



Talanoa Dialogue
Contribution
2 April, 2018

Buddhist Tzu Chi Foundation –

Learning to Co-Exist with the Earth

*Dharma Master
Cheng Yen*

*Buddhist Tzu Chi
Foundation*

The insatiable greed of humanity is seriously damaging our precious Mother Earth. Without thinking of our offspring's future, we gorge on the world's natural resources. The well-being of the world should be everyone's responsibility. So how can we make this happen? We can start by disciplining ourselves, by reining in our unnecessary desires, and by encouraging everyone to protect the earth as much as we can from further damage. We should not forgo even the smallest opportunity to do a good deed, because when all of those small acts accumulate, a sense of kindness will ripple outwards throughout the world.

Table of Contents

1.	What is the Buddhist Tzu Chi Foundation?	3
2.	Climate Change – where we stand	4
3.	Why Focus on Recycling and Education? – The Bottom-Up Approach.....	5
3.1.	Recycling Activities in the Context of the Missions of Tzu Chi Foundation	7
3.2.	Tzu Chi’s Recycling Infrastructure	9
4.	Tzu Chi’s Recycling Activity and Climate Action	11
4.1.	The Impact of Recycling on Greenhouse Gas (GHG) Emissions	11
4.2.	Tzu Chi’s Role: Facilitating Recycling to Achieve GHG Reduction	13
5.	Tzu Chi’s Approach in Recycling of Plastic Bags.....	14
5.1.	Preparations for Recycling: Tzu Chi’s Unsurpassed Precision	14
5.2.	Initial Challenges and Difficulties of Plastic Bag Recycling.....	15
5.3.	The Impact of Plastic Bag Recycling on Everyday Habits	16
6.	Tzu Chi’s Ongoing Efforts	17
6.1.	Technical Innovation	17
6.2.	Recycling as a Source of Happiness	19
7.	Success Stories.....	19
8.	Concluding Remarks	24

1. What is the Buddhist Tzu Chi Foundation?

The Buddhist Tzu Chi Foundation is an international humanitarian NGO with special consultative status in the Economic and Social Council (ECOSOC). It is operated by a worldwide network of volunteers and employees with over 10 million members throughout 57 countries. Up to the present day, Tzu Chi has delivered relief to the needed in 95 countries. While bringing aid to those regions hit by natural catastrophes, the organization has witnessed to the devastating results of climate change around the globe.

For over a half century, Tzu Chi has been encouraging civil society to live in harmony with nature. Since 1990, Tzu Chi has conducted efforts in environmental protection. Along these lines, it has managed to build up an almost ideal recycling system. This system aims to enhance environmental protection and offer possibilities and facilities for civil communities to practice and implement a sustainable life style.

Associated with states, enterprises and society, Tzu Chi is continually fostering community awareness, consensus and unified action in worldwide locations. Today, there are over 10,750 Tzu Chi recycling stations and points in 17 countries. With the same mission to conserve the environment, millions of people worldwide have already joined the sustainability movement of Tzu Chi to help combat global warming.

Crucially, Tzu Chi links the global issue to questions of individual lifestyle and ethics. Thus, it aims to overcome policy dilemmas as well as individual unwillingness to become engaged in the movement against climate change.

If we lead a simpler life, we will help reduce the amount of garbage and protect our environment, thus improving the quality of life on Earth. We should have a grateful heart toward our planet which provides for us and sustains us. It is a simple concept, but if we all put it into practice, the impact can be profound and far-reaching.

Let us inspire more people to join in the environmental effort. As everyone takes part, their hearts and minds will also become more clean and beautiful. By protecting our environment, we are helping to make the planet a safer and better place to live.

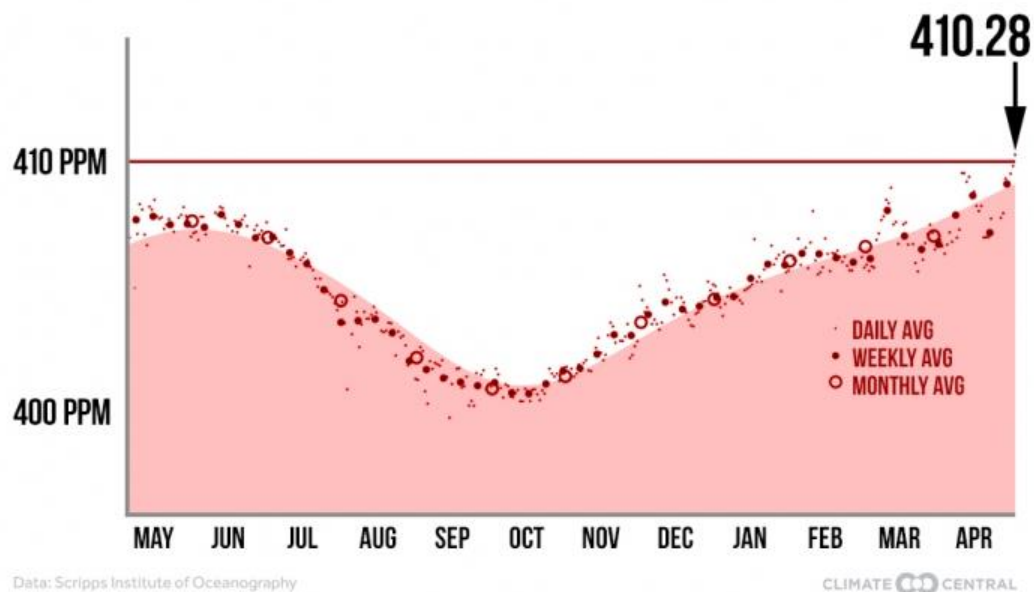
Always remember: we coexist with Mother Earth.

