be relevant to all races organized by the HKDRC.

Organisers of mass participation athletic events (marathons, triathlons, etc.) need to consider the environmental impacts of their events when making planning decisions. The impacts can be significant. High amounts of landfill waste are produced as materials are often used once and discarded. Runners often travel long distances to take part. Runs require a lot of pre-event communication, often resulting in paper use and postage.

Responsible event production can build value for the event, its participants, and its host community. For example, the Austin Marathon in the U.S. has attracted huge amounts of publicity because of its green inventiveness. Hong Kong could lead Asia’s effort to turn its many competitive and charity races green.

A typical runner’s carbon footprint - In 2008, Runner’s World calculated the annual CO₂ impact of a typical American runner, including everything from clothing and shoes to travel. It found that one runner generates 2,471 kilograms of CO₂ in one year. That’s equal to driving an SUV 300 miles per month every month for a year. Running is not necessarily as green a hobby as we may think it is (Appendix B). It would be useful to try calculate what is the CO₂ impact of a typical Hong Kong runner.

Project proposal

To reduce the environmental impact of your races, you need to focus on the following areas:

- **Transport (probably has the most significant carbon footprint)**
- **Food and drink**
- **Communications with runners (pre-race)**
- **Communications with runners (post-race)**
- **Race day logistics**
- **The Race kit**
- **Sponsors/ Supporters**
- **Awards**
- **The spectators (this may be relatively few in Hong Kong)**

2011 Races – WHAT YOU CAN CONSIDER AS PART OF THE PLANNING PROCESS NOW

(considering the limited time frame until the Mount Butler race, not all these will be possible)

Transport – Encourage the use of zero and low carbon forms of transport (public, hybrid, EV, ride shares and cycling where possible). For example, green running event organizers have set up special shuttle buses running on biodiesel, natural gas and other low-impact fuels to transport runners and spectators. What can be done in Hong Kong relating to the two sites where HKDRC races needs to be examined.

Food and drink – Encourage the consumption of local, seasonal and organic foods on race day but also as part of each participant's overall lifestyle.

Only provide organic food, try and source local and seasonal foods.

Recycle all plastic bottles

Begin to engage with local, sustainable retailers to explore possibilities for November 2011 (Appendix G).

Communications with runners (pre-race) - Do online registration and e-mail communication as much as possible.

Begin to phase out paper communications -

For November 2011, if you feel paper copies are necessary, use green options like recycled materials with soy or vegetable-based inks rather than petroleum-based types.

For 2012 onwards use email only, creating PDFs of all programmes, instructions and posters.

Green tips – the following could be included in your leaflet to runners, forming a regular 'green section' in the leaflet and on the website:

- ✓ Include recipes for homemade energy bars, energy drinks etc using organic and sustainable ingredients. These could be used as an alternative to buying pre-prepared gel packs;
- ✓ Include low carbon/public transport information in all race materials;
- ✓ Appeal to runners to and ask them, when embarking on a training run, to take time to look at their surroundings and at any rubbish along the way. Make a plan to grab a bag or container to pick up the rubbish on route. Whether its paper, plastic or any other object– they should tell HKDRC where they found the rubbish and how many bags were collected. Take a few pictures and HKDRC could include them on the website/ in a blog;
- ✓ Set up a blog with green running tips for all participants, past and future, to contribute towards. Offer a prize for the best blogger. This would encourage regular interaction with the HKDRC website;
- ✓ Include information about why this is important – look at statistics relating to the amount of waste produced by an average run to highlight the importance of the issue
- ✓ Include links to a few local green initiatives and set out ideas for future 'green' race initiatives
- ✓ Set up an email address for tips from runners about how the races can be greener i.e. green@hkdr.org.
- ✓ Ask runners to bring shoes that are still in reasonable shape along to donate.

This promotes reuse, by donating shoes to those in need, and reduces the amount of waste going to landfill;

- ✓ Send out the Runner's World *Runner's Footprint* article to registered runners – better still, consider writing something unique for Hong Kong by collaborating with a local publication.

