



# The Complete Guide to Soap Recycling

*The Association of Soap & Hygiene Solutions*





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*A brief introduction from David L. Bishop,  
founder of the Association of Soap and Hygiene Solutions:*

The Association of Soap and Hygiene Solutions is a novel association with a mission to make the concept of recycling soap as common as recycling cans around the world. On this journey we seek to empower others who share our vision by providing insights, best practices and relevant data. Importantly, we also give prospective hygiene solution providers and recyclers the tools and know-how to successfully establish similar entities and scale operations in their communities.

Every day thousands of children die from diseases that can be largely prevented simply by washing with soap and other hygiene solutions. Soap is one of the most efficient and cost-effective lifesaving tools ever invented, yet, every year millions of life-saving bars of soap are discarded. By recycling and redistributing this soap, we can get it into the hands of those who need it the most.

Soap Cycling was started as a tool to empower students at The University of Hong Kong, but has since become a multinational charity with impact all over the world. We work with the hospitality industry to collect, process, and distribute lightly used soap bars and bottled amenities, which then are distributed to disadvantaged communities around the world, particularly Asia.

Here at Soap Cycling we are frequently contacted by prospective soap recyclers and other entities who have questions around the way we operate, and how individuals or organizations may go about replicating aspects of our practices in order to establish hygiene solutions and operations in their own region or country. By creating this guide we can do so in an effective and transparent manner.

### **Join Us**

This document will continuously evolve in the quest to become a full-fledged guide and provide up-to-date valuable insight on everything relevant to hygiene solutions, soap recycling, and more. As the association seeks to unite all types of entities connected to hygiene solutions, we cordially invite you to become an equal member of the association and welcome your active participation. Together we are greater than the sum of our parts, and we can make a deeper and more profound impact on the world.

For any inquiries please don't hesitate to contact us, whether you would like to join the association, provide feedback, specify input that you would want added to the guide, or if you have any questions. Similarly, if you're a prospective recycler or hygiene solution provider with additional inquiries, then contact us and we will do our utmost to help you get started.

Contact us at: [info@soapcycling.org](mailto:info@soapcycling.org)



# Content

**01**

**What**

**05**

**Why**

**11**

**How**

**19**

**Wash**

**23**

**Impact**

**27**

**Who**

**33**

**Appendices**



ts







Every year, 3 million children die from preventable diseases owing to poor hygiene, whilst at the same time 100 million soap bars are thrown away.



# What

- 03 | What is Soap Recycling?
- 04 | How Soap Works





## WHAT IS SOAP RECYCLING?

Although this seems like a simple concept — and it is — the reality is that very few people have even heard of soap recycling. And once they hear about it, they are often confused, or even grossed out. So before we go any further, let's talk about what recycling soap means.

Soap Recycling is repurposing lightly used, discarded hotel amenities such as soap bars and liquid amenities (shower gel, shampoo, conditioner, and lotion), generally with the intention of providing them to populations in need of hygiene resources.

### RECYCLING BAR SOAP:

For bar soap the process can be as simple as merely scraping the outer layer of soap, all the way to creating entirely new bars via scraping, sanitising, chopping, and reconstituting the soap with large machinery. Both methods result in a lifesaving tool for those who cannot afford soap. The process is simple, and can be done on any scale, from a lone individual to an industrial factory.

### RECYCLING LIQUID AMENITIES:

Liquid hotel amenities can also be repurposed by either being sorted, topped up, and disinfected, or squeezed out and combined to make large bottles of liquid amenities. The process for recycling liquid amenities can be quite a bit more complicated than soap bars, particularly because you have to deal with multiple different types of liquid, and often are left with empty bottles that you'll have to dispose of, or preferably recycle. Moreover, there are usually 4 to 5 times more bottled amenities than bars of soap per guest, meaning the volume of bottled amenities is far greater and requires a more regular collection and recycling process.

### THE 'ICK' FACTOR:

One of the biggest hurdles to soap recycling is dealing with what we refer to as the "ick" factor, meaning people get grossed out by the idea that soap is being recycled. Bar soap in general suffers from an image problem. What do you think when you hear the words "recycled soap"? If you thought "gross," and possibly bacteria-laden, then you are like the 50% of Americans interviewed by research firm Mintel

who believed bar soap is covered in germs after use. This belief, particularly strong amongst consumers aged 18–24, has partly led to a 5% overall decline in the usage of soap bars in the United States between 2010–2015, and a continuous rise in the usage of liquid soap. If this is how consumers feel about soap bars shared between family and friends, you can imagine how grossed out they would be with the idea of recycling bars of soap used by random hotel guests from around the world.

As you begin your soap recycling venture you need to clearly communicate to your stakeholders that soap (including gently used hotel soap) is not actually unsafe to use. Quite the opposite, in fact. There is no evidence showing that used soap bars can transmit disease, and in fact studies have shown that soap bars cannot transmit disease. In our years working with recycled soap from several countries around the world, and after welcoming over 10,000 volunteers into our warehouse, we have never heard of anyone getting sick from either the recycling process, or from using our soap. As we jokingly tell our volunteers: as long as you don't eat it, you will be fine.

Now that is not to say that we shouldn't be careful around the soap, or that the process doesn't require any care. As you will see later on, we have very strict and specific guidelines that we use to ensure safety of all our staff and volunteers. But we are not scared of the soap, and you shouldn't be either. Most of the bars of soap are only used once or twice, usually to wash hands only. In fact, we often receive bars of soap that are completely unopened!

## HOW SOAP WORKS:

One of the easiest ways to help people understand how gently used and re-processed soap is safe is by helping them understand HOW soap works in the first place. People in the developed world grow up knowing that we should wash our hands regularly, and that soap gets rid of germs. But few understand how it works. The science behind how soap works is filled with lots of jargon that can make it sound a lot more complicated than it actually is. Here are two versions to help you understand how soap works so that you can confidently speak to potential hotel partners, donors, and volunteers.

## HOW SOAP WORKS

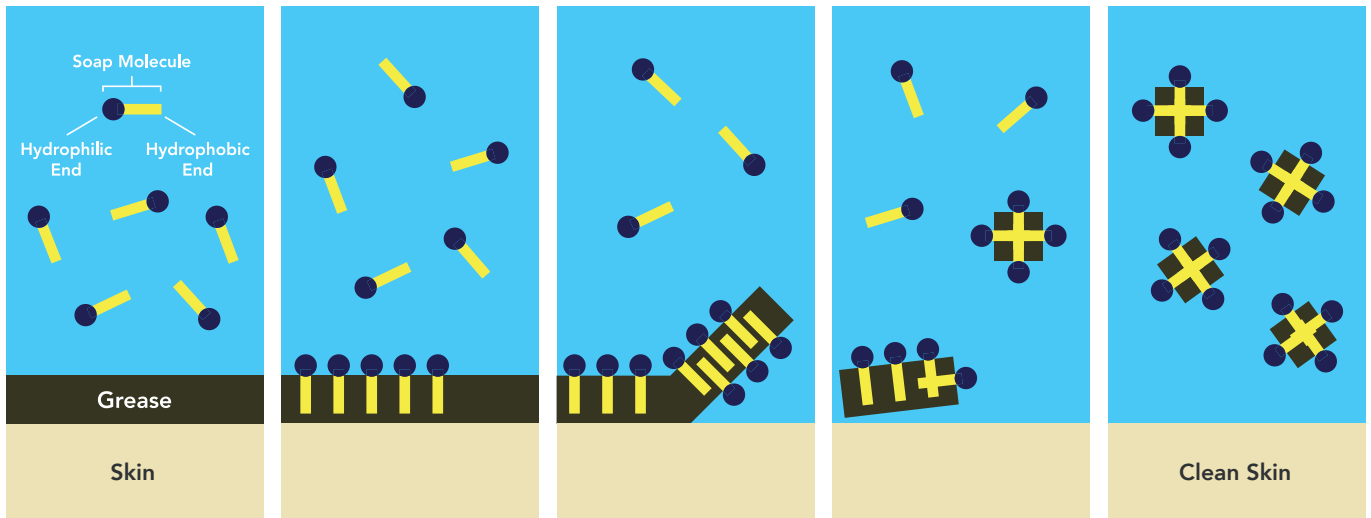
1. Soap dissolves in water into soap molecules.

2. Soap molecules orient themselves in grease and water.

3. Agitation causes grease to separate from the surface and flow off.

4. The process continues.

5. Cleaning is complete with the surface being cleared of grease.



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### THE SUMMARISED SCIENTIFIC VERSION:

Soap is made of a chain of molecules that has two major halves. One end of the chain is hydrophobic, meaning it repels water, and lipophilic, meaning attracted to fats. Combined, this half of the soap molecule repels water and sticks to lipids (fats). The other end of the molecule is exactly the opposite: hydrophilic (attracted to water) and lipophobic (repels fats). Put these two halves together, and you have one of mankind's greatest inventions: soap!

OK, so you're thinking "so what?" Well, most people believe that soap "sterilises" your hands, somehow killing or sterilising bacteria and viruses that are found on your skin. While that can be true, it usually isn't. You see, germs and dirt cling to the natural oils/fat on your hands, giving bacteria and other bugs a great environment to breed and multiply. We get sick when people allow too much time to go between washing hands, allowing the germs to multiply, and then getting shared from person to person via touch.

That's why washing hands with soap is so crucial: when soap is applied rubbed all over your skin, the soap molecules attach themselves to the oil on your hands. Then, when you run your hands through the water, the water attaches itself to the other side of the soap molecule, pulling the oils off your skin, taking any bacteria and germs with it.

### HOW THIS RELATES TO USED SOAP BARS:

So why should this make you feel better about the safety of used soap bars? Because it really doesn't matter what is on the soap bar: when you use soap properly, applying it to your skin thoroughly and rubbing vigorously, the oils will be removed no matter what, leaving your hands clean and bacteria free. This is largely true even if you wash your hands in unclean water. So don't think of soap as killing bacteria; think of it as removing the bacteria's home and breeding ground. That is why soap is the most efficient tool in the fight against illness that has ever been invented, and is why you and your volunteers should not worry about transferring illness via used soap bars. The moral of the story is, gently used hotel soaps are safe to use, and the "ick" factor is not warranted.

### USE DATA TO STRENGTHEN YOUR CASE FOR SOAP RECYCLING:

In addition to mediating the "ick" factor through education, you can build credibility by presenting data from reputable sources on your website such as the Centres for Disease Control Prevention (CDC) and the World Health Organisation (WHO). These organisations recommend both liquid and bar soap for usage at a community setting or generally any non-surgical environment. You can also show that scientific research studies have found no transfer of bacteria from soap to humans, even when using heavily infected soap. Recent hand-hygiene studies in developing countries have even found that people might be able to get the benefits of handwashing even when using contaminated water. Finally, you can emphasise that the only part of the population with potential risk are those with an already compromised

immune system. If you are healthy, your body will have no problem fending off the bacteria found on a bar of soap, and you will be perfectly safe using it.

Mediating people's perceptions of the "ick" factor will be an important and regular part of your work as a soap recycler. You can find some techniques to help mediate any concerns that may be raised in **Appendix F**.

### RESOURCES ON HOW SOAP WORKS:

To understand the science further here are some excellent YouTube videos that explain the process in detail:

- "The Cleansing Action of Soap" by TutorVista
- "How does Soap Work?" by NileBlue
- "How does Soap Work? — Science for Kids" by Mocomi
- "How Dirty Is Soap?" by BrainStuff — HowStuffWorks
- "How Does Soap Work?" by BrainStuff — HowStuffWorks



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# Why

07	Why Recycle Soap?
08	Why #1: Environmental
08	Why #2: Hygiene
09	Why #3: Job Creation
10	Why #4: Youth Empowerment



*For many people around the world,  
soap is a luxury that they cannot afford.*





In the previous section you learned about what soap recycling is, and how soap works. In this section, we will consider why soap recycling is important, and why one might want to get involved.

