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TOSHIBA Youth Conference 2010 NEWSPAPER

Act Eco Journal.

The Camp of Toshiba Youth Conference for a Sustainable Future 2010 takes place in Japan

19 high school students and 11 teachers from four countries (Japan, Poland, Thailand, and the United States) get together to discuss solutions for global environmental issues.

The third annual Toshiba Youth Conference for a Sustainable Future was held from July 31st through August 6th, 2010 in Japan. The camp brought together fresh and diverse young minds to tackle global environmental challenges.

This year' s theme was: "Halve CO2 Emissions by 2050 – Save Energy, Create Energy, and begin a new lifestyle." Throughout the whole camp, students constantly explored the issues of "how can we begin a new lifestyle?"; "What kind of technologies are available?; What are their pros and cons?"; "Can we learn from past experiences?"; "How can we introduce new energy practices to our own towns and communities?"

The camp started off at Josai Awa Kamogawa Learning Center in Chiba Prefecture, surrounded by mountains and the Pacific Ocean. It did not take long in the rich natural environment for students to overcome cultural and language barriers through participating in team building and goal sharing workshops.

Presentation of the pre-camp assignments (see page 2) was a valuable sharing time to discover diverse values, lifestyles, and attempts in each country to solve environmental problems. All were reassured that great learning experiences were awaiting.

Going out into the field and being involved in hands-on learning creates experiences that will be remembered for a lifetime. On the third day, the students ventured out to explore Kamogawa-city, where many of them seemed to be inspired by the ecological local community and traditional Japanese wisdom. (see page 4) On the fourth day, students visited Toshiba Science Museum, Tokyo Uden 2017, and the Ginza honey project, and deepened their understanding of modern technologies and the possible role of green companies. (see page 5) Finally on the fifth day, students had the chance to interview a government official, an expert in renewable energy, and the president of an environmental advocacy company. (see page 6)

After moving the base camp to National Olympics Memorial Youth Center in downtown Tokyo, the students got even closer by sharing meals and traveling as a team. The students from Poland contributed their refined critical thinking skills and realistic vision of the world. The American students added their diverse opinions and energy. The students from Thailand imparted harmony and a quiet curiosity. And lastly, the Japanese students provided grounding and a regional context for discussion.

The conference concluded with presentations by 8 schools and discussions about possible measures to introduce progressive change in Japan and the world at large (see page 8). Taken together, the synergistic combination encouraged and inspired a commitment to find creative solutions to the fundamental causes of environmental problems.

The camp was also a meeting place for teachers passionate about enhancing their abilities to promote environmental and scientific education and intercultural communication. Japan Center for International Exchange held a series of workshops to create synergy among teachers sharing the same goals (see page 7).

The entire camp itself was a microcosm of the current global movement towards environmental justice, acknowledging diverse cultural values, and cooperation in finding innovative solutions to achieve a sustainable future.

After returning to their respective countries, the students will keep in touch via internet using a website created especially for this conference (www.act-eco.net). Progress reports will be sharedto promote a deeper understanding of the issues discussed and further the spirit of international exchange.



Visiting Kamogawa Ecological Minded Kingdom

Creating a Common Vision

A diverse group of 19 high school students from four countries gathered in one room. Their mission: to create a common vision for the world. Impossible you might say. But not for this group of young leaders attending the Toshiba Youth Conference for a Sustainable Future, 2010.

On August 1st, the second day of the camp, a half-hour was spent uniting the Japanese, American, Thai, and Polish students through goal sharing and vision mapping.

The facilitator, Kyle Holzhueter, laid the foundation for the camp by carefully describing humanity's current predicament: "We as humans face a global problematique, consisting of not just one problem, but a matrix of interconnected social and ecological problems."

Mariko Kikuchi of Hitachi First High School was astonished: "In my daily life I never hear about peak oil or energy shortage. I feel guilty but want to learn more!"

In response to the global problematique, the students created a vision map using the backcasting method. In order to determine how to move forward, first the students envisioned a desirable and sustainable future. Next, policies and programs were identified that would help create that ideal future.

Through the Toshiba Youth Conference, high school students are creating a road map to a sustainable future, and taking their first steps towards actualizing their dreams.



Creating a Vision Map

TOSHIBA Youth Conference

As part of Toshiba' s commitment to creating a just and sustainable planet, the Toshiba Youth Conference for a Sustainable Future is designed to deepen awareness of, and solutions to, environmental concerns while acknowledging diverse cultural values. The highlight is the summer camp, bringing together students and teachers from around the world to participate in a week-long program in Japan.

The 2010 participants were from Japan (Hitachi First High School, Keio Shonan-Fujisawa Senior High School, Waseda University Senior High School), Poland (Liceum O golnoksztalcace nr 14, Academic High School at PJIIT), Thailand (Triam Udom Suksa School, Assumption Lampang), and the United States (High School for Environmental Studies).