Post-race communications – Provide details about

- ✓ The amount of waste recycled, other 'green' achievements;
- ✓ Winners, runners up and Green Team winners;
- ✓ Outline the green initiatives that will be available next year (green team initiative, parking options for cyclists etc);
- ✓ Ask sustainable food outlets to provide discount vouchers which can be emailed and printed out to be used at local HK retailers;
- ✓ Add a reminder about completing the survey;
- ✓ Add a reminder about the 20% off scheme if a runner enters both races (to encourage re-use of t-shirt and reusable bottle);
- ✓ Include info about 'green' choices of running gear suppliers in Hong Kong;
- ✓ Encourage runners to tell other race organisers about greening their race.

Race staff logistics – Important to engage volunteers and staff in any green related activities

Police/volunteers ride bikes

Provide reimbursements or low carbon incentives (light bulbs, reusable bottles etc) to volunteers and staff who come by public transport

Race logistics

Toilets on site serviced with Environmental Toilet Deodorizer and use toilet paper manufactured with recycled content. Advertise why you are doing this wherever possible.

Waste

Recycling units at the start/ finish lines to dispose of plastic bottles, paper bibs and recyclable food wrappers.

Investigate water that uses less plastics, e.g. Aquafina bottles use 50% less plastic, that works for Hong Kong.

Race kit – Try to include the following reusable options

A Reusable runner's bottle (with grip) – possibly sponsored by a local Hong Kong based company

A T-shirt designed by a local HK artist and sourced with 100% Organic cotton, recycled polyester, bamboo, or other environmentally friendly material. Also recommended - screen printing with non-toxic inks.

A wristband – made from reused materials, make it into a collector's item, and add charms made from recycled / reused materials, so it can be used over and over again for each race.

A reusable canvas bag – also good advertising for the race;

Eliminate the towel and medal options from the race kit;

A tree seedling – to be planted at home – engage with a local, sustainable nursery to source the seedlings (Appendix H).

Sponsors/ Supporters - eco-friendly race sponsors can help increase green awareness and advocacy for anyone attending the event. Plus they can help advertise the race at their outlets and on their websites. See Appendix H for further suggestions.

Food sponsor – for example, Life café.

Drinks sponsor – for example, Aquafina.

Vouchers for green shops, restaurants or sports clothing companies sent by email to runners (added incentive as well as promoting a greener lifestyle)

Awards - Green marathons commonly reward their finishers with medals created from sustainable materials such as recycled glass, metal and wood. The Portland Triathlon (Appendix C) gives out trophies made from recycled bike parts and the Portland Marathon offers one of the most sustainable awards -- a tree seedling.

Try replacing paper certificates with electronic certificates for the first year.

Spectators – This may not be so relevant but HKDRC could offer them the chance to complete the survey (Appendix A) as well, as most questions would be relevant to them.

Incentivize green behaviour of runners and spectators - Coming by public transport? Produce a used ticket and get a reduction on the cost of a reusable bottle, t-shirt etc on the day.

2012 – 2016 – FUTURE ACTIONS

- **Carbon reductions commitments** – Conduct a carbon footprint study of the races to make future carbon reduction commitments based on the results (Appendix E);
- **Website development** – Promote green living through your website – develop a green page of tips, links and promotions;
- **Increase media interest** - aim for a zero carbon race, send out pre-event and post event press releases;
- **Phase out bottled water completely** - use incentives to encourage use of reusable water bottles, especially the kind made for runners which have a hand grip, as



below. So they are easier to run with;

- Some race organisers require runners to bring their own handheld water bottles or waist packs to refill along the course;
- **Introduce composting on site** – popular in Europe but a relatively alien concept to

Hong Kongers;