## WHY RECYCLE SOAP?

If you never heard of soap recycling, your first reaction will probably be, "Wait.... What?!" Then, shortly after, you will likely ask, "Why?! Why go to all that trouble?" But in reality, we cannot afford to not recycle hotel soap. It is estimated that billions of bars of soap are sent to the landfill every year by the hospitality industry, while simultaneously every year over a million children under the age of five die of pneumonia and diarrhoeal diseases, most of which could be prevented with regular hand washing with soap. Soap recycling diverts a lifesaving resource out of the landfill, and puts it into the hands of families in need in the most poverty-stricken countries. From an efficiency standpoint, soap recycling requires little input but can deliver significant social impact.

We have identified four main reasons why someone would engage in a soap recycling venture:



All soap recycling entities will be beneficial to the environment by removing needless waste, and if distributed and utilised effectively all can have beneficial effects on hygiene related illnesses in the areas they serve. The last two whys, job creation and youth empowerment, are not necessarily a given and will depend on how your organisation chooses to operate. For example, Himanshu Jain, President of APAC at Diversey which sponsors the Soap for Hope programmes in Southeast Asia and Africa said of what inspired Diversey to get involved, "We observed that in the policies of housekeeping and maintenance, a lot of soaps get discarded in an unused or barely-used condition. This not just adds up to the land-fill of waste created by the property, but also an actual waste of the cleaning trait of the soap."

Take some time at the outset to understand the whys of soap recycling. This will help you create clear goals for your organisation. You may be drawn more deeply to just one or two of the whys, or equally by all of them. But regardless, really understanding your "why" is necessary to determine how your organisation should operate.

## MOST VISITED DESTINATIONS OF 2016 & SOAP DISCARDED

Bangkok	London	Paris	Dubai	New York
21.47 million visitors	19.88 million visitors	18.03 million visitors	15.27 million visitors	12.75 million visitors
100,000 hotel rooms	90,000 hotel rooms	140,000 hotel rooms	100,000 hotel rooms	100,000 hotel rooms
12 million discarded soap bars	11 million discarded soap bars	14 million discarded soap bars	10 million discarded soap bars	13 million discarded soap bars

### WHY #1: ENVIRONMENTAL

Did you know that most of the soap bars you see in hotel bathrooms end up in the landfill? According to Accor, a Scandic hotel chain, hotel guests use only 15% of the soaps, shampoos and conditioners found in the room, with the balance thrown away — some even unused and in their original packaging. The hospitality industry in the United States alone throws away approximately 2.6 million bars of soap daily. If 4.6 million hotel/motel rooms in the United States are responsible for 2.6 million soap bars in the landfill per day or 946 million per year, what can be said about the rest of the 15.7 million hotel rooms found all over the world? On top of that, the number of hotel rooms in the world is constantly on the rise, with 710 thousand hotel rooms under construction as of June 2017.

To get a better sense of the magnitude of the environmental waste, you only need to look at the sheer volume of visitors and hotel rooms in some of the most visited destinations in the world: Bangkok, London, Paris, Dubai and New York (see above). These five cities alone are responsible for millions of bars of soap ending up in the landfill every year. This is incredibly wasteful, considering that millions of people all over the world, particularly children, do not have this basic necessity. By engaging in soap recycling, hoteliers can actively work towards diverting tons of waste from the landfill, and supporting the needs of vulnerable populations.

### WHY #2: HYGIENE

#### SOAP: THE MOST EFFICIENT TOOL AGAINST DISEASE

Pneumonia and diarrhoeal diseases are the #1 leading cause of death among children between the age of 0 and 5, killing more children each year than HIV, malaria, and most other diseases combined. Yet most of these deaths are completely unnecessary: if all children simply washed their hands with soap at the right time, nearly half of these deaths would be eliminated! That's why soap is one of the most effective and least expensive ways to prevent childhood illness and death ever invented.

But in many areas, soap is prohibitively expensive. Soap recycling is a way to get soap that would otherwise end up in the landfill into the hands of those who need it the most.

Additional resources related to hygiene-related impact can be found in [Appendix E](#).

#### HANDWASHING:

Soap on its own isn't fully effective without proper handwashing techniques. Therefore, hygiene education is an important part of making your soap recycling efforts productive. As a soap recycling entity, you will need to consider how hygiene education can be implemented with the recipients of your soap. Some organisations such as Sundara Fund are actively involved in hygiene education. Their employees are trained as hygiene educators/ambassadors and teach local communities as part of the distribution process.

Soap Aid provides handwashing education resources on their website. Other organisations such as Soap Cycling distribute solely to partner organisations who have their own hygiene education programmes. See [Distribution](#) for more information.



#### MORE PROPER HANDWASHING RESOURCES:

- ["Clean Hands Save Lives"](#) by World Health Organisation (WHO)
- ["Clean Hands Protect Against Infection"](#) by WHO
- ["How to Handwash?"](#) by WHO
- ["Handwashing: Clean Hands Save Lives"](#) by The Centres for Disease Control and Prevention (CDC)





## WHY #3: JOB CREATION

One foundational aim you may have for your organisation is job creation. Consider if job creation is an important WHY for you, as it will shape how your organisation is structured and what sort of funding you need to operate.

### WISE PROGRAMMES:

Many Soap Recycling organisations operate as WISE programmes, so it is important to understand how they operate. WISE is an acronym for Work Integration Social Enterprise. This is a type of social enterprise with the key aim of providing employment, training, and ultimately re-integration into the workplace for groups of people generally excluded from the labour market. The focus of WISE programmes is often on groups of low qualified, disadvantaged, or under-employed people, such as mothers, the elderly, and disabled.

Several studies have shown that most countries are diverting from a welfare state towards governance through diversion of responsibility to external organisations. The level of funding available for many social enterprises aiming to increase employment levels can be significant in some countries, as governments seek to increase employment through these organisations.

### THINGS TO CONSIDER WITH WISE PROGRAMMES:

Even under the umbrella term of “WISE”, if a key part of the vision of your organisation is to provide employment, there are several different factors that need to be considered. Different things fit different organisations, and the location of your business and the target group of people you are aiming to help will determine the approach you take to these variables.

### Employment:

Jobs can be created in different ways, through part time or full-time employment, in developing or developed countries, and in different areas of your organisation, such as processing, volunteer coordination, and even management.

All of these factors depend on the target group your organisation desires to help. For example, Soap Cycling’s MEY Programme gives part-time employment to elderly persons, whereas SapCycle gives full-time employment to handicapped persons with a view to re-integrating them into the workplace.

Do research on what groups government entities target to create jobs for and see if your soap recycling organisation can meet a specific need. You may focus on employing the elderly, handicapped, minority, or other groups of workers.

As you work with your employees long-term you can add an additional layer of social impact by focusing on opportunities for training and skill development. To ensure the people you employ are at the forefront of the mission of your organisation, offer training, education, and skills that can help them be employable in various organisations even beyond their time with your operations.

If you organise your soap recycling as a WISE programme, it is important to remember that the people you are employing are a part of your business and not just a marketing tool.

### Government & Other NGO Involvement:

Many WISE soap recycling projects partner and receive funding from other NGOs and larger organisations. “The Good People Fund”, for example, has been involved in the past with the Sundara Fund, providing funding for specific projects.

Other programmes use external organisations to find employees from their target area. SapCycle, for example, partners with local NGOs who work to find employment for handicapped persons.

The level of involvement of both governments and other NGOs will vary depending on the type of people your organisation is aiming to employ. Some WISE programmes are based in developing countries, providing employment to local people within communities that benefit directly from the soap. Others are based in developed countries, where the employees are involved in the processing of soap, which is then sent around the world to help those in need.

### Revenue Sharing:

The revenue generated from your WISE organisation should be distributed to reflect the input that went in to your work. If a key source of revenue comes from the people you employ, (for example they are making the soap, and you begin to receive payments from hotels), this should be reflected in their salary of benefits.

### Equipment/Space Design:

If you work with specialised communities such as the disabled and elderly, you will need to have the resources available to customise your workspace to suit their specific needs. Equipment and space design will need to be well thought out, potentially fixing equipment to countertops, tables at the correct height, sitting arrangements adequate. Health and safety considerations will need to be at an even higher standard than working with a traditional population.

### Social Sensitivity:

If you are working in developing countries employing underprivileged women in patriarchal societies you will want to learn more about the culture and status of women where you work. In some patriarchal societies giving women employment opportunities may not be taken well because when women earn money it can shift the power and social dynamics in families and communities. This is not to say you shouldn’t work with these communities, just be aware that not everyone will feel the same about the opportunities you are providing.





## WHY #4: YOUTH EMPOWERMENT

One way you could organise your soap recycling entity is around youth empowerment. Under good management, the process of recycling soap and the tasks and processes that go into it can lend itself to allowing students and young people to be involved in important managerial and operational experiences. This can work well especially for smaller organisations, or as a small part of a larger operation.

### WHY SOAP RECYCLING LENDS ITSELF TO YOUTH PARTICIPATION:

- It doesn't require a full-time commitment, perfect for students involved in school and other extracurricular activities.
- Many of the tasks are very straightforward and operational, can be done without a lot of micromanagement.
- There is always room for trial and error, especially when your organisation is small.
- Students have the chance to learn new skills in a business environment.

Students can be staffed on various communications, managerial, and operations responsibilities such as marketing, operations and logistics, human resource, compliance and distribution. See [Appendix C](#) for more information on youth empowerment ideas.

### UNIVERSITY ENVIRONMENT:

Setting up a Soap Recycling organisation in association with a University can be mutually beneficial to students, the University, and your Soap Recycling organisation. Students get a place to learn new skills and experiment in a real-world environment. The University can get positive exposure to the local community and teach the value of Social Responsibility, and your Soap Recycling organisation gets "free" labour for many essential tasks. Students can take significant responsibility and authority of their roles, but it is essential to have excellent management of the student teams for the organisation to thrive on and continuing basis. With many study abroad programmes and volunteer opportunities available on University Campuses there is opportunity to collaborate for distribution in many areas of the World.

### HIGH SCHOOL ENVIRONMENT:

Soap Recycling in a high school environment will more likely be on a very small scale, with just a few hotel partners, and only manual (non-mechanical) processing. To work in this environment there needs to be strong institutional buy-in from teachers or administrators to champion the programme. Distribution could be through local shelters, or even through organised service experiences.

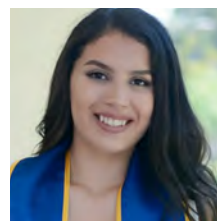
Shampoo Shuttle in Massachusetts, USA is a small liquid soap organisation founded and run by two high school students. They collect liquid soap from local hotels, condense the soap into larger bottles and give them to local homeless shelters.

Soap Cycling started as an opportunity for University students to have real world experience prior to graduation, and has given over 220 student internship opportunities since its inception in 2012.



"My volunteering experience at Soap Cycling was a very precious one. Soap Cycling inspired me to work in more non-profits in the future."

– Emma Li  
2017 Intern from China



"The skills I gained at Soap Cycling prepared me for my future career and I don't think I would be in the position I am in today without it."

– Jasmine Aragon  
2015 Intern from the United States



"My experience at Soap Cycling was extraordinary and rewarding. I was given countless opportunities to communicate with external organisations and coordinate volunteer sessions."

