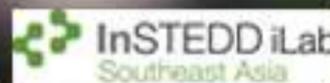
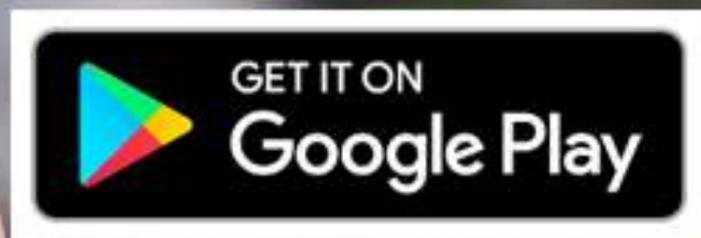


## Live Beautiful **Go Green**



## Background

As Cambodia's economy grows, so does its population, and as a result, urbanization occurs. Rural residents, often of a younger demographic, move to Phnom Penh in search of work, and over the last decade, the city's population has nearly doubled. Current estimates suggest it could reach 2.9 million by 2025. Meanwhile, new construction projects have driven thousands of urban poor out of the city center to peri-urban areas where services are few or non-existent. Cambodia's capital is literally overflowing with the garbage produced by its growing population, and, despite efforts to expand services, waste issues continue. According to the Asia Foundation, between 2009 and 2014, the amount of waste entering the city's main dump site rose from about 800 to 1,475 tonnes per day, not to mention those that scatter all over the streets of Phnom Penh. (Asia Foundation, 2016)

## Partnership

*GoGreen Cambodia app was developed by InSTEDD iLab SEA and Go Green team under exclusive support from SPIDER.*

*The Swedish Program for ICT in Developing Regions (SPIDER) is a center based in Stockholm University. SPIDER supports projects, research and capacity building in developing regions. Its mission is to decrease global disadvantages using ICT in order to achieve the Sustainable Development Goals (SDGs). SPIDER, A donor of InSTEDD SEA iLab, financially supports InSTEDD iLab SEA provides free technical support starting from the design and field validation to building the app, while Go Green team, who has been working closely with the InSTEDD team in the development of the Go Green App, fully dedicates itself to the material collection for building effective content, and the outreach of the app.*

1. <https://asiafoundation.org/2016/07/27/poor-waste-management-threatens-phnom-penh/>

2. Asia Foundation. (2016). Reforming Solid Waste Management in Phnom Penh.



*GoGreen Cambodia believes that the human-made pollution problem can be fixed by general public participation and with relevant education distributed to city inhabitants. The goal of GoGreen Cambodia is to increase awareness of human impact on the environment and to engage community members, resulting in the change of attitude and behavior. The main target audience of the activities are young urban residents, from 18 to 25 year old, who are curious, active, and responsible members of society, willing to make a positive change.*