2. Climate Change – where we stand

Current situation:

Startling rise in carbon dioxide levels in the atmosphere: Since 2013, the daily level of carbon dioxide in the atmosphere surpassed 400 parts per million for the first time in human history. Living in a world with carbon dioxide above 400 ppm has become the norm. In April 2017 the Mauna Loa Observatory recorded its first-ever carbon dioxide reading in excess of 410.28 parts per million.
(Info source – climate central)

A New Milestone: 410 PPM Carbon Dioxide Hits a New High



Effects on human life:

WHO has published an updated fact sheet on climate change and health in 2017

- Basic living conditions: climate change affects the social and environmental determinants of health – clean air, safe drinking water, sufficient food and secure shelter.
- Diseases: between 2030 and 2050, climate change is expected to cause approximately 250,000 additional deaths per year. Causes include malnutrition, malaria, diarrhea and heat stress.

- Financial effect: the direct damage costs to health (i.e. excluding costs in health-determining sectors such as agriculture and water and sanitation), is estimated to be between US\$ 2-4 billion/year by 2030.
- The weak will suffer most: areas with weak health infrastructure – mostly in developing countries – will be the least able to cope without assistance to prepare and respond.

Solutions:

- Already known: Reducing emissions of greenhouse gases through better transport, food and energy-use choices can result in improved health, particularly through reduced air pollution.
- Less known: Encouraging recycling and a simpler lifestyle
 - *Tzu Chi combats climate change with a unique combination of community-based action and ethical self-cultivation.*

3. Why Focus on Recycling and Education? – The Bottom-Up Approach

The basic advantage of recycling and education is that it involves people themselves in action. As will be shown in later sections of this document, these activities have an enormous potential to bring about the broad-based transformation in attitudes needed to save the planet.

Mitigation and adaptation to climate change can be much more effective, if activities by governmental and intergovernmental bodies go hand in hand with a lasting change of attitudes by the broader civil society. Non Governmental Organizations such as Tzu Chi Foundation can play a key role by facilitating and enhancing this process.

This becomes clear by looking at the agreements on climate change that have been achieved so far. Up to now, governmental agreements to rein in climate change have unfortunately been limited to rather decentralized arrangements which are but loosely connected to each other. The Paris Agreement seems to have mitigated this difficulty but is still far from being the strong frame for action which would be necessary to tackle climate change.

The reasons why governments are relatively slow to take up to the challenge of climate change have been investigated multiple times: a consensus seems to have formed around the idea of the governments being trapped in a ‘prisoner’s dilemma’. For every individual government, it is rational to abandon or limit climate action and reap economic benefits. No enforcement mechanisms exist to avoid such defection. On the contrary, governments must cater to various interests, not all of whom may see climate policy as a priority.

To support and complement governments where government action alone may be insufficient, we need a broad-based movement rooted at the very basis of society.

But the problem is this: Even if concern about climate change is widespread, the issue currently has little potential to mobilize large parts of society. This is because

- the process of climate change itself is amorphous, as are consequences. People fail to relate the abstract process to their daily lives and do not see weather-related natural catastrophes as results of climate change.
- climate change is unrelated to the individual identity of most people. While nationality, class and political affiliation have a powerful influence on individual self-conception and actions, climate change hardly does.

To overcome these hurdles, it is necessary to be active at the very basis of society. The aim should be to build up institutions for a sustained social effort to counter climate change. Just to have a common understanding is insufficient. To make significant change in tackling the planet's climate change problem, there is a pressing need for consensus and decisive action. The following sections will show how

- ***Tzu Chi's environmental education*** tries to build up environmental awareness.
- ***Tzu Chi's recycling efforts*** strengthen this awareness and make a direct contribution to reducing carbon dioxide emissions.

The focus on education chimes with various governmental accords like the Belgrade Charter (1975):

- *“Environmental education, properly understood, should constitute a comprehensive lifelong education, one responsive to changes in a rapidly changing world. It should prepare the individual for life through an understanding of the major problems of the contemporary world, and the provision of skills and attributes needed to play a productive role towards improving life and protecting the environment with due regard given to ethical values.”*
- *“The goal of environmental education is to develop a world population that is aware of, and concerned about, the environment and its associated problems, and which has the knowledge, skills, attitudes, motivations, and commitment to work individually and collectively toward solutions of current problems and the prevention of new ones.”*

3.1. Recycling Activities in the Context of the Missions of Tzu Chi Foundation

Charity, Medical, Education, Humanistic Culture, Environmental Protection and Community Voluntarism belong to the core missions of Tzu Chi Foundation. These are implemented in several ways on a global scale.

All of these missions can also be pursued and implemented simultaneously.

Tzu Chi's *Recycling Points* and *Eco-Awareness Recycling Centers* are an ideal model to link up any community of residents with environmental protection. Located within easy reachable distance, the platform provides direct interactive relationships to influence locals and making behavior change.