– Leanette Ko  
2016 Intern from Hong Kong



"Soap Cycling gave me the opportunity to build my confidence, communication skills, and my work ethic. It motivated me to continue to apply for other internships in the NGO sector both locally and internationally."

– Michaela Forte  
2013 Intern from Hong Kong





Soap is mankind's invention and is the most efficient tool for fighting against disease and illness.



# How

- 13 How #1: Soap Collection
- 14 How #2.1: Processing Soap Bars
- 15 How #2.2: Processing Bottled Amenities
- 16 How #3: Distribution
- 17 How #4: Funding/Revenue





The biggest challenge in establishing a soap recycling organisation is learning how to recycle the soap and bottled amenities. Although the process doesn't have to be complicated, let's face it: very few people in the world have any experience recycling soap. Most people wouldn't know where to start. But we will help make the process as clear and easy as possible.

The process of soap recycling is generally divided into four main categories:



## HOW #1: SOAP COLLECTION

Once you have decided to begin a Soap Recycling operation the first step is to contact potential hotels and begin to consider where you can store and process soap. It may take you some time find hotels to work with and coordinate the initial collection and pick up. Storage and processing facilities do not have to be set in stone to start the conversation with hotels.

### FINDING HOTELS TO WORK WITH:

Hotels are your most important partner – without them, your soap recycling operation will never exist. It is important that you view them as a true partner, and include them in every step of the process.

Soap for Hope by Disaster Aid Canada calls participating hotels, Caring Community Partners, and SoapAid calls their hotel partners, Hotel Champions. These titles tap into the “feel-good” factor that participating in Soap Recycling creates. This is an important aspect to capitalise on, since technically to hotels, whether the soap goes to the landfill or to a soap recycler, it is out of their hands. SoapAid has fantastic pitch material to promote their Hotel Champion programme, in addition to the “feel-good” factor, they are also clear about what the collection fees go towards, and what the hotel gets out of it.

### THE PITCH:

Before reaching out to any hotels it is important to be fully prepared for a compelling pitch. We recommend preparing a “pitch packet” so that you can present your idea in a way that hotels can easily understand and be willing to participate. It is important to emphasise what is required of the hotel and what they get out of it. Hotels can fulfil Corporate Social Responsibility (CSR) goals, distinguish themselves further from their competition in their “green” factor, reduce landfill waste, and facilitate for employees what we call the “feel-good” factor. The buy-in from employees can be greater when they understand that they are helping contribute to World Health Organisation (WHO) goals to reduce child deaths from preventable diseases. See [Appendix H](#) for some tips on the things you could include in your pitch materials, and see [Hotels](#) for information on hotels, such as choosing your hotel partner, contacting hotels and training hotel staff.

### COLLECTION/DELIVERY METHOD:

You will need to determine your collection model, which in some cases can be linked to your funding model. See [Funding](#) for more details.

We have identified three different collection models:

- *Subscription:* hotel pay a subscription rate based on average room occupancy, and soap recycler provides hotels with shipping containers and labels. Examples: Clean the World, SoapAid.
- *Hotel Pays:* hotel is required to deliver the soap to you, whether it is shipped via mail, or delivery van. Example: Soap for Hope.
- *Self-Collection:* the soap recycler oversees collection, usually done on a set day each month. Examples: Soap Cycling, Sundara Fund.

If you are collecting soap by yourself you can potentially collect from around 20 hotels in one day with one cargo van. Collection can be done by one person, but we recommend 2–3 people for ease and efficiency.

Once you have your test collection period completed you can assess potential volumes and your capacity for processing. This is the time to maximise your efforts, there is a big difference between collecting from 1–5 hotels and collecting from 10–15 hotels, but the difference between 10–15 hotels and 100 hotels is not as drastic. See what capacity you can handle and streamline your efforts. See [Appendix I](#) for the collection practice for Soap Cycling Hong Kong.

## HOW #2.1: PROCESSING SOAP BARS

Collection and processing develop alongside each other. You can start hotels collecting soap for you before you have the space to process. Soap can be stored for long periods of time before the initial processing, if stored in a dry environment. Depending on your scale, you may not need to acquire external space to store and process soap, a garage at home, or a storage room at an office or school can work. If your scale is big enough to require a warehouse you may consider space being donated to you, if not you may have to factor in rental costs. Partnering with a local hospitality supply manufacturer could also be an option, creating a sort of closed-loop system for hotel soap.

The most cost and time effective way to get discarded soap from hotels to people in need would be for the hotel to send soap directly to charities with WASH programs, but not processing the soap leaves the undesirable “ick” factor and does not send a message of respect to the end user. While technically non-processed used soap can still do the job, it is meant to do (see [How Soap Works](#)), we still recommend a minimum basic processing in soap recycling.

We have identified three main ways to process used soap bars: scraping, reprocessing into new bars using non-electric tools or machines, and reprocessing into new bars using electric machines.

### SCRAPING:

Scraping is the easiest and least involved way to prepare used soap. It is a basic physical process, scraping the entire outer layer of soap from the bar using one of many tools, a vegetable peeler, knife, scissors, or we find a spackle/putty tool works very well. Once the bar has been scraped it is good to go, and can truly be sent on to the end user at that point.

When reaching out to distribution organisations, make sure to understand their guidelines for accepting soap. If scraping is the only element of processing you pursue, there may be organisations that will not accept your soap because you are not providing “new” bars.

Another way to distribute scraped soap effectively could be to provide a device to hold the soap, such as a “soap saver” bag. This soap device could be hung near the water source to keep the soap from laying in water when not in use. This could be done with a specialised bag, or even with a pantihose. You could place multiple bars of scraped soap in the toe of a pantihose and tie a knot at the top. This device could be nailed to a tree or hooked somewhere near the water source. This will keep the soap off the ground, out of water, and potentially be more effective at helping people use the soap they are given.

### REPROCESSING INTO NEW BARS USING TOOLS OR MACHINES:

This process starts with scraping, then soaking soap in a sanitising solution, chopping soap into smaller pieces, and then pressing soap into a hand-crank soap mould. New bars of soap can then be packaged with paper and string or a sticker. You can use your company logo on the paper or the sticker.

Some soap recyclers like Soap for Hope by Diversey use natural fragrances and local flowers and plants, to create beautiful new bars of soap that smell good, and have secondary beneficial properties like ginger for wounds, aloe vera for itchiness, and lemongrass for anti-mosquito.

A processing method that does not require any electricity opens a lot of avenues for soap processing, especially in developing countries.

At the printing of the document there are no hand-powered soap presses available for purchase. The Full Belly Project designed and manufactures the hand-powered press for Soap for Hope, but it is not available for commercial purchase. For Soap Recycling to grow in popularity and volume we feel there is a great need for a hand-powered soap press for individual use. This can encourage small-scale soap recycling operations to begin around the world. Making the jump from manual processing to machine processing is a huge one. Some soap recyclers won't need to make this step because their operations are based on providing manual labour jobs in developing countries, and others won't need it because their operations are just not big enough to warrant the financial investment.

### REPROCESSING INTO NEW BARS USING ELECTRIC MACHINES:

The mechanical processing of soap needs a lot of space, equipment, and financial resources to run. Aside from the manual outer-layer scraping, soap will be sanitised, ground up, reconstituted, extruded, and cut nearly all by machine. Running an operation on this scale will need more than just volunteers, it will need dedicated, paid staff who are trained to work safely with industrial machinery.

Aside from scraping, all steps require different machinery, and depending on your scale of production, some steps can be replaced with a hand-powered substitute. If you are unfamiliar with machinery for producing or recycling soap, even a simple Google search can be overwhelming — there are so many manufacturers and options. Please see [Appendix G](#) for more information about the steps for processing soap bars using electric machines.

### ADDITIONAL SOAP PROCESSING RESOURCES:

- [“Clean the World Orlando Recycling Soap”](#) by James Samples
- [“How to recycle your old hotel soap”](#) by Sundara
- [“Recycling Used Bars of Soap to Save Lives”](#) by Associated Press



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## HOW #2.2: PROCESSING BOTTLED AMENITIES

Processing liquid amenities is very different to processing bar soap. The processing, equipment, challenges, and even distribution are different from Bar Soap, and do not have a lot of overlap. It is logical at some point that you may consider adding liquids to your offerings, whether it is because a hotel asks you to start collections of Liquids, or that you just see the vast amount of waste generated and wasted hygiene potential in the soap thrown away from this portion of the hospitality industry. If you do add liquid amenities to your offerings, these are the things you will want to consider.

### COLLECTING LIQUID SOAP

Collecting liquid soap will require educating hotel staff on what you will and won't accept, and how you want it sorted before collection. Before you agree to start accepting liquids meet with hospitality management and see what types of bottles and tubes they use. Recycling plastics, especially very small containers can be difficult. Look on the bottles and tubes for the recycling symbol, and a number ranging from 1–7, this is the grade of plastic.

Do your research on what grade plastics are easily recyclable in your area before you agree to and begin collections. You do not want to be stuck with a large volume of plastic bottles and tubes that you cannot get rid of. Depending on where you live the ease of recycling different grades of plastics varies greatly.

It will help your processing greatly if different types of liquid amenities are sorted at the collection point at the hotel. Provide your hotels separate bins for different types of amenities, and keep them separate.

Also, be very clear on what you will accept. Hotels have many different types of small bottled amenities such as, shampoo, body wash, conditioner, mouthwash, toothpaste, etc. Some hotels will want to give it all to you, but in general conditioner and lotions are not ideal because they cannot be removed from the bottles, therefore cannot be recycled, and they don't necessarily support your hygiene mission. What is vital for hygiene? Soap. So, do you want to spend your time trying to figure out what to do with large volumes of partially used lotions?

We recommend only accepting liquid body soaps and shampoos, and being very firm with hotels about this rule. As a social enterprise you want to keep your energy and efforts guided towards your cause, if you struggle with hotel compliance don't be afraid to drop them from collections.

### PROCESSING LIQUID SOAP:

First, it is important to keep all Liquids properly sorted, your job as a soap recycler will be much easier if the hotels sort the types of liquids onsite. Try to enforce this requirement as strictly as possible because it reduces the manpower needed to process the soap on your end.

When draining soap to be used in larger bottles it is essential to keep like-soaps together, and clearly label your large collection bottles with the type/brand of soap and the hotel it came from.

Liquid soaps can be used in various ways:

- If they are more than 75% full they may be used directly in hygiene kits.
- If bottles are only 50% full they typically get topped up before being using them in hygiene kits.
- Liquids may also be drained from small bottles and combined into larger bottles.

Bottles and tubes need to be washed before draining, and after draining if they are being recycled. This requires large amounts of water, space, and manpower.

### STORAGE SPACE

Collecting liquid soap requires that you have the space to store large quantities of small bottles before and after the soap is removed. Your empty tubes and bottles may be with you for many months before recycling occurs.

There are two main methods for removing soap from small bottles:

#### **The Squeeze Method:**

Either hand squeezing/rolling, or using a tube squeezer. This generally works best for tubes or softer plastics. Rigid bottles are too difficult to remove soap this way.

#### **The Gravity Drain Method:**

Using gravity to drain liquids from bottles into a collection container. This method is very effective at removing all the liquid, but it requires an open, flat space that won't be disturbed, time for draining, and a specialised device, we call a Draining Board, created for the size of bottles you will be draining.

This device is essentially a piece of Plexiglas or MDF wood with a series of holes that can fit the neck of the plastic bottle. You make the piece wide enough to rest over a large plastic tub that can receive the liquid soap. The bottles rest upside down and the liquid soap drains effortlessly. Since every hotel will have different sized bottles, you will need multiple Draining Boards made, specific to each bottle.