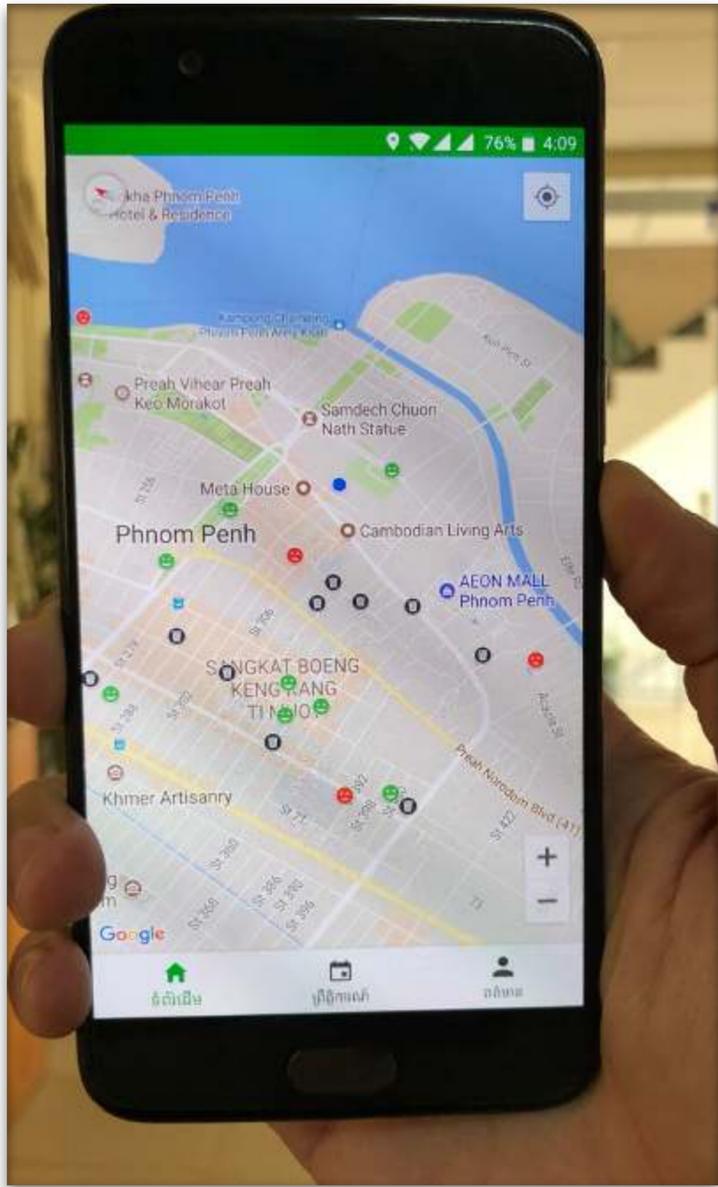
*The iCamp event organized by iLab Southeast Asia as part of the ICT4D Solution Incubator Cambodia in August 4th, 2016, InSTEDD iLab Southeast Asia developers in collaboration with GoGreen team created a rapid prototype for an app to engage citizens and address the growing pollution problem. The GoGreen's concept was selected to enter the incubation stage. The Go Green founders and iLab SEA teams were working on the content and building Mobile application which we hope will enable citizens of Phnom Penh and also citizens of other cities in Cambodia in the future participate in reporting polluted areas using their smartphones. Besides identifying areas that urgently need cleaning, the interactivity of the application will incentivize individuals to get involved, and will also help to educate the users. The app also offers a way for people to self organize clean up events, thus helping users to take a proactive approach to the existing problem. The application will act as a tool to better coordinate 'green' activists to better organize their efforts and to also network with other like-minded citizens.*

*Go Green team has signed MoU with the Ministry of Tourism in cooperation to promote a "Clean City Award" program, initiated by the Ministry of Tourism. The Go Green team is also working hard to have an MoU with the Ministry of Environment and Phnom Penh Municipality and connect to other environmental networks in order to increase usage of the app, and as a result, promote cleaner cities. The team also is working on building strong public relations with media outlets, both locally and internationally, as well as building a strong presence in social networks. Currently the GoGreen Cambodia Facebook group has more than 1,400 active members, establishing itself as the most popular "green thinking" Facebook group in Cambodia.*

### Technology Use

GoGreen Cambodia Mobile Application is a simple tool which we believe will attract attention to the waste management problem in Phnom Penh, engaging residents and related Institutions. The App encourages users to take action into their hands and involve others in taking care of the environment. The app is connected with Google Maps, enabling users to report a location by pinning directly on the map using simple tools like green smiley face for a clean place, a red sad face for a filthy area, or a trash bin for an area that needs one. Users can also upload pictures for the reported areas for a more detailed view of the location. Go Green Cambodia was designed to become a platform for users to create clean-up events and engage other users. On top of that, Go Green Cambodia gamifies the collaborative experience, where users can win badges, earn points for getting involved, and challenge friends to earn the highest score.

## Business Model



GoGreen Cambodia is the first ever Mobile Application that's actively engaging Phnom Penh residents to reduce waste and improve the cleanliness in the city. Using real time data, Go Green Cambodia will allow users to use Google maps to identify areas that are already clean, need more cleaning, and/or areas where more collection points are necessary. The application will also allow users to work with friends to create community clean-ups and take an active role in reducing rubbish in the Phnom Penh, making it a more beautiful city. Besides, the app is providing real life data about the situation on the streets and thus is a valuable resource of information for the stakeholders - such as Municipalities or Ministries. Having this data available it is easy to track the situation in the streets and have a comprehensive report.

Go Green Cambodia App is still in the early phases of piloting in Phnom Penh City. We envision that with time, the app will roll out country-wide.