By engaging in recycling activities, everyone learns to separate recycling materials to help conserve resources. Additionally, it raises the awareness of participants about the importance of changing their own lifestyles with the aim of reducing and avoiding waste.

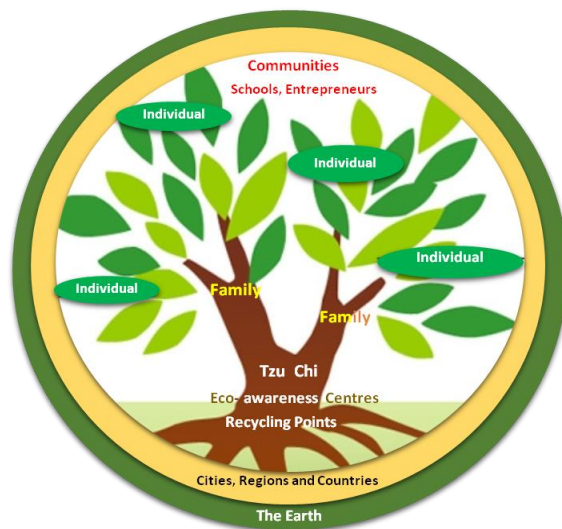
Just imagine: each community is like a tree, every family is a branch and every individual is a leaf. Tzu Chi Eco-Awareness Recycling Centers are the tree trunks which transmit environmental awareness to mobilize people.

Metaphorically speaking, once there are enough trees in this world, global warming can be stopped.

Tzu Chi educates and engages people of all ages in environmental issues and offers various occasions and locations for people to practice and to experiment when they modify their behavior and adopt environmental friendly lifestyles.

Senior citizens, kindergartners to college age students, parents, business owners, teachers, and other community members can join together by doing recycling, cleaning up beaches or mountains, adopting a vegetarian lifestyle and conserving resources by saving water and energy. Through various activities people learn to be accommodating, be grateful, be thoughtful, and be considerate to others.

When we start from ourselves to cultivate a healthy mind and spirit, our life will be filled with contentment and able to respect and live in harmony with Mother Earth.



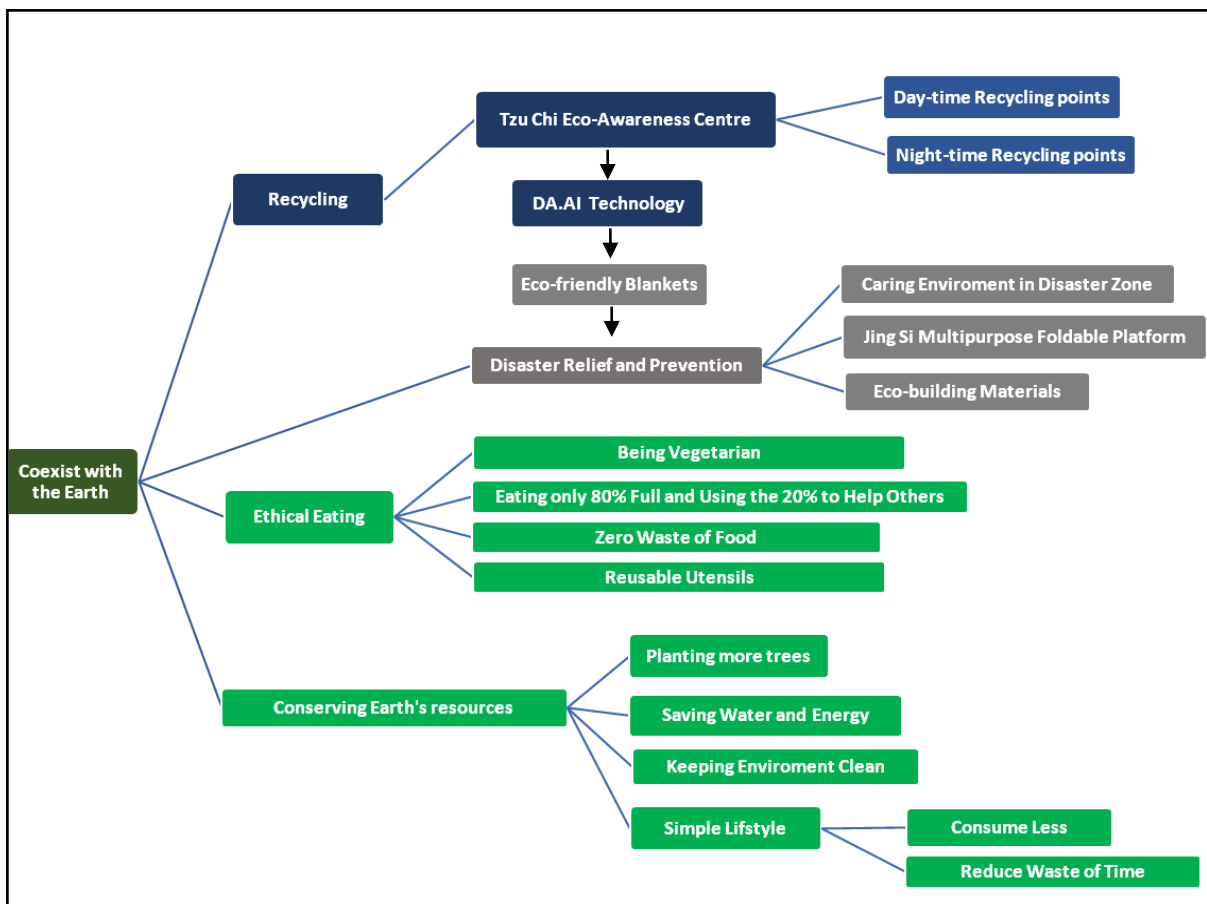
Global warming can be stopped when there are more trees to help reducing carbon emissions.