- **Use** compostable water cups, serve finisher food (if necessary) using compostable plates, cups, and utensils;
- **T-shirts** - Rather than designing t-shirts for each specific race, how about a t-shirt for all HKDRC races for each year? This could also be used as an advertising tool for each race – like a t-shirt you pick up at a concert where all play dates are advertised on the back;
- **Race numbers** – Conduct research into using alternative methods to paper numbers pinned to a runner's top. How about a re-usable wrist band? They can be fashionable and there are green versions like those used with recycled paper or organic cotton. Encourage runners to re-use at other HKDRC races;
- **Minimise use of banners and other plastic materials on race day** - all banners and plastic signage could be made without metal grommets;
- **Race packs/ communications with runners** - Eliminate all paper communications pre-race day – race numbers can be picked up before the race, eliminating requirement for postage of any materials;
- **Race kit** contents to be 100% sustainable;
- **Phase out the use of certificates** – instead use wristbands, possibly combining with other organizers so for each race a 'green' charm is collected and can be connected to the wristband to display how many runs they have participated in. An alternative is electronic certificates.
- **Incentives** - Set up a scheme whereby if you sign up for the Mount Butler race you receive a 20% discount to enter the HK Green Half Marathon. This should encourage participants to run both, re-use their race kit (as above with the wristband and t-shirt) and possibly receive special recognition of running both races with a special wristband colour;
- **Ask for suggestions online about how to green the race** – what have runners observed in the past? Best suggestion gets a low carbon prize;
- **Renewable energy** - Solar-powered generators at start and finish lines;
- **Stakeholder engagement** - Create a Hong Kong based *Green Race Consortium* (perhaps before/after November 2011 when HKDRC has worked out the basics). Bring together all willing race organisers from across Hong Kong to talk about how to work together to promote greener runs i.e.
 - ✓ using the same equipment;
 - ✓ re-using the same t-shirt;

- ✓ using the same posters to advertise a variety of runs;
 - ✓ procuring more sustainable services and products. Grouping together to buy equipment from more sustainable companies (which may be more expensive) but in the long-term this will make the process cheaper;
 - ✓ lobby Government for support, more water fountains for runners, preservation of race routes, EV vehicles, cleaner buses etc;
 - ✓ organise health impacts/air pollution campaigns. For example, because over 300 days per year in Hong Kong are considered too polluted for runners to train outside, running organizations could be highlighting this problem and garnering support for government action;
 - ✓ create an awards ceremony or recognition scheme for the greenest race each year in Hong Kong.
- **Offer a clothing and/or shoe recycling/reuse program and swap shop** - old running shoes and apparel can be recycled and/or contributed to charity organizations – you could encourage runners to bring along unwanted running kit/ trainers/ sports equipment which could be swapped with others.
 - Runners could donate old shoes at the finish line (Appendix H);
 - **Lobby the government for more water fountains** in public areas - For example, there is a 70-foot (21-meter) long water fountain which was created for the ING Hartford Marathon finishers - so far it's saved 20,000 plastic bottles and paper cups from use since it was built in 2007;
 - **Introduce a family race** - Promote social sustainability by introducing family-orientated fun runs alongside the main race;
 - **Transport** – Encourage cycling to the event by providing a secure bike parking area for participants;
 - Reimburse staff and volunteers for using public transport;
 - Introduce a 'no engine idling' policy for all shuttle buses;
 - **Stakeholder engagement** – Encourage the participation of youth, school and green groups to provide volunteers for race day (distributing water, preparing the course etc). Possibly link it to academic schemes like PYP;
 - Include a 'Youth Ambassador' on the organising committee (good for their academic CV);
 - Include a volunteer 'Green Adviser' on the organising committee, to be

responsible for developing and implementing plans for greening the event in the future;

- Ask Hong Kong based green groups and sustainable retailers to set up booths at the event to promote green living, sustainable foods and other products;
 - **Carbon offsetting** - Offset at least 10% of the greenhouse gas emissions from the race through sponsorships, a percent of the race fee, voluntary contributions from athletes, or other means.
 - **Develop a Green Team initiative** – competitors have the option of joining together as 'green teams'. You could develop various criteria for these teams, see below, then give out awards for the 'greenest team'
- ✓ You must come by zero or low carbon forms of transport
 - ✓ You must commit to measuring your carbon footprint
 - ✓ You must all use reusable bottles
 - ✓ You must all raise \$... for a green charity/ initiative based in HK