Clean Conscience has developed a very efficient gravity drain system for their liquid amenities. They worked for months to find a system that was practical and hygienic. They report "sorting and decanting the toiletries is a labour intensive and manually repetitive activity with a surprising calming effect as an added bonus".

**Shampoo Shuttle** has a creative funnel device for draining liquid soap. They used a 3D printer to create a draining board that fit their bottle size and sits on top of a large funnel.

If you are considering processing liquid amenities take the time to really think of every angle of complexity this will add to your operations. If you are a small organisation already processing bar soap, consider if you have the space and manpower to bring in liquids recycling, and don't feel obligated to add them if feel it might compromise your ability to deliver quality bar soap processing. Or, if you have yet to begin your Soap Recycling operations you could begin exclusively with liquids, like Shampoo Shuttle in the United States. They work only with liquid soaps and distribute locally to homeless shelters in their area.



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#### **ADDITIONAL SOAP PROCESSING RESOURCES:**

- "[Recycling Hotel Soap Toiletries](#)" by Clean Conscience



## HOW #3: DISTRIBUTION

So, you finally have processed soap, ready to send on to those in need, but how do you get it there? There are two main options for distribution, distributing the soap yourself, or working with external organisations to distribute on your behalf. When exploring your distribution options, remember that soap can be stored for a long period of time, so the distribution arm of your operations can wait until you find the right organisation to work with, or the right connections to start your own distribution.

### IN-HOUSE DISTRIBUTION:

Soap distribution requires accompanying hygiene education. Without proper use, soap is not effective in disease prevention. If you choose to distribute the soap yourself you will also need to develop a hygiene education program and find places to implement your program. Potential entities to partner with could be schools, hospitals, or churches. If you are not distributing locally you will need to employ someone on the ground in the countries you distribute to, which will mean added costs to your organisation. When developing your hygiene education resources work with someone who speaks the local language to be considerate of language and cultural subtleties that you may not be aware of as an outsider. For a list of hygiene resources to reference when developing your education materials see [More Proper Handwashing Resources](#).

Sundara Fund and Soap for Hope have developed distribution/employment arms as part of their organisational structure. Distribution is a vital part of the mission of their organisation because it provides women with employment opportunities. At Sundara Fund, women are employed to collect and process soap with some employees trained additionally as Hygiene Ambassadors. Hygiene Ambassadors are trained to give hygiene education classes in their communities as part of the distribution process.

Soap for Hope has a decentralised operation model, so they do not dictate how the soap is distributed. Soap for Hope facilitates connections, resources, and materials to begin a soap recycling initiative in certain communities around their partner hotels in connect with a local NGO, and allow the local soap recyclers to determine how to distribute. Generally, the soap is distributed in the immediate community around the hotel where the soap was collected. Some re-processed soap may be placed for sale, or optional donation at partner hotel lobbies, some might be sold for a small cost at local markets, and more often, the soap is distributed for free to the communities around the donor hotel by the soap recyclers themselves.

### PARTNER DISTRIBUTION:

If you are working with external organisations for distribution first realise that most will have a list of requirements for donations, check to make sure that the manner your soap was processed in is acceptable to your desired distribution partner. For example, some NGO's will not accept bar soap that has only been manually processed (scraped only), they require fully processed, "new" bars.

When looking for distribution partners try to create long-term partnerships. Reaching out to other WASH programs (see [WASH Programs](#) for more information), is an ideal place to start, as they will have aligning goals and values. You can also look to work with religious service organisations, but if you do, make sure that you feel comfortable with the level of proselyting that is involved. We suggest discouraging organisations from using the soap in proselyting activities.

Find a distribution system that works best for your mission. There are as many ways to distribute as there are ways to recycle soap. Depending on the scale of your operations you may have multiple distribution streams including local and international. Some organisations are highly involved in distribution alongside their distribution partners, creating distribution trips together, and others have essentially nothing to do with the soap once it is sent off to the distributing organisation.

When working with partner NGO distribution channels you can develop a protocol of requirements you desire in a distribution partner some of which may include:

- Permission to do due diligence which may include a review of proof of charitable status and other relevant corporate/financial documents.
- Distributing soap based on need, not religion, political affiliation, ethnicity, or other criteria.
- Discouraging active engagement in political activity or proselytising any religion.
- Ways to measure the impact of the soap use and regular reports on data, outcomes, including stories and photos, which may be used by your organisation.
- When possible, willing to compare pre- and post-distribution data on indicators such as diarrhoeal infection rates, cases of pneumonia, etc.
- Willingness to add your organisation to the list of sponsors/partners on their website and other marketing or social media pages.
- Willingness, upon reasonable notice and as agreed ahead of time, to allow your organisation to audit and visit the partner's facilities or distribution points to ensure, among other things, quality control and proper handling of the soap.

This list is not exhaustive, so consider what you feel you need out of a distribution partner, and keep the dialogue open and clear as you begin your relationship.

If your distribution happens internationally you may be confronted with criticism that sending soap long distances is not environmentally friendly, or that your immediate community should be prioritised over those abroad. There are no one-size fits all for distribution, and local vs. international distribution have different purposes. You will need to be prepared to talk about how and why you distribute the way that you do. The reality is though, that there is a lot of discarded soap in the world that would otherwise end up in the landfill, and the places where the hygiene needs are greatest are not always where the soap is discarded. In an ideal world soap wouldn't need to travel long distances, but until hospitality waste is reduced drastically, and low-income populations around the globe can have easier, cheaper access to hygiene, then soap recyclers will continue to work in the best way they can.

### LOCAL DISTRIBUTION:

Distributing local to collection and processing is good for the environment as it keeps your carbon-footprint low, and it can help with branding to increase the profile of your organisation in your community. Depending on where you live, what types of soap, and volume you are offering (bar vs. liquid), organisations that could use your soap might be:

- Homeless shelters.
- Women in crisis shelters.
- Refugee organisations.
- Orphanages.

In general, we recommend distributing liquid amenities locally because they are heavy, expensive to ship, can leak during transport, and can be difficult to get through customs. When kept in their original packaging Liquid Soaps are ideal for use in hygiene kits. You can also distribute shampoo and body wash in large quantities by consolidating them into large plastic containers.





## HOW #4: FUNDING/REVENUE

Funding is a vital element for any soap recycling venture, and how you structure your WHYs and HOWs will determine funding requirements. Small entities can be run quite leanly, especially if there are many elements of donation and volunteerism. Large entities that process on an industrial scale will obviously require significant financial resources. From observation these are funding models we see at play in the soap recycling world:

### PAY-FOR-PLAY:

Hotels pay a subscription fee to the soap recycling program. The fee is based on number of hotel rooms and average occupancy. This fee covers shipping, and helps cover some operating costs. Extras can be provided such as in-room forms to advertise the hotel is a participant.

This is a good model to get funding, but only if hotels are willing to pay. In developing countries, it can be difficult to convince hotels the cost is necessary since the soap leaves them whether it goes to the landfill or is recycled.

Clean the World CEO, Shawn Seipler, talks about their early days and the thought process that went into making Clean the World a Pay-for-Play model:

“ In 2009 the economy was in very rough shape, so having a completely philanthropic model did not work for us early on; we actually went broke very quickly, we almost never got out of that garage [where they started their operations]. We had to ask hotels to not only participate from an operational standpoint but we needed them to participate from a financial standpoint.

So, we had to create a model whereby hotels ‘bought’ the recycling program, so they had to see value in it, not just from an internal impact standpoint, what it means to their employees, to the guests, to the environment, but it also had to make sense financially because that was the only way we were going to be able to scale the organisation. ”

– Shawn Seipler, CEO of Clean the World



### SERVICE PROVIDING:

One possible unique model for funding is offering service/team building experiences for corporates and groups. For a set rate (depending on location and group size) your soap recycling organisation either brings a soap recycling session to corporate offices, or groups of employees can come to your warehouse. Human Resources, Corporate Social Responsibility and other team leaders in large companies use these sessions as part of their philanthropic, CSR, volunteering, and team-building initiatives.

Soap Cycling Hong Kong uses the **Corporate Sessions Model**. Soap Cycling can bring a bar and liquid soap processing session to offices, or sessions can be done at the warehouse. Participants spend some time learning about what Soap Cycling does, and then a few hours processing soap, manually sorting, scraping, and squeezing. These sessions receive wonderful feedback from participants, they find it enjoyable and stress relieving to scrape the soap, they have time to chat with colleagues and build team synergy, and they have the feel-good factor of knowing they are contributing to the world in the positive way.

### CORPORATE SPONSORSHIP:

You could work with a corporation to sponsor your organisation. This will be more successful if your organisation is run leanly. Try to find an organisation with a strong environmental or hygiene related CSR strategy.

You could also get corporations to sponsor only a specific portion of your operations, such as partnering with a logistics company to donate shipping costs to get your soap to the country in need, or partnering with a warehouse/storage facility to donate your warehouse space.

### GRANTS/GOVERNMENT PARTNERSHIPS: W.I.S.E.

Investigate local grant opportunities, especially those in the W.I.S.E. (Work Integration Social Enterprise) category. Many governments are leaning away from strictly welfare programs and funding work opportunities for those in the community that are under-employed or struggle to find suitable work experience, such as the disabled, elderly, or homeless. For more information on this see **W.I.S.E. Programs**.



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### FUNDRAISING/FULLY PHILANTHROPIC:

If you structure your organisation as fully philanthropic you will need to spend a lot of time seeking and maintaining funding, this can be stressful and tenuous. Even the most leanly run soap recycling organisations need cash resources for much of the operations. Consider if you have the time to continuously be seeking out funding, and what your time might be better spent doing.

### NON-PROFIT ARM OF FOR-PROFIT SOAP MANUFACTURER:

An ideal closed-loop system could be soap manufacturers being involved in the soap recycling process. Hospitality Soap Manufacturers have the facilities for space and machinery already in place, so the overlap would keep costs down. The processes that would need to be added are, scraping, sanitising, and grinding/chopping the used soap, and the rest would already be a process the factory operates. Hospitality Amenities providers would have hotel connections already in place. It would be wonderful to see more soap manufacturers take a proactive role in waste reduction. **Soap Aid** in Australia is a wonderful example of a closed loop soap manufacturing system. Soap Aid is a charity arm of Concept Amenities.

### PAY-FOR PRODUCTS:

Some Soap Recyclers get funding from other soap producers and soap sales platforms. Reach out to soap producers to see if they have charity initiatives, and if they don't, propose one. Show them how the "feel good" marketing can be mutually beneficial.

#### Examples:

- **Soap Box Soap**'s mission is to change the world through every day, quality purchases. They produce natural soap products for purchase, and donate a bar of soap to someone in need with every purchase. They work with Sundara Fund and EcoSoap Bank.
- **B.A.R.E Soap** works with Sundara Fund, donating money from their give 20% fund to help fund the ongoing initiatives for job creation and hygiene education in Indian Slum communities.

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# Wash

21	Introduction
22	Other Wash Programmes



Despite there several billions of dollars being spent on WASH programmes, less than 10 million is spent on providing soap to those that actually need it.





## INTRODUCTION:

Hand-washing with soap is among the most effective and inexpensive ways to prevent diarrhoeal and respiratory diseases in the developing countries, where millions of children per year suffer from diseases that could have been prevented with proper handwashing.

WASH programs combine hand-washing and other hygienic practices with clean water and healthy sanitation in order to prevent the spread of disease and promote a healthy lifestyle.

### WHAT IS WASH?

The acronym for WASH (Water, Sanitation and Hygiene) started to be used in the late 1980s as part of a project by the United States Agency for International Development, but began to be used in its current form from about 2001 onwards. Since then, WASH had been adapted universally as an umbrella term for “water sanitation and hygiene”, and is a key priority for both UNICEF and the World Health Organisation (WHO).