The conference is sponsored by Toshiba International Foundation, Toshiba America Foundation, and Toshiba Thai foundation, in cooperation with Toshiba Corporation, and Japan Center for International Exchange. The program was organized by BeGood Cafe, a leading Japanese environmental NPO. For more information, please visit www.act-eco.net



From left to right

Mr.Kiyoshi Shikita (Chairman, BeGood Cafe)
Mr.Fumihiko Namekawa (President, Toshiba international Foundation)
Ms.Kobkarn Wattanavrangkul (President, Toshiba Thai Foundation)
Mr.Toshihiro Menjyu (Cheif Program officer Regional Netwerking, Japan Center for Internal Exchange)

Student acting as journalists and photographers

As a tool to share and widely disseminate the successful results of the camp, participants acted as journalists and photographers to create this newspaper, "Act Eco Journal."

Each student joined one of three departments (Lifestyle, Business & Politics, and Science & Technology) according to their interests. On the second day, students were given a short presentation on article writing and photography. The next day, the students jumped into their role as journalists, taking notes, recording their findings, and collecting their thoughts into informative articles.

The teachers and staff of the camp also invested their creativity and knowledge, acting as journalists, photographers, and editors. Ms. Premyuda Boonroj, a professional journalist from "The Nation", a newspaper in Thailand, accompanied the camp and also pitched in her experience to enrich the quality of Act Eco Journal.



A Student Journalist Taking Notes

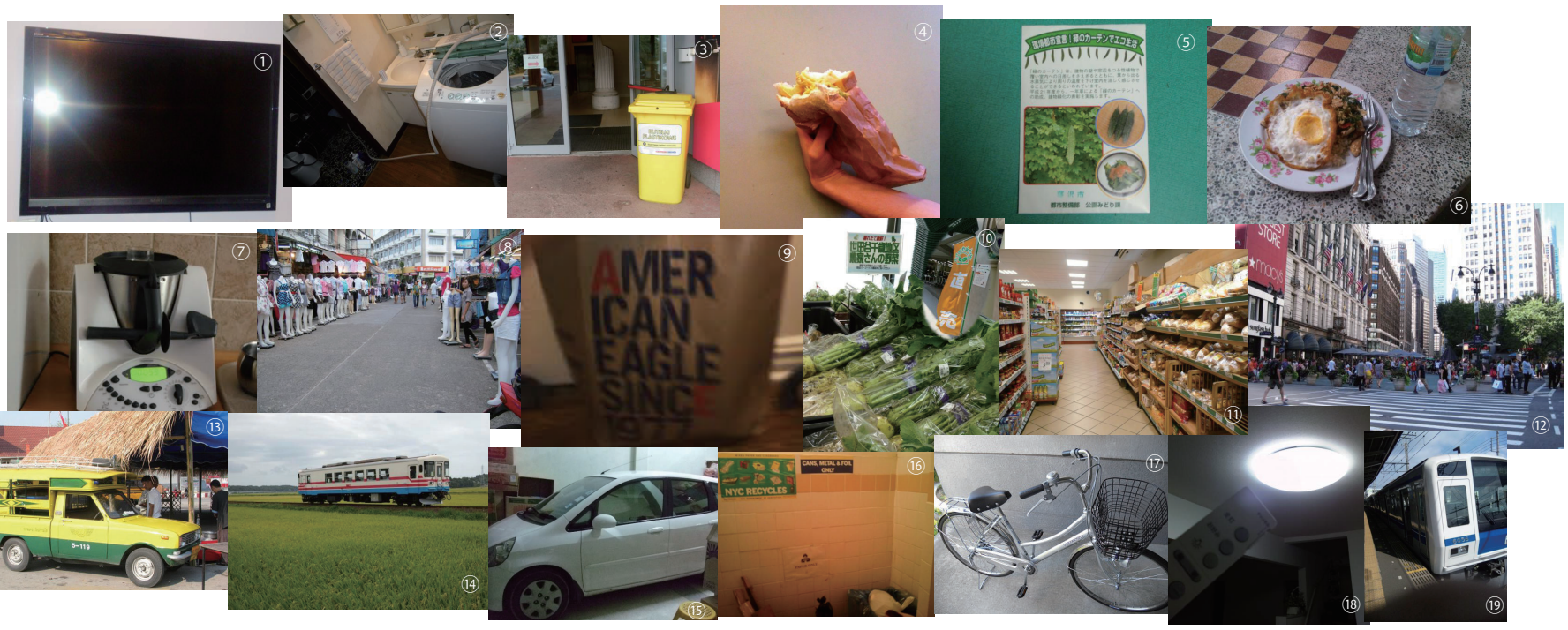
Utilizing the time between lectures and often working late into nights, students, teachers, and staff created this paper to record their discoveries and capture the spirit of the camp.