Project milestones - Priority areas

Milestone or Event	Projected Date of introduction/ completion	Significance
Eliminate certificates and medals – replace with sustainable alternatives like charm wristbands and reusable water bottles	2012	<i>Race kits are so often discarded by competitors, creating huge amounts of waste.</i>
Engage the media to promote the race and publicise its green achievements and aims for the future	2012	<i>Good from a marketing perspective, plus encourages a wider audience to think about low carbon living</i>
Online registration ONLY, no paper associated with pre-race registrations	2012	<i>Most runners throw away pre-race materials. Plus, the option of printing maps etc</i>

		<i>is still there but discouraged</i>
Build a stakeholder network involved in the organization, and delivery of, the March and November races – to include green groups, youth groups, local schools and community organizations.	2012	<i>Community involvement is key to the event's sustainability, success and longevity</i>
Set up an off-setting scheme for runners as part of the application process	2012	<i>Easy to set up, use a local initiative, like a wind power scheme on the Mainland. Try to aim for a gold standard offsetting scheme</i>
Eliminate plastic bottles	2013	<i>Symbolic and will reduce waste associated with the event significantly</i>
Introduce a full range of recycling facilities at the start, finish and along the race course. Could be shared among race organizers.	2012	<i>Even with the aim to eliminate plastic bottles given to the runners, the runners themselves may well bring plastic bottles which will need to be recycled</i>
Write a sustainability policy (Appendix E)	2013 or 2014	<i>To be shared with other race organisers.</i>
Create a Hong Kong Green Race Consortium	2013 or 2014	<i>This encourages sustainable procurement, working together to develop combined green schemes (repeated use of t-shirts, wristbands, water bottles etc), and encourages development of a recognition/ awards scheme for the greenest race in HK</i>
Majority of runners, say 90%, using public transport, including shuttle buses arranged by organizers	2015	<i>Transport is the most significant contribution to the race's carbon footprint.</i>

Top Ten Risks

#	Description	Mitigation Strategy
1	Putting runners off with green messaging. They may feel like they are being preached to.	Make the case, gradually, about why this is important. Runners, by their very nature, may well be very susceptible to green messaging, as the lifestyle they have chosen suits a green way of thinking ;
2	Paperless communication may be viewed as age discriminate – for example, older participants may not have access email/ the internet.	Always offer the option of paper copies as a last resort, if special requests are made but avoid sending paper registration forms to all possibly interested runners. Advertise the runs through newspaper articles and posters, as well as internet based campaigns. However, email communication, internet marketing and other 'virtual' forms of marketing should make up the majority of marketing for the races. Keep a database of past runners' email addresses. Today's greenest races make online registration a requirement;
3	Traditionally certificates and medals are the form of recognition for runners. Some may dislike their elimination.	Include information about how much waste is generated from producing and discarding certificates and medals. Include this on your website and in the PDF programmes;
4	Runners are already green, why should they do more when events like motorcycling, horse racing or football matches are just as wasteful, if not more so?	Include the message that everyone must do their bit for the environment. Also include info about the idea for a green consortium of race organizers and argue that by 'greening' these races you are starting a trend for all race organizers across sporting disciplines. Plus, putting HK on the map as a leader in this pursuit;
5	Greening the race will increase costs incurred by the runners.	Try and make all extra expenditure options rather than requirements – plus a lot of the green initiatives will actually save the runners more over time – like the discount for entering both races, getting the bus rather than using their car is cheaper, cycling is free, using the same t-shirt removes the need to buy one for each race etc. The Portland Marathon, as one example, has gone green without increasing costs.

Budget- Very rough estimate of potential savings

Work item	Saving (HKD \$)
Printing cost of poster, entry form and certificate	2,500
Trophies, Medals and Souvenirs	32,500
Plastic cups	500
Photocopy and mailing services	500

Project appendices

Appendix A. Survey questions for the Mount Butler Heritage Race (March)

Appendix B. Green Race Consortium

Appendix C. Case studies – Austin, Portland, LA among others

Appendix D. Glossary of terms

Appendix E. Calculate the race's carbon footprint and make future carbon commitments

Appendix F. Green Certification possibilities

Appendix G. Useful Links

Appendix A – Survey questions

Mount Butler Heritage Race – every entry gets automatically entered into a prize draw, which takes place at the finish line on race day. Suggest no more than 10 questions.