In order to pursue its environmental protection mission Tzu Chi is focusing on the following three major directions:

- Recycling
- Ethical Eating
- Conserving Earth's Resources

Starting from grassroots movements to support the Post-Paris Agenda in mitigation and adaptation, Tzu Chi involves civil society, enterprises and decision makers to affect on a local, regional, national and international level.

The following diagram gives a broad overview of Tzu Chi's environmental protection campaigns:



3.2. Tzu Chi's Recycling Infrastructure

During more than two decades of activism, Tzu Chi has managed to build up a worldwide recycling infrastructure that revolves around *Recycling Points* and *Tzu Chi Recycling Stations*.

Tzu Chi Recycling Points: these are temporary locations in each neighborhood that the community residents congregate at specific times to collect recyclables. The location can be an empty space in front of a shop, around communal pavilions, activity areas, or parks.

Tzu Chi Recycling Stations or *Eco-Awareness Recycling Centers* provide a permanent location for collecting, sorting and storing recyclables. Environmental friendly concepts are used in every construction of the recycling centers. Caring the environment is the main consideration in every construction and decoration design. Water resources are recycled and reused. Rain water recycling system and solar energy systems are applied. In addition, natural lightings and ventilation are incorporated in structural designs of Tzu Chi buildings not only to lessen or avoid the use of air-conditioning system, but also to bring people closer to nature. Recycling Stations also act like day care centers that welcome Tzu Chi volunteers, especially elders to come to contribute their care for environment.

Recycling points and recycling stations are commonly located in high density residential areas. They are organized to open at varied times to enable different types of participants to come.



For example, local residents bring the recyclable items they have collected to the evening Recycling points once per week and to help to sort out.

Tzu Chi's Recycling Points and Recycling Stations have a range of benefits:

- **Reduce waste and improving recycling quality and rates**
- **Engage residents personally in sorting recyclable materials and learning about them**
- **Spread and implant environmental awareness among the public**
- **Inspire more people to join the effort to promote environmental protection**
- **Promote ethical volunteering and charitable acts**
- **Cherish the elderly and involving seniors in meaningful activities**
- **Strengthen community responsibilities and neighborhood relationships**
- **Offer positive free-time activities for families and groups**

Why can Tzu Chi's recycling model specially help in improving mitigation practices? The main asset of Tzu Chi is that individual citizens can personally get involved in recycling work. In a further step, they may often even become grassroots environmental teachers. Many of the volunteers are able to transform profound environmental knowledge into their daily lives. Hence, they are able to share knowledge on environmental protection with others, for example back to the family, to the friends and neighbors.

The citizens who have participated in recycling can understand the importance of conserving earth resources and therefore will also help to promote environmental-friendly lifestyle to the public. This applies whether they are volunteers or not. Tzu Chi's recycling infrastructure shall be a platform for the whole society. This is reflected in our organization's close cooperation with enterprises; school teachers and students; as well as residents in the neighborhoods.



In conclusion, Tzu Chi's recycling infrastructure integrates the long-term benefits of environmental protection with the short-term advantages of sociability, encounter and exchange. Individual reluctance to tackle climate change can thus be overcome.

4. Tzu Chi's Recycling Activity and Climate Action

4.1. The Impact of Recycling on Greenhouse Gas (GHG) Emissions

In many minds, recycling appears unrelated to climate change. On first sight, this attitude seems to be corroborated by findings like the fact that solid waste management contributes less than 5% to global greenhouse gas (GHG) emissions (Bogner et al., 2007)ⁱ.

However that may be, a key facet that needs to be taken into account is that recycling materials can actually be used to produce new ("secondary") products. These secondary products can displace the need of producing "primary" products from raw materials. The production of "primary" products cost significant inputs of energy and raw materials which lead to GHG emissions.

Thus, if recycling is done in a proper way to allow for a conversion into secondary products, the benefits of recycling in terms of reducing GHG emissions can increase significantly. Separating the recycled materials in a careful way increases their suitability for producing new ("secondary") products. David A. Turner's study (2015)ⁱⁱ shows the important contribution that effective source-segregated materials recycling can have in reducing the GHG impacts of waste management.