Under the UN’s Sustainable Development Goals adopted in September 2015, the global community has resolved to achieve safe water, sanitation and good hygiene for all people by 2030.

WASH can improve health, life expectancy, gender equality, and many other key issues associated with international development. Each aspect of WASH had individual goals, but the grouping of the concepts comes from the shared issues that deficiencies in any area can create. For sustainable public and individual health, addressing all three areas together is key.

### WATER:

Access to safe and clean water is essential for good health and development of children. Under the water area of WASH comes increasing access to safe and affordable drinking water, easily accessible for rural communities.

### SANITATION:

Sanitation covers adequate treatment and disposal of sewage, and access to toilets. Millions of children in poor and rural areas do not have access to toilets and have to go in the open, otherwise known as “open defecation”. Almost 900 million people around the world, 12 percent of the global population, practice open defecation. The term is used in much of the literature about WASH. One of the key issues under sanitation is that open defecation is part of many people’s traditional cultural practices. Improving sanitation is about more than just building toilets in rural communities, but developing education for people about the importance of sanitation is just as important.

### HYGIENE:

Hygiene covers all the basic cleanliness needed to minimise the spread of disease. Washing hands with soap at crucial times, like before eating and after using the toilet, for example, can have a huge impact on health.

*“ Infusing soap into an existing successful WASH programme is the most efficient way to improve sanitation and hygiene for disadvantaged communities. ”*

– David L. Bishop, Founder of Soap Cycling

## OTHER WASH PROGRAMMES:

Many other organisations exist to address different aspects of WASH. A soap recycling company fits into this category along with the following:

### WATER SANITATION:

Around 99 per cent of the water on earth isn't drinkable. WASH programs exist to clean the water in many countries and make it safe to drink through processed like desalination and filtration. This is an expensive process, hence the need to often involve external organisations in poor countries to help clean water. Different methods and processes are used, with many organisations focusing on slightly different areas such as the following:

- Sand filters.
- Water purification systems.
- Spring protections.

### ACCESS TO WATER:

In remote and rural areas, the main problem can be access to water without main pipelines. Wash programs work in the following areas to improve access to water in these regions:

- Wells.
- Pipelines.
- Boreholes.
- Springs.
- Rainwater catchments.

### WASTE DISPOSAL:

Many organisations focus on reducing the practice of open defecation. A key area of WASH is building, maintaining, and teaching about the use of:

- Toilets.
- Toilet paper and toiletries.

## RESEARCH AND INNOVATION, AND SHARING IDEAS:

Many WASH programs do not specifically target one area of WASH, but collect data and conduct research on different solutions to challenges and ways to improve. Many of these are multinational organisations such as the World Health Organisation and UNICEF.

### WHERE DOES SOAP RECYCLING FIT IN?

Distributing soap to poor, often-rural communities can improve the hygiene of children and adults who need it most. Recycled bars of soap can be used in these communities to reduce diseases such as diarrhoea, for example, by as much as 50 percent, saving lives and protecting communities. SapoCycle likens hand washing to "a "do-it-yourself" vaccine," calling it "more effective than vaccines, medication, or clean water initiatives alone".

Soap is a tool that will protect communities, but distributing soap is not enough, and therefore it is vital to partner with agencies or WASH partners who do Hygiene Education. In areas where people are not used to using soap, they may not know how and when to use it. To have a real impact on people's health and lives distribution must work in tandem with education initiatives on a regular basis.

This makes contacts important. There are many organisations that focus on the education side of WASH, teaching in schools and communities about the importance of washing hands with soap. These organisations could have many resources ready-made so your soap recycling company is not starting from scratch. Big companies have access to bigger data sets and better research than a new non-profit ever could, so it is useful to contact these types of organisations and work with them on developing WASH programs in these countries. Large organisations such as UNICEF and the WHO are a good place to start.



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*Almost all soap that is discarded is still completely safe to use, contrary to what is typically believed.*

# Impact

- 25 | How to Show Your Impact
- 26 | Impact Measurement Considerations



## HOW TO SHOW YOUR IMPACT:

Investors and donors want to know their money is being spent to make an impact and that you are achieving the things you set out in your mission statement. It is also important that as an organisation you are aware of whether you are achieving your goals and how you are doing so.

Soap Recycling companies can show their impact across several different data sets. Keep detailed records from the beginning, especially for data sets linked to your mission statement. The way you display your results should be linked to your mission statement and business model. If, for example, you want to create a WISE program with a focus on employment, the key figures you need to show are the number of jobs you are creating, or the training you are giving etc.

It can be difficult to show or prove your impact in distribution countries, so more often than not your showable impacts will be within collections and processing. Keep this in mind as you collect data, you cannot prove how many lives your organisation has helped save, but you can demonstrate how much soap you have distributed, or how many volunteer hours you have facilitated.

### VOLUME OF SOAP:

It is imperative that data on the volume of soap into and out of the factory is recorded. One of the easiest ways to show the work of a soap recycling organisation is to list figures on the amount of soap collected, processed, and distributed. This information can be shown through the actual number of bars or by the weight of the soap, and may be further broken down into the number of recipients or the amount of people it will help for a year.

Having a set process in place from the start of operations with a uniform collection and distribution system enables you to ensure you are measuring accurately and consistently, and will make the data collection process far easier down the line.

### VOLUNTEERS:

Recording and listing the number of volunteers or hours spent in your organisation can show the community impact you are having.

### EMPLOYMENT:

For a WISE program, employment is key and therefore your organisation should keep a record of the statistical impact you are having on the labour market, i.e. how many full/part-time jobs your organisation has created.

This is important to show not just from a marketing perspective, but investors and some government funding may rely on the local impact of your work. In Singapore, for example, to qualify for charity status 70% of the impact of an organisation needs to be in Singapore, helping local people. This is something also to bear in mind when deciding on a business model and mission direction view.

### TRAINING:

Training falls under the umbrella of employment. Hours of training per week, managerial positions taken up, and opportunity given to young people are all ways to show your impact.

This is particularly important if you are setting up a WISE program, with the focus on employment, as WISE programs often seek to give people employable skills that they can use for future employment opportunities outside of the WISE system.

If Youth Empowerment is a mission you aspire to fulfil Training opportunities are a good way to demonstrate impact. Soap Cycling Hong Kong is an example of this, the number of student interns and the hours of training are two measures Soap Cycling uses to show their impact in this area.

### EDUCATION:

Some Soap Recyclers such as Clean the World USA have their own hygiene education initiatives. Clean the World as a WASH program in schools in Orlando and Las Vegas, and works in international communities to change behaviour with soap.

It is hard to measure the quantitative impact teaching is having, but hours spent in schools or communities, the number of people attending workshops etc., are all part of educational impact and key to the success of an organisation's missions in impacted communities.

### HOTEL PARTNERS:

Recording the number of hotel partners working with your organisation can help show the growth and scope of your business, as well as the recognition you have on the local community. The number of hotels and location of the hotels you partner with are two examples of how to show impact here. Many organisations show this on a per room basis, which requires the hotel partners to estimate the number of rooms they use.

### GLOBAL IMPACT ON THE PROCESSING SIDE:

Measuring the global impact of soap distribution is important, but difficult. You can't quantitatively measure the actual number of lives your soap distributions will save, for example, but this area of impact measurement that many volunteers, investors and hotel partners will want to see results from. After all, if you are claiming to be improving and saving the lives of people in disease-riven countries, it is important to be able to prove this is happening.

There are different ways to show the international impact of your organisation. Simply a list of the number of countries you send soap to is one way. This does not, however, equate to the actual impact you are having. You will need to weigh up the depth versus breadth of your organisation's work, and find a suitable measure to prove you are making a difference. Be cautious to only make statements you can comfortably prove.



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## IMPACT MEASUREMENT CONSIDERATIONS:

### HONESTY:

It can be tempting to conflate the impact of your organisation for marketing appeal, but it is essential to maintain honesty and convey in concrete terms only things that can be proven.

Integrating the impact measurement process into your Soap Recycling from the beginning allows you to form accurate and honest information, and gives you back data so you can track your progress.

### THE IMPORTANCE OF EMPIRICAL IMPACT MEASUREMENT:

There has been a trend in recent years towards empirical impact measurement. The importance of statistical measurement is increasing and it is key for several different inputs.

For funding, investors may require statistical results and evidence of impact measurement. For a non-profit to achieve a charitable status and the accompanying tax benefits, it will often be key to prove the charitable works of your organisation and making an impact.

### LEGAL REQUIREMENTS:

In addition to the morality aspect of the data collection and presentation you use, you need to consider the legal obligations that might be over your business. The extent of these obligations will depend on the type of business you are running. If, for example, you receive government funding, there may be a legal requirement for you to make a certain impact in your domestic country.

### BIG DATA:

Further to the importance to funding, data collection in an industry where there is relatively little research, and any effective research can be hard to do, can make overall huge improvements to everyone's work. Research in this area had developed in recent years following the official establishment by the UN of Sustainable Goal 6: Ensure availability and sustainable management of water and sanitation for all. Latest findings and updates on the goal are published in an annual report by the UN.

Further research and studies can be found on other data-sharing websites. These websites and resources are becoming more and more prominent in the field of WASH around the world. Websites like the [American Global Waters](#) collect resources from several different sources about research on water and disease. These sites can be a useful basis for looking at the impact your organisation, as a soap recycler, can have and is having on the fight against disease in many communities across the world.







# Who

29	Who #1: Who can rely on soap?
29	Who #2: Hotels
31	Who #3: Volunteers



Our goal is to make recycling soap as commonplace as recycling paper, glass, and metal around the world.





## WHO #1: WHO CAN RECYCLE SOAP?

Everyone can recycle soap! If you are staying at a hotel that does not participate in a soap recycling scheme, then take your soap home with you, otherwise it will end up in the landfill.

There are many different groups that might consider creating a soap recycling operation:

- Student groups, high schools, and universities.
- NGO's with WISE Programs.
- Passionate individuals looking for a way to make a positive impact in the world.
- Soap manufacturers (create a closed loop system, and they have the equipment already in place).
- Hotels.

As Soap Cycling Hong Kong founder David Bishop says, "This is an idea that is just looking for a leader." Soap Recycling is a chameleon of an enterprise because it can be done in so many ways, by so many different passionate people, for so many different purposes.

### LIST OF SOAP RECYCLING ENTITIES AS OF 2018:

- Clean Conscience – England
- Clean the World – Orlando and Las Vegas, England, Canada,
- Clean the World Asia – Hong Kong
- Eco Soap Bank – Cambodia
- S.O.A.P Recycling Program by BaliWise – Bali
- SapoCycle – Switzerland
- Shampoo Shuttle – Massachusetts, USA
- Soap Cycling – Hong Kong, Mainland China, Singapore
- Soap for Hope by Diversey – Multiple countries
- Soap for Hope SFU Vancouver – Canada
- Soap for Hope: Disaster Aid Canada – Canada
- SoapAid – Melbourne, Australia
- Sundara Fund – India

## WHO #2: HOTELS

### HOW TO CHOOSE YOUR HOTEL PARTNERS:

We recommend approaching global brands, preferably of 4- and 5-star rating, as these hotels tend to have larger, higher quality bars of soap, higher occupancy rates (meaning more soap wasted), and established environmental and corporate social responsibility programs. It's also beneficial to choose hotel partners that have neighbour hotels for logistic and collection purposes. There is probably a hotel association in your city or region, so consider starting there to find a list of hoteliers. For your initial contact we recommend approaching 15 –20 hotels, knowing that not all will participate.