Possible intro to survey, to be loaded on to your website rather than paper copies given out:

We are trying to make this race more sustainable to reduce the impact it has on the environment – in order to do so, we need your help! Please take a couple of minutes to complete the survey below; it will inform future green initiatives associated with this race. Many thanks, all completed forms will be entered into a prize draw. Prizes include reusable water bottles, t-shirts and wristbands.

Question	Options	Reason for asking
1. Can we communicate only by email?	Yes No Maybe	Minimise risk of losing runners through green initiatives
2. Do you support greening marathon racing?	Yes No Maybe	Gauge interest in 'green' races as a marketing point to attract future runners and maintain interest of currently signed up runners

3. If a free reusable bottle was offered as part of the runner's kit, would you use it for training and future races?	Yes No Maybe	Inform contents of race kit
4. Rank the following in order of priority: - T-shirt - Towel - Reusable bottle - Canvas bag - Medal - Certificate	1 – Most important 6 -Least important	Inform contents of race kit
5. Would you pay more for a better designed, sustainable race t-shirt?	Yes No Maybe	Find out whether investigating the possibility of an artist in Hong Kong designing a special t-shirt for the race is worth it.
6. Would you consider paying X% more for a place on the run if that 10% went to an carbon offsetting scheme?	Yes No Maybe	Useful if considering supporting a local green initiative like beach clean ups, tree planting schemes etc
7. Would you be more inclined to sign up to both the 15k and half marathon if you received a X% discount?	Yes No Maybe	To assess whether an incentive scheme around promoting take up of both races is viable – for example, some runners who feel capable of running 15k may be put off running half a marathon
8. Did you travel by public transport or drive to races?	Yes No	Profile of runner's green practices
9. Do you have other ideas about what we can do to green marathon racing?		Gather suggestions for future green practices to implement, encourage participation
10. Are you associated with a business that would be interested in supporting our race?	Yes No Not relevant	To build up a supplier/ stakeholder list

Prize suggestions

- LED lights
- Membership to a green group for a year
- Donation to a good green cause
- Reusable bottles/ T-shirts/ Wristbands

Appendix B – Runner’s Footprint – www.runnersworld.com/green

Appendix C – Case Studies

The Austin Marathon (won award for being greenest marathon in the world) - The event uses 100 percent online registration, solar-powered and biodiesel-powered generators; places 10 biodiesel support vehicles, recycling stations and compost bins throughout the course; donates discarded clothing to charity and sets up a now famous finish line farmer's market.

<http://running.about.com/b/2008/02/10/austin-marathon-goes-green.htm>

LA - http://www.resport.org/media/pdf/release_LA_certified.pdf

Portland Marathon - http://www.portlandmarathon.org/media_green.php

Marine Corps Marathon -

http://www.marinemarathon.com/race_info/Going_Green.htm

Assorted case studies - http://www.resport.org/resources/case_studies.html

Appendix D - Glossary

Carbon footprint – A carbon footprint measures the amount of carbon dioxide we put into the atmosphere as we live our daily lives.

Appendix E – Measuring your carbon footprint

WWF Loop programme – wwf.org.hk/loop

Appendix F – Certification

Council for Responsible Sport -

http://www.resport.org/certification/pdf/certification_application_2010.pdf

Appendix G – Further info

Council for Responsible Sport - <http://www.resport.org/> ReSport certifies athletic events across that nation that meet its green standards in the categories of waste, climate, equipment and materials, community outreach and health promotion.