Moreover, the camp was covered by national television station TBS and by renowned newspapers such as Yomiuri, Asahi, and Chiba Nippo newspapers. Media coverage provided the public a chance to share this unique learning experience.

On this page, find some descriptions of "Pre-Works" submitted by participants before the camp. Pre-Works were organized into three parts: Reports, My Life, and Interview.You can read more works on the website: www.act-eco.net/2010

My Life

Take pictures of the following five different scenes of your daily life: meals, garbage, electricity, transportation, and shopping, which show how energy and resources are consumed everyday. Post the pictures on the website with short descriptions of each photos.



Reports

List some examples of good energy production and/or consumption practices and activities implemented in an effort to tackle environmental issues in your country or community. Choose one best example among them and explain why it is most desirable. Also, discuss any issues or future possibilities for improvement associated with that particular practice.





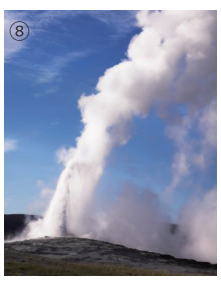














① **Ekoinfonet system in Poland**

by Anastasia Karolewska & Alex Martyniak - Polish-Japanese High School, Warsaw (Poland)

Recently, in Poland system called Ekoinfonet has become public and we think that it is a very good example of our country energy policy. Today we would like to bring main ideas of this project closer to you...

② **"Air Dolphin" --small-scale wind power --**

by Maya Hirohara and Shota Utsumi - Keio Shonan - Fujisawa Senior High School (Japan)

We will be introducing you to the merits of small-scale wind power. Unlike thermal power, wind power can generate electricity without emitting carbon dioxide. It can do so even at night, so compared to solar power, facilities can be used more efficiently...

③ **Algae as a Biofuel**

by Nina Luksanapol & Alejandro Vinueza - High School for Environmental Studies, New York, United States (U.S.A.)

Algae is an autotrophic organism that captures carbon dioxide and sunlight and converts it to glucose and oxygen. Fifty percent of its weight is oil, and this oil can be used to produce fuel. Many species can be used to make biofuels, including: Gracilaria, Dunaliella tertiolecta, Chlorella, and Sargassum, which produces ten times the output of Gracilaria.

④ **Electric cars in Japan**

by Shinya Hara, Takumi Nagashima and Rita Kasai - Waseda University Senior High School (Japan)

We examined the electric car. Because we think Japan is famous for cars all over the world and there is a lot of interest in electric cars. An electric car has many strong points. That car is kind to environments, and living.There are three big advantages of electric cars. The first is that electric cars are able to cut down the amount of green house effect gas.

⑤ **Energy Policy&Technology**

by Teerapat Satjalak and Tanachit Sangchan - Assumption Lampang (Thailand)

The National Elephant Institute (NEI) looks after the Thai Elephant Conservation Center since January 13, 2002. The institute is located on 301 acres of national forest reserve, along the Lampang - Chiang Mai Highway, Hangchat District, Lampang Province, Thailand

⑥ **Tax Credits**

by Diana Eng and Ashley Hernandez - High School for Environmental Studies, New York, United States (U.S.A.)

The US Environmental Tax credit is based on a system where you buy something and you get money back in the form of paying less tax. Federal Tax credits reduce the amount of taxes that must be paid by an individual or corporation in which acts as if part of one' s tax is already pated.

⑦ **Micro Hydroelectric Power Generation**

by Mariko Kikuchi and Yusuke Horie - Hitachi First High School (Japan)

Our planet is now in a serious problem called `global warming` and new, environmentally friendly ways to make electricity are being researched all over the world. Out of these new ways, we would like to propose using hydroelectric power generation. .

⑧ **Geothermal energy**

by Jakub Ubysz and Arkadiusz Kacała - Liceum Ogolnoksztalcace nr 14 (Poland)

SGeothermal power is power extracted from heat stored in the earth. This energy is accumulated in rocks and ground waters and steam. The temperature in the Earth crust is rising with the deep. Like an average value 30 ° C/km is used to mention. The temperature grows with the depth and in the Earth' s core it reaches even 5000° C.

⑨ **Renewable energy policy**

by Supawich Wongkietkachorn and Thawatchai Sangdes - Triam Udom Suksa School (Thailand)

Pourposes: To make Thai use renewable energy as a primary energy resource. To find new way of using energy resource in Thailand. To support 'Green City' project. To support renewable energy industry in Thailand. To explore and do an experiment for renewable energy.



Electricity : Television
by Diana (U.S.A.) ①

This is my TV on the wall of my living room. My parents and sisters use. I usually don't even touch it. ..



Water Recycling
by Rita (Japan) ②

This is a washing machine in my house. It has a special hose. When we put the top of the hose into the bathtub and turn on the switch, it can pump...



Plastic bottles this way
by Anastasia (Poland) ③

This is a container for plastic bottles only. It stands on the outside of fitness club which I attend. People who work out have to drink a lot ...