### CONTACTING HOTELS:

Prepare your pitch materials, what you will say in person, written materials that can be emailed, and printed materials that can be left with the hotel. When these are ready you can begin to contact housekeeping managers. Start with a phone call directly to housekeeping management and ask for a face-to-face meeting. Send an email in between the call and the meeting, and complete an in-person meeting to present your proposition. If for some reason you cannot get any response via phone or email to set up a meeting you can try just stopping by and asking for housekeeping management. If you struggle to identify or get in touch with housekeeping management, then you may consider contacting other departments such as marketing, CSR or HR to get in contact with the hotel.

Once you have 3–10 hotels on board, you can begin a test collection period to see what kind of volume you are looking at from each hotel. We recommend testing for few months because it can take time for housekeeping staff to fully implement collection procedures and hotel occupancy can fluctuate month to month. During this time you can begin to determine your options for storage and processing. If your operation is small you can use space at home, like a garage or storage room. Also, be aware that you don't have to be ready process as soon as you have soap. If it is stored in a dry, clean environment soap can be stored for a long period of time before processing.

## CONTACTING HOTELS:

### 1. Hotel Selection:

- Approach your local or national hotels association.
- Aim for global brands, 4 and 5-star hotels.
- Size doesn't matter as much as occupancy rates, the higher, the better.
- Aim for 10–15 hotels for a trial period of 2–3 months to gauge volume.
- Over time word of mouth will be able to help you increase your impact.
- Have pitch materials ready before reaching out to any hotels
- Once you have 3–10 hotels on board begin your initial test collection.

### 2. Contact Hotel Housekeeping Manager:

- Phone Number.
- E-mail.
- Arrange an in-person meeting to fully present your pitch.
- If necessary just stop by hotels and introduce yourself to reception.

## TRAINING HOTEL STAFF:

Once you have a group of hotels who have agreed to participate you need to be prepared to train housekeeping staff on how to collect and store the soap. In general, the turnover rate for housekeeping staff is high, so your materials need to be simple, visual, and easy to understand and implement. We recommend creating a one-page document that briefly explains what soap recycling is, the mission of your organisation and what you will do with the processed soap, that can be placed in an easy-to-see spot in Housekeeping storage rooms. Another one-page document demonstrating “good” and “bad” soap will help ensure the soap you receive is usable. One very wet bar of soap can ruin an entire box, so make it very clear in visual form, and train staff that if it's questionable, throw it away. Last, make sure your organisation contact details are easy to find, the person you train may not be in their role very long and you want to ensure proper collection and storage continues as staff rotates.



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## MATERIALS FOR “GETTING STARTED” PACKET:

1. Welcome packet.
2. Labelled collection containers, or labels for their containers.
3. One-page wall poster of who you are, what you do, where soap goes to.
4. One-page wall of “good” and “bad” soap examples.
5. One-page wall poster of contact information for your organisation and other necessary information.
6. Branded bins, if you are providing them.

You will need to discuss with housekeeping management what storage situation works best for their space constraints. You may provide them labelled bins, a small container for the housekeeping trolley, and large containers for storage until collection, or hotels may want to provide their own. Make sure the storage box is not too big as soap is heavy. The box must be manageable to lift when full. We recommend no heavier than 20 kilograms when filled with soap. If you are providing storage boxes for hotels we recommend using heavy duty plastic bins with flip-top lids. If you can, your company logo should be printed on the side of the plastic bins, it can help with branding, and keeping housekeeping staff aware of what they are collecting soap for.

Once you have collected for a few months you will be able to gauge how often you need to collect your soap. Large hotels with high occupancy rates need more frequent collection, possibly once a month, smaller hotels with less occupancy might only be every 2–3 months. We recommend requiring hotels to have at least one full container for pick-up, and to have the containers closed and taped shut prior to your arrival.

Include with your recommended practices a contract with the hotel so that so both parties know what is expected of the other. We recommend including a clause that the hotel will give 30 days' notice before collections cease. See [Appendix C](#) for a sample welcome letter.



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## WHO #3: VOLUNTEERS

Volunteers are a vital part of processing for any soap recycling organisation. Regardless of the size of your organisation or whether your operations are nearly all manual or entirely industrial, you will need lots of manpower to get your work done. We see three main ways you can use volunteers:

### MANPOWER:

Soap Recycling is a labour intensive activity. Volunteers can help with soap and bottle sorting, bar scraping, bottle washing and drying, liquids squeezing, hygiene kit assembly very easily, without prerequisite skills or intense supervision.

Generally, volunteers are not ideal for the machine processing because of health and safety issues. If you have long-term volunteers that work for you on a regular and consistent basis they may be trained up to work with the machinery.

In the beginning you will probably be relying on family and friends to do the initial rounds of processing while you get to know your process and systems. As your organisation grows, and your volume of soap grows, you can start to bring in volunteers from your community, reaching out to school and church groups, volunteer organisations, and even corporations.

### AWARENESS/RELATIONSHIP BUILDING:

You can create awareness about your organisation and soap recycling in general by setting up informational booths or conducting volunteering sessions at community-organised events like carnivals and marketplaces, educational institutions like primary schools, or generally any commonly visited public space. Even though this is a great marketing tool — especially for when you're just starting your operations — there are two key things you need to keep in mind:

- This is a resource heavy activity. It takes a lot of time, effort and manpower to move soap to an external location and have people there all day. If you need to rent a cargo van and pay booth fees, it is possible you might end up losing money on this initiative.
- The goal isn't to process large amounts of soap or make money. The purpose of these booths and volunteer sessions is more about introducing your work to the public and ensuring everyone has fun!

### REVENUE GENERATION:

Large corporations have budget allocations for CSR (Corporate Social Responsibility), team building, and corporate philanthropy. Companies are looking for volunteer activities for groups larger than 20 people, and in large urban centres even up to 50–100 people. Soap Recycling lends itself easily to meet this demand.

You can create volunteer processing sessions for corporations either in their offices or your warehouse, and companies may pay you for this service.

A volunteer session should include:

- **Introduction:** a brief but thorough introduction to your mission and operations, explain the what and how of soap recycling, i.e. how impactful it is on the environment and for those in need of hygiene resources, and how the processing hours they contribute help accomplish those goals.
- **Processing:** You can do both bar soap and liquid amenities processing on site. Make sure you are prepared with drop cloths and gloves to make your clean up easy. Volunteers can scrape soap and consolidate liquid amenities for an hour or two. Make sure to do a wrap up explaining where the soap goes to next, and thanking them for contributing to such an impactful social cause.
- **Documentation:** Take quality pictures and video throughout the Volunteer Session, including the team and what they processed during the session. You can also use this media on your social media sites, and tag the attending Companies to increase your visibility and reputation. Encourage the company to share on their social media, to help you gain even more exposure. An additional upsell, could be creating a short bespoke video, documenting the volunteer session for the company to use for internal and external publicity. Capitalise on the “feel good” factor that Soap Recycling saves the earth, and saves lives.

Occasionally you may come across people who wonder, “Why should we have to pay for this processing session, we are helping you.” While you may understand the concern, remember to present yourself as a service provider. Companies are looking for activities they can do with employees that are good for business, good for people, and good for the environment — soap recycling hits all of these targets. Soap Recycling corporate sessions are a wonderful way for teams to interact outside of the traditional work environment, it gives a sense of shared purpose, and employees report they find processing soap relaxing and fun. Soap Recycling can be a refreshing alternative to traditional CSR activities like working at a food bank or raising money for a cause. In your initial development you may offer a few sessions free to demonstrate what you offer, build trust, and get endorsements from CSR management.

After securing a partnership with a corporation, you can experiment with the development of bespoke programs, including offering a bigger variety of team building activities and volunteer opportunities for additional revenue generation. At different points in time you might need to recruit different types of volunteers for different reasons. As your organisation matures and moves from one stage of its lifecycle to another your volunteer recruitment needs are going to change.



If you transition from a fully philanthropic model to a revenue generating social enterprise you will face many new opportunities, including new avenues for fundraising, such as impact investors.

Once you've identified your volunteer needs it's important to identify the types of volunteers that will help you achieve your goals:

- **General public:** People who find your organisation through your website or word of mouth and who are looking to do actual work (e.g. soap scrapping, sorting, etc.). If you can find volunteers that can work short, regular sessions this can help keep a baseline of processing going in between larger corporate/group sessions.
- **Community organisations:** Potential pools could be educational institutions (e.g. secondary schools), religious groups, and volunteer groups formed through social media. This category of volunteers either serves as manpower (they can be tasked to do actual work) or they can help raise awareness in the local community about your work and soap recycling. To find these types of volunteers investigate the following:
  - **Volunteer aggregators and meet-up groups:** Includes platforms like HandsOn and others who often can be located through social media and via Google search.
  - **Organisations with access to large crowds looking for volunteer opportunities:** Includes organisations such as UNICEF, The Rotary, women's organisations, houses of worship, and college student and alumni organisations who have access to a large volunteer base and not enough volunteer projects. You could even approach your participating hotels to do processing days to really see where the soap goes after it leaves their hands.
- **Additional resources:**
  - **The National Council of Nonprofits** provides resources for any organisation with their volunteer tools and resource centre.
  - **VolunteerMatch** allows organisations to post volunteer positions and volunteers to search for volunteer work in their area.
  - **VolunteerHub** helps organisations recruit and manage volunteers.
  - **LinkedIn** allows organisations to post volunteer descriptions and accept resumes from interested candidates.
- **Corporations:** Medium-large local companies. They can serve as a great revenue source but establishing a relationship with them is a long-term process.

#### ARE YOU READY TO INVITE VOLUNTEERS IN YOUR FACILITIES?

Before you invite volunteers into your facilities you need to create a detailed volunteer policy including a liability waiver. This document should include instructions, health & safety regulations, as well as helpful tips.

We recommend you consider including the following:

- Limitations on the age of the volunteers (i.e. children between ages 12–16 years must have parental supervision/participation, health and mobility concerns for the elderly population).
- Eating and drinking policy.
- Alcohol policy.
- Data privacy and media waivers (very important if you want to use their images for social media or other promotional material).
- Map of the facility and instructions on how to get there.
- Attire policy.
- Soap processing instructions.

#### ADDITIONAL RESOURCES FOR CSR AND VOLUNTEERS:

- [“Why Corporate Social Responsibility is Important”](#) by Double the Donation
- [“What is Corporate Social Responsibility”](#) by Prezly





# Appo

*Soap recycling is easy, but it requires a  
commitment to precision.*

# endices

35	Appendix A: Examples of W.I.S.E. Soap Recycling Programmes
36	Appendix B: Examples of Soap Sizes & Volumes
37	Appendix C: Youth Empowerment Roles
38	Appendix D: Sample Welcome Letter
39	Appendix E: Hygiene Related Impact
40	Appendix F: How to Mediate the 'Ick' Factor
41	Appendix G: Processing Soap with Electric Machines
43	Appendix H: Pitch Material Tips
44	Appendix I: Collection Process for Soap Cycling HK



## **APPENDIX A: EXAMPLES OF W.I.S.E. SOAP RECYCLING PROGRAMS**

### **BALIWISE:**

Baliwise is an initiative in Nusa Dua Bali, founded under the R.O.L.E. Foundation, created to prevent land-based waste from entering the oceans as well as to create sustainable jobs to protect the livelihoods of coastal communities.

Baliwise has a Soap Recycling program called S.O.A.P (Sustainable Opportunity Achieving Possibility). They employ local disadvantaged women to reprocess the soap, funded by donations from partnering hotels. The reprocessed bars are distributed for free to orphanages and other disadvantaged and poor people.