Athletes for a Fit Planet - <http://www.afitplanet.com>

Appendix H – Hong Kong & international suppliers and related organisations

Organic Farm - Organic, seasonal food in HK - info@organic-farm.com

Soles 4 Souls charity - www.soles4souls.org/about/shipping_outside_us.html

Kadoorie Farm - <http://www.kfbg.org.hk>

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- **Race packs/ communications with runners** - Eliminate all paper communications pre-race day – race numbers can be picked up before the race, eliminating requirement for postage of any materials;
- **Race kit** contents to be 100% sustainable;
- **Phase out the use of certificates** – instead use wristbands, possibly combining with other organizers so for each race a 'green' charm is collected and can be connected to the wristband to display how many runs they have participated in. An alternative is electronic certificates.
- **Incentives** - Set up a scheme whereby if you sign up for the Mount Butler race you receive a 20% discount to enter the HK Green Half Marathon. This should encourage participants to run both, re-use their race kit (as above with the wristband and t-shirt) and possibly receive special recognition of running both races with a special wristband colour;
- **Ask for suggestions online about how to green the race** – what have runners observed in the past? Best suggestion gets a low carbon prize;
- **Renewable energy** - Solar-powered generators at start and finish lines;
- **Stakeholder engagement** - Create a Hong Kong based *Green Race Consortium* (perhaps before/after November 2011 when HKDRC has worked out the basics). Bring together all willing race organisers from across Hong Kong to talk about how to work together to promote greener runs i.e.
 - ✓ using the same equipment;
 - ✓ re-using the same t-shirt;

- ✓ using the same posters to advertise a variety of runs;
 - ✓ procuring more sustainable services and products. Grouping together to buy equipment from more sustainable companies (which may be more expensive) but in the long-term this will make the process cheaper;
 - ✓ lobby Government for support, more water fountains for runners, preservation of race routes, EV vehicles, cleaner buses etc;
 - ✓ organise health impacts/air pollution campaigns. For example, because over 300 days per year in Hong Kong are considered too polluted for runners to train outside, running organizations could be highlighting this problem and garnering support for government action;
 - ✓ create an awards ceremony or recognition scheme for the greenest race each year in Hong Kong.
- **Offer a clothing and/or shoe recycling/reuse program and swap shop** - old running shoes and apparel can be recycled and/or contributed to charity organizations – you could encourage runners to bring along unwanted running kit/ trainers/ sports equipment which could be swapped with others.
 - Runners could donate old shoes at the finish line (Appendix H);
 - **Lobby the government for more water fountains** in public areas - For example, there is a 70-foot (21-meter) long water fountain which was created for the ING Hartford Marathon finishers - so far it's saved 20,000 plastic bottles and paper cups from use since it was built in 2007;
 - **Introduce a family race** - Promote social sustainability by introducing family-orientated fun runs alongside the main race;
 - **Transport** – Encourage cycling to the event by providing a secure bike parking area for participants;
 - Reimburse staff and volunteers for using public transport;
 - Introduce a 'no engine idling' policy for all shuttle buses;
 - **Stakeholder engagement** – Encourage the participation of youth, school and green groups to provide volunteers for race day (distributing water, preparing the course etc). Possibly link it to academic schemes like PYP;
 - Include a 'Youth Ambassador' on the organising committee (good for their academic CV);
 - Include a volunteer 'Green Adviser' on the organising committee, to be

responsible for developing and implementing plans for greening the event in the future;

- Ask Hong Kong based green groups and sustainable retailers to set up booths at the event to promote green living, sustainable foods and other products;
 - **Carbon offsetting** - Offset at least 10% of the greenhouse gas emissions from the race through sponsorships, a percent of the race fee, voluntary contributions from athletes, or other means.
 - **Develop a Green Team initiative** – competitors have the option of joining together as 'green teams'. You could develop various criteria for these teams, see below, then give out awards for the 'greenest team'
- ✓ You must come by zero or low carbon forms of transport
 - ✓ You must commit to measuring your carbon footprint
 - ✓ You must all use reusable bottles
 - ✓ You must all raise \$... for a green charity/ initiative based in HK