School breakfast
by Arek (Poland) ④

This is my school breakfast. In my school we usually eat sandwiches during breaks. It's packed in paper bag, bacause of ecologicall issues.



Green curtain
by Shota (Japan) ⑤

We have just started garden plant of bitter gourd in our garden. This plant can grow very quickly and make a green curtain for us in summer...



The most common Thai lunch
by Leo (Thailand) ⑥

It's called "pat ga prao moo ki dao." It is very easy to make it, just pork and basil fry together with some sauce , chilli and galic...



Food
by Alex (Poland) ⑦

I prepare most of my meals using a microwave or a similar device that looks like this.



Scenes of my daily life
by B (Thailand) ⑧

The walking street where we can shop in the afternoon. I always hang out in here to pass the time away and sometimes window shopping.



Alejandro's Life
by Alejandro (U.S.A.) ⑨

My favorite store to go clothes shopping in American Eagle!



Local production for local consumption
by Maya (Japan) ⑩

Setagaya-ku, my town's municipality has been consulting on local production for local consumption in order to protect farmers...



My shopping
by Kuba (Poland) ⑪

This is the place where I shop. Ordinary plastic bags were replaced here by oxy-biodegradable bags.



Walking
by Ashley (U.S.A.) ⑫

When they're not using public transportation a lot of people are walking. I walk almost everywhere I go.



Transportation
by Best (Thailand) ⑬

This is one of public transportations. I always take it when i want to travel in downtown since its fee is quite cheap and comfortable.



A Nice Ride On a Train
by Mariko (Japan) ⑭

This is one of the trains I ride everyday when I go to school. It`s really old, but I love the classy design.



Together We Save
by Chai (Thailand) ⑮

This is my cousin's car. I often return home with her. Because our homes went the same way.



Trash
by Nina (U.S.A.) ⑯

In my building, on every floor we have a room where we throw garbage out. We have one bin for paper and one bin for plastic, glass and metal items...



Bicycle
by Yusuke (Japan) ⑰

I can go anywhere with it.



My light bulb
by Shinya (Japan) ⑱

My light bulb in the house is able to control the brightness. By adjusting it we can conserve energy.



Train
by Takumi (Japan) ⑲

I go to school by this train.

Interviews

Interview your grandparents or other older people in your community or family, and ask them how they remember energy and resources being used in the past. Try to interview more than one person if possible. How does their lifestyle in the past compare with the way you use energy and resources today?

Jakub (Poland)

Interview with my father

To understand the differences in the level of energy consumption between my generation and older, I decided to ask my father about his and his parents' lifestyle in the past (because I was not able to make this interview with my grandparents). In this way I desire to state the changes that have occurred since my grandparents' puberty years (the 30') until now. Being aware that this long period of time (almost 80 years) cannot be fully described in a few paragraphs, I decided to focus only on the most significant differences.

Both of my grandparents were born in 1921. Before the Second World War they lived in small Polish towns. My grandmother lived in the South of Poland in a town called Nowy Sącz. In the streets there were horse-driven cabs instead of cars and the street lamps ran on gas. Electricity was present only in some houses. The most common sources of light in houes were oil lamps and candles. People cooked on wood-burning stoves a

nd washed their clothes in bowls. Saving water was a must, because there was no water supply system and sewage was simply poured into the gutters for the lack of proper sewers. The problem of saving energy was absent because people consumed only a little energy. Although those times were difficult, my grandma really missed them.

My grandfather was born in Włocławek, a town located in central Poland, where he also spent his childhood. His family had a farm where all work was done manually. The ground was naturally fertilized. The cereal was hand-cut and transported in hayracks propelled by horses. Then corns were milled in wind- or water mills. Although tillage was not as effective as nowadays it was much friendlier to environment.

In the times of the Second World War, people cared only about surviving so they did not pay attention to environmental issues especially if there was shortage of food. The environment was polluted by numerous war activities.

After the Second World War, power in Poland was taken over by communists. My grandparents moved to Wrocław, where they met each other and then got married. This city was destroyed and new citizens had to rebuild it. In Poland, extensive industrial development was launched. This economic development concentrated mainly on heavy industry such as coal mines, foundries, steel-works and factories. They all had huge negative impact on environment, which was disregarded by the communist government. This resulted in the formation of huge slung dunk near mines, bingsteads besides factories and high emission of CO_2 by powerhouses. In the 60s' the problem of pollution occurred especially in the southern part of Poland, called Silesia, where industry was mainly concentrated.

This article continues on www.act-eco.net/2010

Tanachit (Thailand)

Interview

The interview was conducted in the house of Mr. Suthee Junsai, 65 years old of Lampang, Thailand. He is one of the elderly and has been living in the village for almost 45 years.

From the interview, it was found out that the energy consumption in the past was much lower than the present. Before, life was so simple that they can live without using much energy.