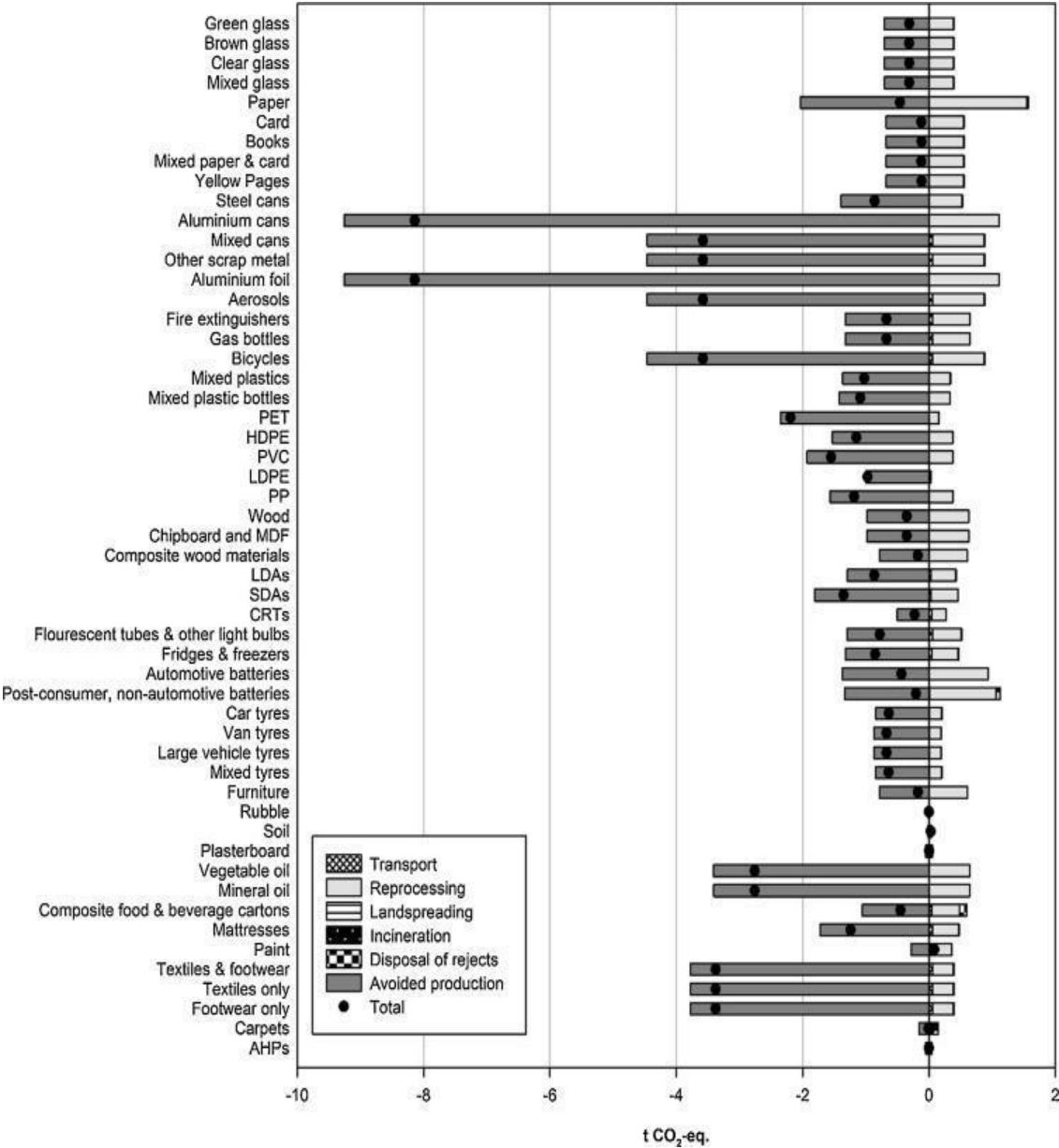
The contributions to total net GHG emissions from avoided primary production relative to reprocessing were found to be particularly important in recycling of LDPE, PET, textiles, and aluminum cans and foil, where significant differences between gross and net GHG emissions were identified.

It can be seen from the bar chart on the following page that metals, wearables and various sorts of rubber are the most promising materials in terms of emission reduction. But the whole picture is also encouraging: Recycling can have significant benefits in reducing GHG emissions in almost all the materials.

ⁱ J. Bogner et al., 2007 **Waste management**

ⁱⁱ DA Turner et al., 2015 **Greenhouse gas emission factors for recycling of source-segregated waste materials**

The following chart gives a detailed overview of this effect for individual types of materials:



Contribution analysis of the net greenhouse gas (GHG) emissions from recycling of source-segregated materials. PET, polyethylene terephthalate; HDPE, high-density polyethylene; PVC, polyvinyl chloride; LDPE, low-density polyethylene; PP, polypropylene; MDF, medium-density fibreboard; LDA, large domestic appliance; SDA, small domestic appliance; CRT, cathode-ray tube; AHP, absorbent hygiene product.(Info. source David A. Turner / Greenhouse gas emission factors for recycling of source-segregated waste materials, Source-segregated materials recycling)

4.2. Tzu Chi's Role: Facilitating Recycling to Achieve GHG Reduction

For many ordinary public and private sector recycling stations, the separation of recycling materials meticulously amounts to higher operating cost and hence less profits. To recycle source-segregated waste materials and bring about further GHG emissions savings, economic incentives alone often do not suffice.

In Tzu Chi's recycling model, Tzu Chi educates people about environmental protection and encourages each family to start the recycling process at home by separating items such as cans, plastic bottles, papers, cartons from ordinary waste and by keeping these clean.

This facilitates the recycling process for Tzu Chi volunteers when these materials are collected, sorted and further processed at Tzu Chi's Recycling Points and Eco Awareness Recycling Centers.