Project milestones - Priority areas

Milestone or Event	Projected Date of introduction/ completion	Significance
Eliminate certificates and medals – replace with sustainable alternatives like charm wristbands and reusable water bottles	2012	<i>Race kits are so often discarded by competitors, creating huge amounts of waste.</i>
Engage the media to promote the race and publicise its green achievements and aims for the future	2012	<i>Good from a marketing perspective, plus encourages a wider audience to think about low carbon living</i>
Online registration ONLY, no paper associated with pre-race registrations	2012	<i>Most runners throw away pre-race materials. Plus, the option of printing maps etc</i>

		<i>is still there but discouraged</i>
Build a stakeholder network involved in the organization, and delivery of, the March and November races – to include green groups, youth groups, local schools and community organizations.	2012	<i>Community involvement is key to the event's sustainability, success and longevity</i>
Set up an off-setting scheme for runners as part of the application process	2012	<i>Easy to set up, use a local initiative, like a wind power scheme on the Mainland. Try to aim for a gold standard offsetting scheme</i>
Eliminate plastic bottles	2013	<i>Symbolic and will reduce waste associated with the event significantly</i>
Introduce a full range of recycling facilities at the start, finish and along the race course. Could be shared among race organizers.	2012	<i>Even with the aim to eliminate plastic bottles given to the runners, the runners themselves may well bring plastic bottles which will need to be recycled</i>
Write a sustainability policy (Appendix E)	2013 or 2014	<i>To be shared with other race organisers.</i>
Create a Hong Kong Green Race Consortium	2013 or 2014	<i>This encourages sustainable procurement, working together to develop combined green schemes (repeated use of t-shirts, wristbands, water bottles etc), and encourages development of a recognition/ awards scheme for the greenest race in HK</i>
Majority of runners, say 90%, using public transport, including shuttle buses arranged by organizers	2015	<i>Transport is the most significant contribution to the race's carbon footprint.</i>

Top Ten Risks

#	Description	Mitigation Strategy
1	Putting runners off with green messaging. They may feel like they are being preached to.	Make the case, gradually, about why this is important. Runners, by their very nature, may well be very susceptible to green messaging, as the lifestyle they have chosen suits a green way of thinking ;
2	Paperless communication may be viewed as age discriminate – for example, older participants may not have access email/ the internet.	Always offer the option of paper copies as a last resort, if special requests are made but avoid sending paper registration forms to all possibly interested runners. Advertise the runs through newspaper articles and posters, as well as internet based campaigns. However, email communication, internet marketing and other 'virtual' forms of marketing should make up the majority of marketing for the races. Keep a database of past runners' email addresses. Today's greenest races make online registration a requirement;
3	Traditionally certificates and medals are the form of recognition for runners. Some may dislike their elimination.	Include information about how much waste is generated from producing and discarding certificates and medals. Include this on your website and in the PDF programmes;
4	Runners are already green, why should they do more when events like motorcycling, horse racing or football matches are just as wasteful, if not more so?	Include the message that everyone must do their bit for the environment. Also include info about the idea for a green consortium of race organizers and argue that by 'greening' these races you are starting a trend for all race organizers across sporting disciplines. Plus, putting HK on the map as a leader in this pursuit;
5	Greening the race will increase costs incurred by the runners.	Try and make all extra expenditure options rather than requirements – plus a lot of the green initiatives will actually save the runners more over time – like the discount for entering both races, getting the bus rather than using their car is cheaper, cycling is free, using the same t-shirt removes the need to buy one for each race etc. The Portland Marathon, as one example, has gone green without increasing costs.

Budget- Very rough estimate of potential savings

Work item	Saving (HKD \$)
Printing cost of poster, entry form and certificate	2,500
Trophies, Medals and Souvenirs	32,500
Plastic cups	500
Photocopy and mailing services	500

Project appendices

Appendix A. Survey questions for the Mount Butler Heritage Race (March)

Appendix B. Green Race Consortium

Appendix C. Case studies – Austin, Portland, LA among others

Appendix D. Glossary of terms

Appendix E. Calculate the race's carbon footprint and make future carbon commitments

Appendix F. Green Certification possibilities

Appendix G. Useful Links

Appendix A – Survey questions

Mount Butler Heritage Race – every entry gets automatically entered into a prize draw, which takes place at the finish line on race day. Suggest no more than 10 questions.