Mr. Suthee Junsai told me that his family used to cook food using dried wood they gathered from the forest but now, they spend more money for electricity or gas for cooking. Before, they used to walk to the market and temple or ride bicycles but now, people don't care to walk anymore. Everybody has a motorbike or car to go from place to place.

He also shared with me that before when they go to the market, the things they bought from the market were all wrapped in fresh leaves, especially banana leaves. At present they don't use leaves anymore, instead they use plastic bags and paper wrappings.

From the interview, I can say that the lifestyle before was energy-free or more energy-saving. Nowadays, the people are more energy-dependent and more energy is wasted everyday. With this problem facing us today, the youth should work hand-in-hand to help find for alternative sources of energy. As young students, we can mobilize our forces to implement a campaign to change our lifestyles. Changing our lifestyles from complicated to simple lifestyles will ensure efficient use of energy for the future to be sustainable and the world would be a happier place to live.



You can visit and read all the assignments on
www.act-eco.net/2010



Creating Your Own Lifestyle

Lifestyle Team



Yae hosting her cafe.

"It Takes a Village"

Yoshiki Hayashi, the spokesperson of the local currency AWA Money, was born and raised in the city of Tokyo, Japan. Like many people, he experienced a desire to live a wealthy and luxurious life. However, as he proceeded to achieve his economic goals, he noticed that "the more wealth he obtained, the more the environment suffered."

His thought is that wealth in the countryside deals more with self-sustainability (planting food for one's self and family to survive) while wealth in the city centers around being able to purchase manufactured goods. He and others, therefore, started the AWA monetary movement within the Kamogawa Nature Kingdom.

This system is not competitive and is focused on developing relationships with others and not on the accumulation of material wealth. And by bartering within the community, many fresh vegetables are available without preservatives so we can reduce CO2 by trading goods over short distances. People can, therefore make friendships within the community by trading. The wealth is kept in the community. It could bring back traditional Japanese culture by individuals having their own farms.

Mr. Hayashi isn't the only person within this community that believes in the ability of a community to succeed with a barter system. Yae a woman whom now grows her own organic vegetables in Kamogawa Nature Kingdom decided to move to the community to raise her family as opposed to the city where she used to live for quite sometime.

For some people this lifestyle poses some challenges. For example, the community may become too large, resembling a city, which will defeat the original purpose of developing a bartering system. The community may also experience increasing difficulties; for example, there may be goods and services that are unobtainable. Even with all these challenges, the Kamogawa Nature Kingdom is a happy community which is gradually flourishing and setting an example for environmentalists striving for a sustainable future.



TYC meeting with spokesperson Mr.Hayashi

Article written by Arkadiusz Kacala (Poland)
Shinya Hara (Japan)
Ashley Hernandez (U.S.A.)

Wisdom from the Past

Sci - Tech Team

Taking energy efficient ideas from the past and making them present again

More than 30 students and educators from Japan, Thailand, Poland and the United States were in awe when they had the privilege of visiting a 150 year old traditional Japanese farmhouse in Kamogawa, Japan. All of these students are participating in the Toshiba Youth Conference for a Sustainable Future focusing on energy solutions to half carbon dioxide emissions by 2050. The house belonged to the late professor and founder of Josai International University, Mizuta Mikio.

On a hot and humid day in August, the Mizuta residence was cool and comfortable. This is just one example of a traditional home that although built a long time ago, has many smart energy solutions. The house was cooled using many open windows that allows wind to ventilate throughout the house and the humidity is lowered by the use of wall plastered by a mixture of straw and soil so they absorb the moisture. The roof is made from susuki which is a local plant plentiful in the region. The house is made from local trees that are pieced together without the use of nails. The fireplace sends smoke to help dry the susuki roof, keep insects away, and provide light and warmth. Everything is the house is made with efficient energy and materials use in mind. When the wood on the walls gets old, it can be used as flooring, and when that ages, the wood can be used for fire, and finally the ashes can be used for fertilizers.

During the tour we noticed similarities and differences in the Mizuta house and our homes in the U.S., Thailand, Japan, and Poland. We all realized the purpose of a home is the same; to cook, to sleep, to entertain, however, we all felt the biggest differences in modern homes in our countries is the lack of connection to the environment.

The lingering question is what can we learn from the Mizuta house? Perhaps our modern addiction to non-renewable resources is too much to quit today, but someday soon when we run out of these resources we will look to traditional Japanese building styles and be grateful for Japanese traditional knowledge.

Article written by Takumi Nagashima (Japan)
Tanachit Sangchan (Thailand)
Alejandro Vinueza (U.S.A.)



The entirety of the Mizuta Residence, a 150 year old farmhouse in Kamogawa in Chiba Prefecture.



The entirety of the Mizuta Residence, a 150 year old farmhouse in Kamogawa in Chiba Prefecture.

Collaboration between farms and cities

Business and Politics Team

A totally new way to allow city residents to get involved in a traditional farm life.