As if writing, a month since the app was launched, more than 100 users are actively using this app, pinning locations and organizing cleanup events. The app could be more active if we finalize MoU with Ministry of Environment and Phnom Penh Municipality, thus having involvement of the stakeholders from the governmental side. Go Green Cambodia App is free and is available for download for Android devices through the Google Play store. To start using the app, a user must login with his or her Facebook account.

## The Challenge

Challenges include:

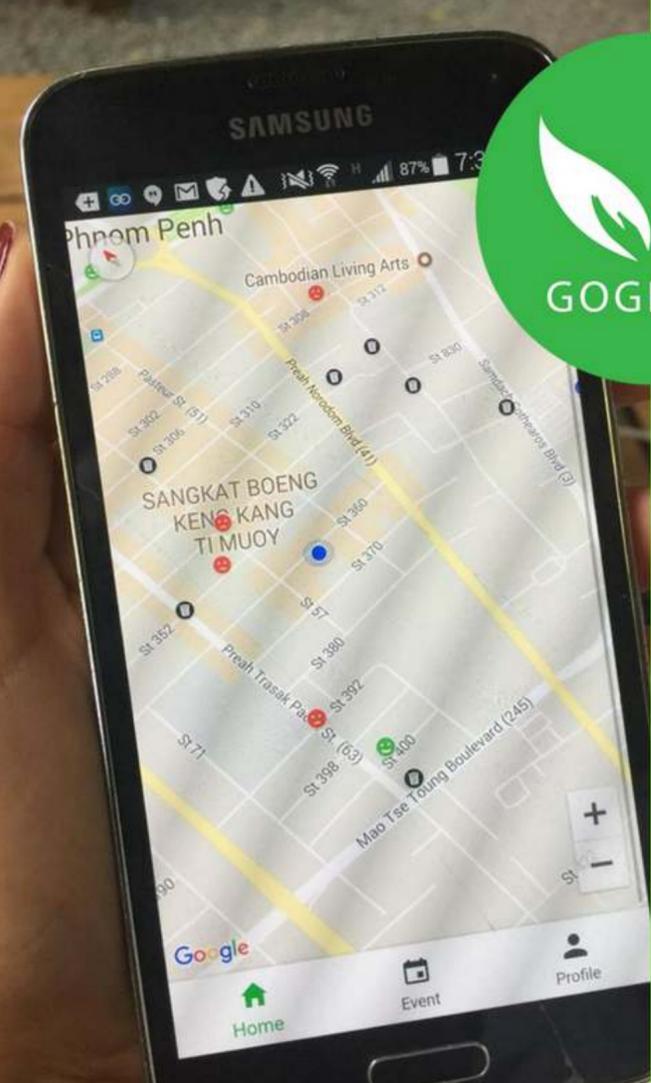
- We only have four months incubation period which need to complete the application development and campaign preparation for pilot
- Facebook permissions: The team has to overcome current Facebook 3rd party app access issues, to share cleanup events with friends.
- Ministry of Environment cooperation: The local authority required that any group gathering need to be officially informed first before any event can take place. We are working with the Ministry of Environment to overcome this challenge.

## The Solution

To achieve success of the GoGreen Cambodia App, the InSTEDD iLab Southeast Asia team and GoGreen team were working revised on both development and content. We visited youth for validating several times. Beside revising, the team also decided built strong and sustainable partnerships with local businesses and ministries including Ministry of Environment, Ministry of Tourism, Youth groups, Phnom Penh municipalities, and many active Youth Groups in Phnom Penh.



## Results



**Thank you for using the app!**

**Users reported:**

-  32 pins with clean spots
-  31 pins with dirty spots
-  46 pins to request trashbins

After one month since its official launch, the Go Green App has more than 100 active users. There are 32 pins with clean spots, 31 pins with dirty spots and 46 pins to request trash bins. The reports notify all necessary stakeholders to take an action.

## Next Steps

The Go Green app has been downloaded by more than 200 users in between February and March 2018 from the Google Play Store. More than 100 reported places are pinned on the map and a cleanup event was initiated by a community.

The project is open for funding to expand its coverage. We wish for the app to be available on the Apple iOS App Store and wish to see the app accessible to all provinces in Cambodia. We notice that most youth in the city are using iPhones. We also wish to continually upgrade and to respond to the needs of the users, as well as have a better back end data management system, that would enable us to create more comprehensive and valuable reports for the partners, media and official stakeholders.



GoGreen Launched Event