Possible intro to survey, to be loaded on to your website rather than paper copies given out:

We are trying to make this race more sustainable to reduce the impact it has on the environment – in order to do so, we need your help! Please take a couple of minutes to complete the survey below; it will inform future green initiatives associated with this race. Many thanks, all completed forms will be entered into a prize draw. Prizes include reusable water bottles, t-shirts and wristbands.

Question	Options	Reason for asking
1. Can we communicate only by email?	Yes No Maybe	Minimise risk of losing runners through green initiatives
2. Do you support greening marathon racing?	Yes No Maybe	Gauge interest in 'green' races as a marketing point to attract future runners and maintain interest of currently signed up runners

3. If a free reusable bottle was offered as part of the runner's kit, would you use it for training and future races?	Yes No Maybe	Inform contents of race kit
4. Rank the following in order of priority: - T-shirt - Towel - Reusable bottle - Canvas bag - Medal - Certificate	1 – Most important 6 -Least important	Inform contents of race kit
5. Would you pay more for a better designed, sustainable race t-shirt?	Yes No Maybe	Find out whether investigating the possibility of an artist in Hong Kong designing a special t-shirt for the race is worth it.
6. Would you consider paying X% more for a place on the run if that 10% went to an carbon offsetting scheme?	Yes No Maybe	Useful if considering supporting a local green initiative like beach clean ups, tree planting schemes etc
7. Would you be more inclined to sign up to both the 15k and half marathon if you received a X% discount?	Yes No Maybe	To assess whether an incentive scheme around promoting take up of both races is viable – for example, some runners who feel capable of running 15k may be put off running half a marathon
8. Did you travel by public transport or drive to races?	Yes No	Profile of runner's green practices
9. Do you have other ideas about what we can do to green marathon racing?		Gather suggestions for future green practices to implement, encourage participation
10. Are you associated with a business that would be interested in supporting our race?	Yes No Not relevant	To build up a supplier/ stakeholder list

Prize suggestions

- LED lights
- Membership to a green group for a year
- Donation to a good green cause
- Reusable bottles/ T-shirts/ Wristbands

Appendix B – Runner’s Footprint – www.runnersworld.com/green

Appendix C – Case Studies

The Austin Marathon (won award for being greenest marathon in the world) - The event uses 100 percent online registration, solar-powered and biodiesel-powered generators; places 10 biodiesel support vehicles, recycling stations and compost bins throughout the course; donates discarded clothing to charity and sets up a now famous finish line farmer's market.

<http://running.about.com/b/2008/02/10/austin-marathon-goes-green.htm>

LA - http://www.resport.org/media/pdf/release_LA_certified.pdf

Portland Marathon - http://www.portlandmarathon.org/media_green.php

Marine Corps Marathon -

http://www.marinemarathon.com/race_info/Going_Green.htm

Assorted case studies - http://www.resport.org/resources/case_studies.html

Appendix D - Glossary

Carbon footprint – A carbon footprint measures the amount of carbon dioxide we put into the atmosphere as we live our daily lives.

Appendix E – Measuring your carbon footprint

WWF Loop programme – wwf.org.hk/loop

Appendix F – Certification

Council for Responsible Sport -

http://www.resport.org/certification/pdf/certification_application_2010.pdf

Appendix G – Further info

Council for Responsible Sport - <http://www.resport.org/> ReSport certifies athletic events across that nation that meet its green standards in the categories of waste, climate, equipment and materials, community outreach and health promotion.

Athletes for a Fit Planet - <http://www.afitplanet.com>

Appendix H – Hong Kong & international suppliers and related organisations

Organic Farm - Organic, seasonal food in HK - info@organic-farm.com

Soles 4 Souls charity - www.soles4souls.org/about/shipping_outside_us.html

Kadoorie Farm - <http://www.kfbg.org.hk>