Take a PET bottle for example: Tzu Chi volunteers separate the cap and its plastic ring from the bottle, then take off the label wrapping, leaving the bottle as clean and free from impurities as possible. By doing so, those materials can be sold for better value and be re-produced into high quality products.

Because of this specific process, recycled PET bottles can be turned into fabrics, which are then made into clothing and blankets. It actually takes 70 recycled PET bottles to make one blanket.

Finally Tzu Chi distributes these blankets to people in need around the world, such as disaster survivors and the poor. Instead of obtaining raw materials to make the blankets, through recycling, we are able to turn "garbage" into valuable resources and reuse them to make useful products for people.

The production of 1 Kilogram of PET bottles usually requires 3.12 Liters of crude oil. Each PET bottle contains at least 90% of reusable polyester fiber. Tzu Chi's detailed recycling process facilitates the conversion of waste (i.e. PET bottles) into secondary products (i.e. high quality Textiles).



Top and bottom pictures: Leaflet for household to identify recyclable items and separating PP and PET



Without Tzu Chi's voluntarism and technological capabilities, this conversion would be uneconomical and unpractical.

The way how recycling materials are processed is actually very important. Tzu Chi's great advantage is that its volunteers separate to a degree of fineness unattainable with machines alone.

5. Tzu Chi's Approach in Recycling of Plastic Bags

When doing recycling, it is important not only to focus on the profit of the selling value of the recycling products. It is a key point to also take the whole present and future environmental impact into account.

Plastic bags and packaging are icons of the convenience culture that permeates modern society. Such a culture however, has become an increasing threat to the environment. Plastic bags are inexpensive, lightweight, durable and made of plastic, which does not readily biodegrade.

Much of the plastic ever made still exists. Worldwide, as many as one trillion plastic bags are used each year and less than 5 percent of plastic is recycled. According to the United States Environmental Protection Agency, over 380 billion plastic bags and wraps are used in the USA yearly, requiring 12 million barrels of oil to create.

The vast majority of the non-biodegradable bags are just thrown away. When buried, they block drainage systems and waterways and impede the flow of underground water. When incinerated, PVC plastic packaging materials release highly toxic carcinogens, such as dioxins, into the air.

Either way, plastic waste is harmful to the environment as well as humans. Tzu Chi has put a lot of effort in recycling plastic bags to address this issue.

Tzu Chi does not do recycling for economic profit. We do it for the benefit of planet earth, for the natural environment, mankind and all living beings on this planet.

5.1. Preparations for Recycling: Tzu Chi's Unsurpassed Precision

In some locations, Tzu Chi recycling stations also collect and sort low re-sell value items, including plastic bags.

Finding recycling companies that buy plastic bags and packaging which are capable to re-process those materials has been a priority for Tzu Chi since it started collecting plastic bags.

Volunteers first began by collecting only clean polyethylene (PE) plastic bags. Now they generally sort out five categories based on the materials the bags and packaging are made of:

- (1) polyethylene (PE-used in transparent plastic bags for food, translucent plastic bags, etc.)
- (2) polypropylene (PP-disposable plastic cups, food packaging, etc.)
- (3) polyvinyl chloride (PVC-packaging for bed sheets, blankets, thick raincoats, shrink film, etc.)
- (4) composite plastics
- (5) sealing film

Further, each type of plastic bag or package can be further classified based on whether it is all-white or colored; hard or soft. Those that do not fall into any of the above five categories or are made of mixed materials must be sorted out for another group.

Although it is hard to find out the exact material properties of plastic bags, experienced volunteers are able to distinguish between the different types of them. They do this by feeling them, rubbing them, and listening to the sound they make.

In addition to collecting clean plastic bags, Tzu Chi has been searching for recycling firms that can accept soiled plastic bags. There are more and more companies now which are based on the ideal of caring for the environment who accept to recycle soiled plastic bags.



Information board found in Tzu Chi Recycling station to help volunteers to identify the different materials of plastic bags.

Volunteers are collecting soiled plastic bags and packages, as long as they are not too badly soiled or greasy. Local residents are also encouraged to use gray water (i.e. used but not too dirty) when rinsing their plastic bags before bringing it to recycling stations. Rinsing bags like this is a good strategy to conserve water.

5.2. Initial Challenges and Difficulties of Plastic Bag Recycling

Tzu Chi recycling stations encountered many difficulties at first. The wide variety of materials was confusing enough for younger volunteers, let alone the elderly. Most of the elderly volunteers didn't know English; it filled them with dread to have to distinguish between PE, PP, PVC, etc. Moreover, some of the bags and packages given to recycling stations contained smelly leftover food. This definitely put most people off. There were lots of difficulties and struggles of promoting plastic bag recycling at the beginning.

With persistence and perseverance, Tzu Chi volunteers approached to address peoples complaints about the hassle of collecting bags and packages for recycling.

Tzu Chi volunteers explained to everyone involved that if these items were not recycled, they would be dumped in landfills and increase the level of VOCs. Alternatively, they might be burned, thereby releasing toxic gases into the air. The worst scenario would be for them to end up in wildlife, endangering wild animals.

So even though recycling plastic bags is difficult and little rewarding from a financial point of view, it should still be done for the sake of the environment.

Tzu Chi's insistence touched the consciences of the people. Gradually, they became more aware of the enormity of the problem and began pitching in to help out.