### **CLEAN CONSCIENCE:**

Clean Conscience has partnered with a local NGO, Ways into Work, to provide training and work opportunities for local youth on the Autism spectrum. They host 12 volunteers, two job coaches, and two PA care givers per week.

### **ECO SOAP BANK:**

Eco-Soap Bank lists employment creation as one of their three key missions. They work with women from disadvantaged backgrounds in Siam Reap, Cambodia to provide reliable income. As of 2018 they employ 5 Cambodian women who sell recycled soap in their local communities.

### **SAPOCYCLE:**

SapoCycle is a social enterprise founded in Switzerland that recycles soap and provides employment for disabled people. One of the foundational aspects of their vision is to help handicapped people enter the workforce and providing them with a stable workplace. This aspect is shown in the recycling of the soap, with SapoCycle working with local social integration who actively seek job provision opportunities for handicapped persons. They provide the employment in the sanitisation of the soap and the creation of new bars.

### **SOAP CYCLING HONG KONG:**

Soap Cycling Hong Kong began with a focus on Youth Empowerment in 2012; in 2017-18 they are implementing a W.I.S.E program called the M.E.Y Program focusing on employment opportunities for Minority, Elderly, and Youth populations in Hong Kong. This program aims to "integrate disadvantaged people from the Hong Kong community. They will get a chance to lead and be empowered, plus receive a fair wage for their time and work, and simultaneously bringing them together with other members of the HK community."

### **SOAP FOR HOPE:**

Soap for Hope, is a decentralised Soap Recycling organisation. They team up with local NGOs and partner hotels to set up the initial Soap Recycling operations including equipment and training; once the partnership and training are established then the NGO runs the daily operations of the Soap Recycling. Many of the hotels involved will "buy" back the soap as a way for those involved to earn a living, and in turn the soap is distributed amongst the local communities.

### **SUNDARA FUND:**

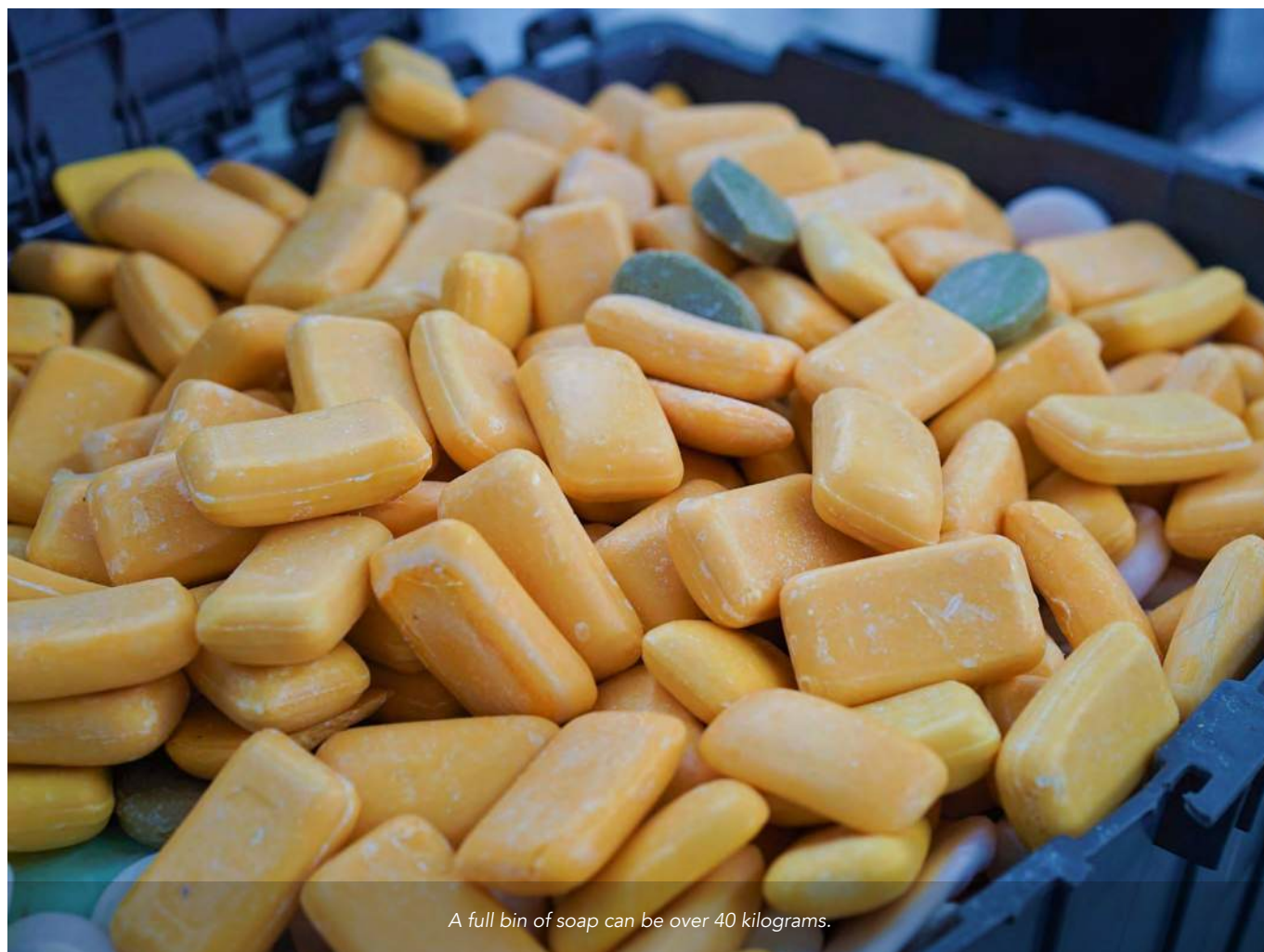
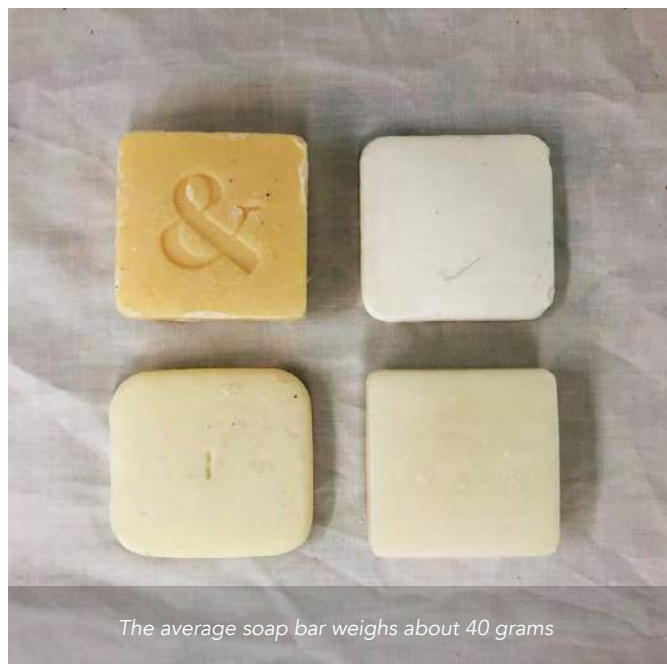
The Sundara Fund is a soap recycling company founded by Erin Zaikis in 2013. They work directly with women from underprivileged backgrounds in India to help them create their own income. The women are employed to collect the used soap from partnering hotels, reprocess it, and distribute it out to local people in need.



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## **APPENDIX B: EXAMPLES OF SOAP SIZES AND VOLUMES**

Being new to Soap Recycling it may be difficult to picture what various volumes of soap look like. These photos can help you gauge what your space needs might be once you have started collecting soap.





## APPENDIX C: YOUTH EMPOWERMENT ROLES

### MARKETING TEAM:

Students on this team will be involved in direct marketing, research, public relations, branding, communications and advertising. Since this team is required to work alongside a wide range of people, the students get the chance to develop a wide range of skills. Students on this team are responsible for:

- Designing and holding promotional events.
- Exploring ways to expose Soap Cycling to more volunteers.
- Developing integrated marketing strategies (such as leaflets, stickers, T-shirt design).

### OPERATIONS & LOGISTICS TEAM:

Runs the warehouse operations dealing with collection and transportation of soaps from hotels to the warehouse, and Volunteer session staffing. Duties include:

- Organise and schedule collection from hotels.
- Maintain good relationships with partner hotel hospitality management.
- Evaluate hotel partner collection guideline execution, offer training when guidelines are not being met.
- Formulating and refining a set of effective and efficient procedures for volunteer sessions.
- Understand and teach processing processes.
- Analyse and evaluate current procedures and processes, seeking to improve the collections, processing, and distribution performance.

### HUMAN RESOURCES TEAM:

Students on the Human Resources Team develop time management, communication and interpersonal skills. Duties include:

- Managing human resources and administrative operations by recruiting, and orienting students and staff.
- Administrating volunteer session performance review to support coordination among departments.
- Scheduling volunteer manpower at the warehouse.

### COMPLIANCE TEAM:

Works with senior management to ensure the organisation fulfils relevant legal and regulatory obligations. Required to conduct financial analysis of every financial period and to conduct legal research upon request.

### DISTRIBUTION TEAM:

The distribution team will manage many related aspects of the operations including:

- Research distribution partnership options, finding new partners, and evaluating existing partnerships. Partners should have a proven reputation with an established WASH program that focuses on long-term behavioural modification.
- Packaging: Knowledgeable on standards for distribution partners
- Import/export concerns: Knowledgeable about laws and regulations for receiving countries
- Logistics: Who do you want the recycled soap to be used by and how those individuals will get that soap. How does soap get from A to B? Costs involved in getting soap to end receiver. Hygiene education resources at receiving end.



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## APPENDIX D: SAMPLE WELCOME LETTER

Welcome! We are very excited to receive soap from your hotel.

To ensure smooth operations in collecting and processing the soap donated by your hotel, we would like to recommend some best practices on soap storage and packing. By following these practices, you can maximise the efficiency of our volunteers and minimise the amount of sub-standard soap we must discard.

### Storage:

- If a piece of soap is too dirty or wet, please discard it to avoid contaminating the batch.
- Please store the soap in a cool and dry place.
- Do not store soap in plastic bags.
- Store the soap in clean and sturdy boxes. If cardboard boxes are used, please make sure to tape the boxes sufficiently so that they do not rupture during transport.
- Do not include packets of coffee, shampoo, or other items that can leak, break open, or otherwise contaminate the soap and the box.

### Soap Sorting:

- Please try to keep all rubbish and other non-soap items like plastic bags, shower caps, toothbrushes and liquid soap bottles out of the soap.
- If more than one colour of soap is used in your hotel, please try to separate them prior to shipping/collection.

### Weight:

- Please kindly provide us an estimate of your hotel's monthly soap amount and label the weight on every soap container.
- Please try to ensure each box does not exceed 20kg.
- Please only ask for collection after you have at least one full box of soap (20kg).

### Communications:

*Please feel free to contact us if you have any inquiries:*

Name:

Number:

Email:

Thank you



## APPENDIX E: HYGIENE RELATED IMPACT

As a soap recycler, it is important for you to showcase your impact. You need to be able to clearly communicate why soap recycling is important, and how simple and easy it is. Being able to properly link your work with a global issue such as children's lives and hygiene will give you credibility, allow you to strengthen your brand and ultimately enhance your fundraising efforts. To maintain a strong reputation and maximise the impact of your statement, it is crucial to present information and statistics from reputable sources — ideally updated annually — such as WHO and UNICEF. Most of the soap recyclers present their website data from such sources, which are available for free online. These reports are great because they clearly show that hand washing with soap is the single most effective way to prevent children deaths caused by hygiene-related illnesses.