Our world is run by technology and progress. In those crazy and fast times people are looking for a place to escape. They can find it in Oyama Senmaida - Terraced Paddy Fields.

Looking at that peaceful and calm landscape of rice fields, an area located in the countryside of Japan, many people are not aware of the complicated business and politic relations hidden behind it. Despite the fact that cities are so distant from those crops, they have a big influence on how they work. Nowadays, big amount of money is essential to ensure its proper development. That's how the "ownership system" was introduced.

The main objective is to lend fields to rich city people, who earn money there and want to escape from the busy city jungle by returning to the lifestyle of their ancestors. The best solution for them is to rent a farming place where they can cultivate rice. Oyama Senmaida makes it possible. It provides opportunities for both the farmers and citizens to fulfill their needs. The farmers have a lot of fields and they do not have enough labor force to manage them. Investments of business money – by lending the fields – solve the problem. This is a real life application of "demand and supply" rule.

City person spends ¥30,000 to lend the field. In this sum, 10% goes to the field's owner, basic care uses next 20%. And 50% is the setup fee - rice plants are very delicate at first. Finally the last 20% goes to the people related to NPO. The area has to deal with various problems though.

One of the issues that we are aware of is the efficiency of rice fields. For instance, those big Oyama Senmaida fields are not enough to feed even one Japanese family for a year. Also, there are lots of wild swine raids that destroy the planted rice. However, the Japanese are not driven away by those issues. And that is a great thing, because the system is not only an amazing business opportunity - it also serves as a protection for over 20 different kinds of endangered spices of animals!



375 rice paddle fields of Oyama Senmaida

As you can see, the system is a totally new style of doing business. Also, the rice fields look stunning and really attractive – it serves as a great place to go sightseeing and it is something that Japanese can be truly proud of.

Article written by

Anastazja Karolewska (Poland)
Ritaro Kasai (Japan)
Shota Utsumi (Japan)

Act Eco Journal. Field Trip -Day 4 Aug.3 2010

Ninja, Wheelie, and Other Toshiba's Products!

Lifestyle Team



Our Ninja in action

How Toshiba Provides an Entertaining Lifestyle

The fourth day of Toshiba Youth Conference was called the Toshiba Day. We visited The Toshiba Science Museum where we could get to know about wide range of product that Toshiba has offered us through 135 years of its existence. Among many things that we saw, we could discover how our everyday home appliances devices have changed over the years. We realized the most interesting of them are leading innovation entertainment products.

In the beginning of our visit, we went to the 3D cinema where we saw a projection of the fantasy film that amazed us. Although they are commonly known to the whole world due to "Avatar," we got to know that these technologies will soon be available in our homes. Recently Toshiba has launched a 3D television, but it is not yet affordable for everyone.

The next thing that impressed us was the "Ninja video game". In this game we turned into a Ninja that fights with a giant robot. The modern technology made it possible for us to jump into a virtual world. We control our ninja there by the movement of our body.

Another Toshiba innovating product that amazed the greater part of us was "Wheelie", the cute self-balancing 2-wheeled Robot. By his detectors he could easily avoid hitting obstacle while holding an object on the top of his head. We realized that this kind of appliances presented in the museum may be useful in the daily life of the elders in the future.

Today, we got to touch a little bit of future lifestyle. Our lifestyles change as time goes by, and so does the technology. At this museum, we discovered that Toshiba is also following this trend. However, seeing all those entertaining gadgets, we should not only focus on consuming them but try to think about their environmental impacts. Toshiba is launching new technologies as described above, and improving those commonly known devices (for example, TVs) by decreasing the need of the energy. We believe that these products will contribute to the society and to the Earth for a sustainable future.



"Wheelie" holding a present for you

Article written by Mariko Kikuchi (Japan)
Jakub Ubysz (Poland)
Supawich Wongkietkachorn (Thailand)

TOSHIBA FOR THE FUTURE

Sci - Tech Team

LED technology leads the way for a Brighter Future.

Toshiba has been introducing new innovative technologies for ages. They were the first company to bring various household appliances to Japan, such as the refrigerator and washing machine in 1930, computers in 1954, microwaves in 1961, word processors in 1979 and the first DVD player in 1996. Today, they are still working on life-changing technologies while trying to be as eco-friendly as a company can be.