Top and bottom pictures: A Tzu Chi volunteer collecting and cleaning refuse.

5.3. The Impact of Plastic Bag Recycling on Everyday Habits

We have observed in practice that the experience of sorting plastic bags at a recycling station will encourage people to use fewer plastic bags in the first place.

The sight of thousands of used plastic bags and packages lying on the floor is a wake-up call for those who participate in the recycling process. When people see them, they realize how serious the problem is and how much effort is required to collect, sort and recycle these bags.

This leads to a change in peoples lifestyle and habits by adhering to the 4 R's: refuse, reduce, reuse and recycle.

6. Tzu Chi's Ongoing Efforts

6.1. Technical Innovation

Charity and Eco Enterprise A: TIHAA and DA.AI

To actively promote the recycling and conserve the Earth resources, Tzu Chi continues to promote environmentalism in its cooperation with business. To those entrepreneurs with an interest in assuming responsibility, Tzu Chi provides advice so that they may finally take charity and environmental protection as their humanitarian missions.

The aim is to bring the idea of environmental protection and material recycling to the development of environmental technologies.

To intensify its activism in this direction, Tzu Chi has begun to branch into producing recycled products on its own. Since 2006, the Clothing Research and Development Group of the Tzu Chi International Humanitarian Aid Association (TIHAA) has played a major role in developing fabric made from eco-friendly materials and in producing clothes, sleeping bags, and blankets all from recycled materials.

After extensive research on new methods of reusing recycled plastic bottles, DA.AI Technology Co., Ltd. was set up by the TIHAA. Its first products were **eco-friendly fabric products**, which DA.AI unveiled in 2009. Following is the process showing how recycled PET bottles can be turned into fabrics.



DA.AI is unique in the way it operates: As a ‘social enterprise’, it takes the maximization of social welfare as its target. All profits are re-invested in ways that promote this aim or donated to the Tzu Chi foundation for charitable work. They are not handed out to the owners or other leaders of the company.

With the advent of global warming, reusing and reducing the consumption of resources grows increasingly important. DAAI Technology Company brought together entrepreneurs and volunteers and through promoting eco-friendly products, becoming an example cooperation between an NGO, civil society, enterprises and other decision makers.

Eco-friendly blankets for Tzu Chi’s disaster relief campaigns.

Over one million blankets have already been distributed in more than 37 countries to people in need around the world, such as disaster survivors and the poor. The eco-friendly fabric absorbs moisture, repels perspiration and is fast drying

The Tzu Chi gray eco-blanket is an environmentally friendly product. It is derived from dope dyed 100% post consumer recycled polyester yarn. Its color originates from the addition of color chips in the process of spinning instead of traditional dyeing process. This process not only reduces a lot of water consumption and chemical pollution, but also conserves energy.

Each gray eco-blanket is made from 68 recycled water/tea PET bottles, equivalent to reducing 1.7 kg of CO2 emission, and saving 35.4 milliliters of oil and 6 liters of water. The recycled PET bottles used as the raw materials of blankets are collected, classified and cleaned by Tzu Chi volunteers.



Top and bottom pictures: Tzu Chi’s eco-blankets in as they are used.

6.2. Recycling as a Source of Happiness

Tzu Chi recycling volunteers come from a multitude of cultural and religious backgrounds. They share the principle idea of coexisting with the Earth. They work diligently to safeguard the planet, thereby inspiring more people to join their campaigns. People come whenever they have time to make their effort and treat one another like a family with mutual care and support. Many of the elderly volunteers are happy to be able to contribute even in their old age and have become healthier and increasingly cheerful as they serve.

Tzu Chi also holds special *Recycling Days* as a community activity that promotes kinship and good neighborliness. Besides doing recycling work hands-on, the volunteers share knowledge about environmental protection in a warm and friendly atmosphere.

After completing the half-day task of sorting the recyclables according to their material, everyone will work together to clean up each venue and restore the venue to its original clean state.

Proceeds from the sale of all recyclables are then channeled into Tzu Chi Charity Fund to help people in need.

Many residents in the community take part in our recycling effort. When they participate and personally get involved in doing recycling, they see for themselves firsthand how much waste we generate, how many things we throw away, and how much we are consuming.

The experience inspires them to reflect on their own lives, and they start living a less wasteful lifestyle and curbing unnecessary consumption, thereby reducing the amount of trash generated. They find great joy in doing work that helps protect the environment, and they often become healthier, both mentally and physically, as a result.

7. Success Stories

In this paragraph, we want to give the reader further examples of the positive impact Tzu Chi's efforts in environmental protection and recycling activities have had so far.

a) Productive Golden Years

Many Tzu Chi recycling volunteers are elderly. These stewards of the Earth give of themselves cheerfully and make good use of their retirement by collecting and reclaiming reusable resources. Their work reduces garbage and pollution and fills their lives with a strong sense of value and purpose. A better, cleaner world for the generations that follow will be their enduring legacy.



These elderly enjoy participating in recycling. They have company, do exercise and feel constructive – it is much better than to sit at home alone watching TV.



The joy of these Seed Kindergarten children while doing recycling brought cheers to everyone.

b) All ages are welcome!