1. UNICEF Report — “Levels & Trends in Child Mortality: Estimates Developed by the UN Inter-Agency Group for Child Mortality Estimation”. UNICEF publishes annual reports estimating the number of children below the age of five dying on an annual basis from diseases easily preventable by regular hand washing with soap. According to the 2017 report, respiratory infection (e.g. pneumonia) and diarrhoea were the biggest children killers, combined accounting for around 25% of all children under five deaths in 2016. Around 80% of these deaths occurred in Sub-Saharan and Southern Asia.
2. UNICEF Website — “The Importance of Handwashing”. According to UNICEF, the act of hand washing with soap at critical times such as before eating or preparing food and after using the toilet or cleaning a child, can reduce diarrhoeal risk by about 45% and pneumonia risk by about 25%.
3. WHO Website — “Top 10 Leading Causes of Death by Income Group”.
4. WHO — “Progress on Drinking Water, Sanitation and Hygiene”. At the same time, in some areas of the developing world, less than 5% of households have access to soap for hand washing.



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## **APPENDIX F: HOW TO MEDIATE THE "ICK" FACTOR**

### **1. TEACH HOW SOAP WORKS AND PROPER HANDWASHING TECHNIQUES**

People think gently-used bar soap is gross because they either don't understand how soap works or how to wash their hands thoroughly to receive the full benefits of using soap. Through educational campaigns you can shift the public opinion when it comes to soap recycling and at the same time build your brand.

### **2. EDUCATION ON PROPER BAR SOAP STORAGE**

A big reason people think bar soap is unclean is that if left in a wet place, it can create slimy puddles of water. Through educational campaigns you can teach the general public to store bar soap in a dry environment such as a drainage rack between uses. That way, there are no puddles of water or moist environment for germs to flock to.

### **3. EDUCATION ON EFFECTIVENESS OF THE SOAP RECYCLING PROCESS**

People think recycled soap is unsafe because they don't understand what the process includes, from collecting a gently-used bar of soap from a hotel to distributing it to a community in need. Having a section in your website that explains in detail the soap recycling process can help convince the general public that recycled soap is safe and extremely beneficial.

### **4. SPONSOR A NEW RESEARCH STUDY ON THE TOPIC**

A large setback you might face as a soap recycling charity is the lack of recent, credible scientific research on the benefits/risks associated with the usage of bar soap, and more specifically gently used hotel bar soap. There is no research on the effects of using gently-used hotel bar soap, and the most recent research study on the effects of hand washing with normal bar soap was published 30 years ago. Hopefully some day in the future someone will partner with an educational institution, a hotel association, other soap recycling organisations, or government to sponsor a research study on the topic.





## APPENDIX G: PROCESSING SOAP WITH ELECTRIC MACHINES

### 1. SCRAPING (MANUALLY):

Scraping is the first step of any bar soap recycling process, including mechanical processing. Through the scraping process you remove dirt, hair, and any packaging. This essential process helps you start with the most hygienic, quality soap possible. The entire outer layer of each bar gets scraped off with a tool such as a vegetable peeler, knife, scissors, or our favourite, a spackle/putty knife.

### 2. STERILISING (OPTIONAL):

After the bars are scraped and clean, many organisations dip the bars into a sanitation solution (usually a mixture of water and antibacterial chemical) and then allowed to dry, as necessary, before moving on to the next part in the process.

This step is not essential from a scientific standpoint (if you know how soap works you will know that even “dirty” soap can still clean hands), but it can help with the “ick” factor and your ability to find distributors. Clean the World surface cleans their soap and then dips it in a sterilising solution of diluted bleach, 400 parts per million to kill “any pathogens that would pass from skin to skin. Clean the World also has their soap tested quarterly to easily ensure to interested parties that the soap is safe to use. They even admit that the sterilisation step is not essential, but helpful for the “ick” factor.

### 3. CRACKING/CRUSHING/GRATING:

After your soap is sanitised the next step is to make your bars into as small of pieces as possible through cracking, crushing, or grating. If you are producing on a very small scale, you can easily use a cheese grater or box grater with a coarse grating surface to grate the soap bars into small pieces (just be sure to not scrape yourself!). For larger operations we recommend an industrial grinder such as a meat grinder or a chickpea grinder. A grinder is a very efficient way to quickly create soap pellets. It is important to note that the grinding process can produce a lot of soap dust. Generally speaking, and assuming sufficient ventilation, soap dust is not dangerous, but it can be bothersome for some people. Wearing facemasks can reduce irritation. Soap dust can also make the floors slippery over time. We recommend installing some form of industrial anti-slip mats, such as rubber drainage mats used in restaurants, in your warehouse space to help mediate this safety issue.

### 4. MOISTURISING:

After the soap is crushed/grated the next step is to add some moisture to make the soap softer and more malleable. Plain water is all you really need, but you can also use other additives such as fragrance, colour, creams, titanium dioxide, bactericides or anti-oxidants.

If you are working on a small scale you can easily moisturise ground soap by hand, without machines. Use a large plastic bowl; fill it roughly 1/3 full of grated soap and some water. Knead the soap and water like you are making pastry dough, until there are no loose soap particles or dust (wearing long rubber gloves is recommended for this step). When you are finished you should have a big ball of slightly wet soap.

If your operations are large enough that hand moisturising is too laborious you can consider purchasing a mixer or amalgamator. Amalgamators mix the soap pieces so they are evenly dispersed.

### 5. REFINING:

Once the soap is mixed you could move straight to pelletising, but if you have the resources to improve the quality of your recycled soap we recommend further refining with a roller mill. A roller mill makes sure the soap is fully homogenised and removes dry specks and grittiness from the soap mixture. This makes your soap as smooth and refined as possible. If you need quality soap on a large scale this step should not be skipped.

If this step is not financially feasible you can still use your strictly mixed-moisturised soap, and move on to pelletising. Just be aware that mixing alone does not ensure full homogenisation and there may still be some small lumps of soap or patches of dryness. This does not influence hygiene or usage of your processed soap; it is more of a cosmetic concern.

### 6. PELLETISING:

Now your soap mixture is ready to get into the plodder. A plodder is an extrusion machine that forces the soap mixture out with pressure. There are two general types of plodders, Simplex and Duplex, both types do the same functions, but the Simplex plodder requires more steps to get the same result. Plodders are a significant investment and start at around several thousand USD and up, which may be intimidating, but a Plodder is at the heart of soap production, so investing in one will take your soap production operations to the next level.

The first step for either plodder is pelletising, which is the last step of refining and homogenising before creating actual soap loaves. Soap pellets are created when the soap mixture is extruded (or pushed) out of very small holes while simultaneously being cut into small pieces. The more refined your soap mixture is the better the pelletising will work (which is why we recommend the roller mill step if possible).

If you have a Simplex plodder, you will need to change the attachment at the front of the machine to a forming plate and put your pelletised soap back into the machine to extrude the final long loaves of soap.

#### 7. EXTRUDING:

Once the forming plate is in place, and the pelletised soap is put back in the machine, the Simplex plodder will now extrude long, continuous bars of soap, or loaves, which can be cut to length for handling, before being cut into individual sized bars.

A Duplex plodder can pelletise and extrude soap bars in one single step. The pelletised soap moves automatically into a chamber that then pushes it again through a forming plate and the soap loaf is then extruded automatically. Depending on your machine you will either need to hand cut the loaf into manageable sizes or your machine may automatically cut the loaves.

#### 8. CUTTING:

There are many ways to cut your soap loaf into bars. Hand cutting with a kitchen knife or putty knife is the cheapest and simplest option. It can be difficult to create a uniform shape or weight so if appearance is important for distribution you will need to consider more refined options. Soap loaves can also be cut using hand-powered single or multi-cut soap cutters, these give a uniform shape and size and smoother edges to your bars. When you are hand cutting you will need to cut the bars when the soap loaf is freshly made and not fully dried. If you have the financial resources, you can integrate a cutter into the Finishing Line that automatically cuts the soap loaf into bars and stamps it with your logo. Consider what size bars you need, how finished they need to look, and what financial resources you have to assess what cutting tools your operation requires.

#### 9. STAMPING:

Stamping is not a necessary step but it can be a useful marketing tool as people will recognise and remember your organisation via your logo. Stamping can also be a fun part of processing for volunteers/employees. Hand stamping is easy and quick. The cheapest version is a manual stamp you tap with a mallet, the more professional version is a mechanical hand-powered soap stamper. If you have the resources and you are processing entirely on an industrial level you can also incorporate stamping, wrapping, and packing the soap into the finishing line.

#### 10. WRAPPING AND PACKAGING:

Wrapping soap bars is another optional step. You will need to decide if wrapping is important for aesthetics and/or function. Wrapping can make your soap look more professional and can be helpful so that soap does not stick together in heat and humidity for transportation and storage. Some options you could use to wrap with are shrink-wrap, foil, or various papers and some sort of closure like a sticker or string. Try to be mindful of your environmental impact, single-use plastics are not good for the environment, so look for options that biodegrade or go without a wrapper.

Packaging for shipment also depends on the scale of your operation. If your soap is hand-cut and aesthetics are not a consideration at distribution you can place soap bars into cardboard boxes without much organisation. Depending on how reliable your shipping options are, you may need to line your box with a plastic bag. Plastic is not ideal for the environment, but it can protect the soap during shipment. Some soap recyclers have the packaging as part of the finishing line; again, this industrial scale requires a lot of financial resources.



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## APPENDIX H: PITCH MATERIALS TIPS

Here are some things you could include in your pitch materials:

### What is soap recycling?

- Used soap is collected by hotel partners when their clients check out of their rooms.
- Can be both bars of soap and liquid soap.
- Hotel partners notify your organisation when the soap is ready for collection.
- Soap is either collected physically or sent to the warehouse
- The soap is then sorted and recycled.
- Soap is distributed to communities in need.

### What does the hotel get out of it?

- Marketing. The “green” factor differentiates
- Helps achieve internal CSR goals
- Solid waste reduction (potential savings if they must pay for volume)
- Benefits to the community: you will help them reduce landfill waste
- Feel-good factor: It saves lives through sanitation and provides a sense of purpose for staff if trained and maintained

### What are you asking them to do?

- Implement soap collection, store until collection
- Potentially delivering or shipping
- Place info cards about the program in rooms
- Spotlight in their social media if possible

### Where does the soap go?

- Recycled soap is distributed to the needy with help from NGO partners

### Benefits to hygiene and the environment?

- Every 15 seconds a child dies from a disease that could have been prevented with soap
- Millions of children die each year from diseases that can be prevented with simple hand washing
- We believe in hand washing because it is shown to reduce the presence of harmful bacteria by 92%.
- People need the soap and hotels can help us get it to the people that need it
- The millions of bars of soap, that are wasted on a daily basis, decay in landfill sites and generate methane that can throw back heat into the atmosphere that is at least 23 times greater than carbon dioxide, making it a leading contributor to global warming.
- If we recycle soap, we can prevent waste in landfills, the benefits to the environment cannot be emphasised enough.

## APPENDIX I: COLLECTION PRACTICE FOR SOAP CYCLING HONG KONG

Soap Cycling Hong Kong's best practice for direct collection of soap:

- Pick a set date of the month and try to stay as consistent as possible, i.e., the 3rd Saturday of each month (specify minimum 1 full container for pick-up).
- Notify hotels by email 1-week in advance about pick-up
- Put hotels into Google Maps to find best driving route.
- 3-days out from collection notify hotels if pick up will be in the AM or PM, give a 3-hour window
- Call 15-minutes before arrival
- Meet staff at loading docks or other specified location, clear beforehand that your collection vehicle can fit the site
- Swap full box of soap with new empty collection container.

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