Recently, they introduced a new way to provide light to homes which also helps to save energy and cut carbon dioxide emissions – LED lights. It's a real revolution compared to the classical incandescent bulbs. There are plenty of reasons to throw away our old light sources and change to the new type of the bulbs. The first thing that's worth pointing out is that these lamps are a lot more efficient than the old bulbs. As an example, it takes only 4,2W LED lamp to create the same intensity of illumination as a 39,9W incandescent bulb. Because of that, the destructive CO_2 emissions are also reduced by two-thirds compared to the classical incandescent bulbs and one-third to the fluorescent lights. Furthermore, the LED lamps last for about 40,000 hours! [see Photo 1]

Another amazing technology introduced to the world by Toshiba Corporation is the CELL REGZA TV display. Because of the controlled backlight it possesses, it's finally possible to achieve true black color in a household environment! The secret lies in a small box that stands by the TV. It decodes the picture and sends various signals to the screen, so that the LED lights inside are not constantly turned on all the time – in fact, those keep adjusting according to what is being displayed. Thanks to that, the TV also offers a 40% reduction in power consumption compared to the standard LED backlight. Since its thinner, it further reduces CO_2 emission generated during transportation. [see Photo 2]

These are only two examples of what Toshiba Corporation is trying to accomplish in their quest to maintain the leadership in providing cutting-edge technology to consumers. Along the way, their determination to create top quality products is combined with the mission to raise their own environmental standards.



Photo 1: The LED bulb provides as much illumination as the incandescent but with less Watts

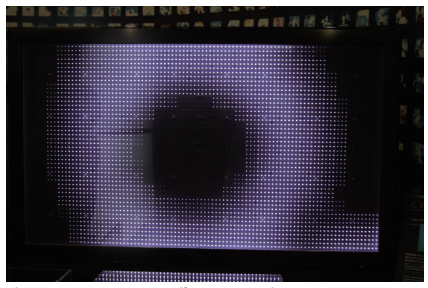


Photo 2: CELL REGZA TV offers a 40% reduction in power consumption because of its backlight

Article written by Nina Luksanapol (U.S.A.)
Yusuke Horie (Japan)
Aleksander Martyniak (Poland)

Big Things Can Come in Small Packages Too

Business and Politics Team

Day 4 youth conference offer new business promotions

As the world population is facing the effects of global warming, different entities in Tokyo have taken the initiative to mitigate its effects. Such entities include the new attitude towards climate change from Toshiba, the use of cooking oil leftover to produce biodiesel, and the rise in the use of bee farms.



Tokyo Yuden are pioneers of collecting waste oil

Toshiba has begun to take an interest in appeasing the impact of climate change and sell eco-friendly products worldwide. The price of such products from Toshiba is initially expensive but the government understands that there is a need to reduce carbon emissions. Therefore, the government provides consumers with incentives promoting the green product consumption.

But not all initiatives against global warming come from powerful entities such as Toshiba. There is currently an oil recycling system in Tokyo initiated by a family in 1997. The cooking oil from families and restaurants is collected from about 100 recycling across Tokyo stations and brought to the factory to produce biodiesel. They collect 100 tons of oil a month and sell it at $4 a gallon.

Another small-scale act is the bee farms on the rooftop of buildings. Bees are important because they help contribute to farming and agriculture. Last year, 800 kiloliters of honey was collected and it was sold for $500 a gallon. This totals up to $400,000 a year.



The hive



Bees are comming out to collect honey

Climate change is a difficult conflict that humans face today. Powerful corporations like Toshiba are needed to advertise the need to mitigate its impact. However, one company cannot change everything. Small entities like the promotion of recycling cooking oil and the use of bees in the city are great beginnings to a change that may be massive.



Toshiba developed the word processer

Article written by

Diana Eng (U.S.A.)
Maya Hirohara (Japan)
Thawatchai Sangdee (Thailand)

Act Eco Journal.

Interview -Day 5 Aug.4 2010

On Day 5, August 4th, each team interviewed an expert in their field.

Sustena for "Sustainability"

Lifestyle Team



Mrs.Maekita is talking about her active lifestyle

"Nobody Does It So I Do It"

Sustena for "sustainability" is a nonprofit social enterprise which promotes peace, communication, and sustainable lifestyles through the use of creative advertisements. It is represented by Ms. Miyako Maekita, a former "back-packer" born in Tokyo, Japan.

One of the programs Sustena endorses is Candle Night which is similar to Earth hour but directed almost exclusively to individuals. Cleverly, the word of this event is spread through contacts with music artists and creative things such as special candle paper. The special paper is put around a candle and the light shining through creates an advertisement. Participants in the Candle Night event held at both winter and summer solstice are asked to turn off all their lights for two hours and illuminate their night with candles and to, "please talk and take it slow."

This event is originally titled, "One Million Candles Night." However by the second year, with Ms. Maekita's help, the organization began to contemplate whether to change the name to "Ten Million Candles Night" because 5 Million people had successfully joined the movement the first year. "Candle Night" not only helps conserve energy, but it brings people together to discuss conserving the health of our planet.

Ms. Maekita's former "back-packer" years have lead her to her recent project, "Food Mileage Campaign", where she advertises the importance of locally grown foods in order to decrease the need to import into Japan. Importing food is necessary in Japan as well as other countries due to the low wages the employees are paid. For this particular reason Ms. Maekita encourages local food markets. It will decrease CO2 levels because the food doesn't need to be transported as far. She also believes that with the introduction of local markets the issue of poverty within these countries that are used for subcontracting will also be decreased.