Protecting our environment is not just the responsibility of the elders. The youths are capable of protecting the Earth and should also be responsible. The younger generations will spend a longer time on earth, thus they should put more effort into protecting the environment.

c) Recycling Points in Singapore: positive effect on local community

Since the Redhill Recycling Station was established in 2007, more than 30 local residents come together every month to do their part for the environment. Tzu Chi volunteers will also share the information of environmental protection to promote eco awareness.



These residents are personally engaged in sorting recyclable materials while inspiring more people to join the effort to promote environmental protection.

d) Philippine City Signs Recycling agreement with Tzu Chi

The city of Marikina in the Philippines signed an agreement with Tzu Chi to promote recycling across the city.

A visitor at the Manila North Cemetery says Tzu Chi's environmental protection campaign in cemeteries every year has taught the public to become more conscious of throwing their trash properly, thus helping the environment.



e) Environmental Care in Disaster-affected Areas

After Typhoon Urduja, Tzu Chi launched a cash-for-work program, mobilizing local residents in Ormoc, Philippines, to clean up their community. The program will hasten the clean-up efforts and prevent the spread of diseases.

In 2013 Typhoon Haiyan (Yolanda), one of the strongest tropical cyclones ever recorded, swept across the Philippines. Tzu Chi provided relief to the survivors and save Tacloban city from being abandoned.

Today the lives of residents in Tacloban are back to normal and they advocate their time and energy to help mitigating climate change. Tzu Chi encourages people to do recycling and to protect the environment in order to help to reduce disasters in our world. Even a small act can contribute a lot in helping our environment and in additional help the people in need, and those who are affected by disasters.



Heavily exposed to increasing incidence of extreme weather events, the Philippines is among one of the countries most vulnerable to climate change in the world. After relief Tzu Chi implanted environmental awareness in disaster affected areas.

f) Tzu Chi organized cleanup activity and returned nature to its original beauty

Few decades ago, public environmental awareness was not as high as it is today. Visitors tossed their litters down the slopes of Guanyin Mountain hiking trails. The site was completely covered by garbage of all kinds. The soil was buried under layers upon layers of rubbish so deep that no grass could grow. If not removed, the environment might have been damaged beyond remedy.

Removing the garbage from the area was a great effort. The area is accessible by foot only. All the garbage collected had to be carried down. The walk took 30 minutes and each bag of garbage weighed five kilograms. The participants' age ranged from ten to over ninety. Some hikers also spontaneously joined their effort on the spot. Together, they filled and removed 4,000 garbage bags.

g) Between Tradition and Environmental Protection

Thaipusam is the biggest festival for Hindus after Diwali. In Malaysia, celebrations take place on a grand scale at the Batu Caves attracting millions of devotees and tourists each year. As you can imagine, with such large crowds come large amounts of garbage. Hence, since 2010, under the request of the Selayang municipal council, Tzu Chi has been spreading the practice of recycling at the event.



Top and bottom pictures: Tzu Chi organizes clean up events worldwide to promote Environmental Protection. It's also offering positive free-time activities for families and groups.



h) Tzu Chi invokes greener Seventh Lunar Month amid global warming

In Chinese tradition, people usually burn incense and joss paper money during the 'Ghost Month'. For over 30 years, Tzu Chi encourages people to use alternative offerings such as doing charitable deeds during 7th Lunar Month. For Buddhism the 7th Lunar Month is an auspicious month for thanksgiving, filial piety and joy.

This is a good example of adapting religious practices to new circumstances. Burning incense and joss paper causes negative environmental and health impacts. It should not be considered as trivial and without consequences. Sometimes, it is necessary to make reforms, in this case in line with eco-consciousness, for the good of all. Furthermore, Tzu Chi promotes vegetarian diet to protect life and our environment.



After few decades of efforts in implanting environmental awareness among the public, there are more and more temples in Asian communities which stop burning incense and joss paper. This can significantly help to reduce GHG emissions. Doing charitable work and/or adopting a vegetarian diet has now become the modern way of doing spiritual offerings.

8. Concluding Remarks

To overcome the limits of current climate policy, awareness of climate change as one of the most urgent challenges to mankind has to take root in society. Tzu Chi suggests that education and community-based recycling may play a vital role in nurturing such awareness.

Environmentalists aside, many people today are reluctant to curtail their consumption or even use their own time to counter climate change. This is because climate change seems like an abstract, remote problem. In reaction to this problem, Tzu Chi links climate action to immediate personal benefits: Vegetarianism promotes individual health while it also reduces greenhouse gas emissions; community-based recycling limits emissions and offers sociability; recycling and environmentalism can give individuals an invaluable sense of purpose. These are just to name a few.

As an international charity, Tzu Chi puts special emphasis on environmentalism during its humanitarian missions. Not only are most of the materials and technology used on these missions eco-friendly. Tzu Chi also helps to re-build communities struck by natural disaster in a way that lets environmental awareness become a central part of daily life. In addition to curbing climate change, such awareness is often essential to the long-term ability of these communities to cope with disaster.

Just as Master Cheng Yen once remarked: “Saving the world means protecting the environment.” But there are more dimensions to this than we usually think: “protecting the spiritual environment, the social environment and the environment of the whole globe.”

Buddhist Tzu Chi Foundation

Debra Boudreaux ✉ : Tzehuei@us.tzuchi.org

<http://www.tzuchi.us/>