Addressing these issues through positive or charming advertisement, Sustena is sure to capture the attention of many and lead them closer to a sustainable future.



An advertisment of the candle night

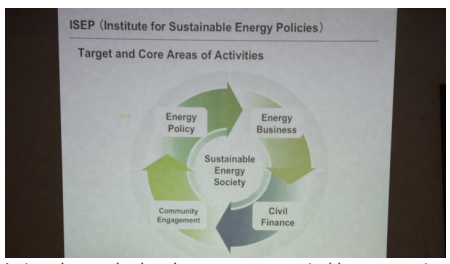
Article written by Shinya Hara (Japan)
Jakub Ubysz (Poland)
Ashley Hernandez (U.S.A.)

Creating Our Own Path

Sci - Tech Team

Shota Furuya provides insight on renewable energy technology.

One challenge is the policy because they are different in every country. Japan's policies are nationwide, and the United States' policies are controlled on a state level. This makes it much harder for Japan to use renewable energy technology since the federal policies have to be followed. Japan has only aimed to increase its renewable energy technology by 1.63% by 2014. Mr. Furuya suggested the idea that in order to have a progressive policy, Japan needs a progressive leader to change it. He emphasizes that the most important thing to have is political will and that in order to overcome this challenge, Japan must consider its availability of resources, encourage peoples' engagement, and change its policy. To change the policy, Japan's citizens must start at a small level, and encourage local governments to create a much more progressive policy. Mr. Furuya also states that the best policy is the Feed In Tariff (FIT). It is one of the ways to incentivize investments in renewable technologies. The long term goal is that with increased investments, the capacity of renewable energy technology will increase and the technology costs will decrease.An advantageous renewable energy technology would be the Pellet Stove. The Pellet Stove uses wood pellets, which are made from scrap wood. This reduces waste and also lessens carbon emissions. The only disadvantage is its cost. It can cost from 450,000 Yen to 500,000 Yen and the pellets can cost 300 Yen per kilogram. But, Mr. Furuya is informed that simpler and cheaper versions are being developed so it is possible to attain such technology, especially for developing countries. Mr. Furuya says that in order to obtain renewable energy technology, we must start small. It is the most effective way since starting at a local level can have a big impact overall. As he quoted Jorgen Norgaard, "Future is not something to foresee, but to choose.



Actions that need to be taken to create a sustainable energy society


Mr. Furuya shows us the wood pellets used in the Pellet Stove incandescent but with less Watts

Article written by Nina Luksanapol (U.S.A.)
Takumi Nagashima (Japan)
Tanachit Sangchan (Thailand)

The Three Pillars

Business & Politics Team


Mr.Mitsui Ishida

Day 5 conference offers political insight

Mitsuji Ishida is environmentally aware congressman who is pushing for more sustainable communities in Japan. He is determined to overrun the label that revolves around the idea that renewable resources deter the economy. He is fervently trying to prove that the investments the people make for these new energies are efficient and fiscally healthy.

This statement was aroused by the goal of decreasing carbon emissions by 25% by 2020 compared to 1990. It is due to the fact that the machinery that is needed to capture and generate the renewable energy is expensive. However, unlike nonrenewable sources, renewable ones do not need an input.

For instance, coal generated energy requires a mass consumption of coal. The output is energy as well and a sufficient amount of carbon dioxide. On the other hand, renewable resources like wind energy requires natural and infinitive wind power and the output is clean energy with little carbon emissions. Coal is becoming more finite and it will eventually run out considering the current speed of consumption. Wind always exists and therefore, will never run out.

Despite the fact that windmills are pricey, in the long run wind energy will be more profitable. Instead of deterring the economy of Japan, it will actually flourish due to the circumstances of the infinite and easily attainable wind.

Another aspect of Ishida's environmental plan is a dense area in which little transportation is needed. By the means of little transportation, bicycles and human ambulatory power is promoted in this lifestyle. This concept is similar to new urbanism. There is a goal of negligible carbon emissions from transportation means in place.

All of this initiates the idea of Ishida's three pillars. His motto is "kankou, kankyo, kenkou" which means the endorsement in tourism, environment, and health. These three pillars are paving Japan's path to a greener and more sustainable lifestyle without deterring their precious and fragile economy.



Article written by Diana Eng (U.S.A.)
Maya Hirohara (Japan)
Teerapat Sutjaluk (Thailand.)

Presentations by Thailand and Poland

Day -4
Teachers' Program



Nipon Srinarumon and Somsak Gathong

Teachers from Thailand create new environmental opportunities for students

On Day 4 of the Toshiba International Youth Conference for a Sustainable Future, Nipon Srinarumon of Triam Udom Suksa School and Somsak Gathong of Assumption Lampang School presented to a group of teachers from Japan, Poland and the United States. Presentations focused on the environmental educational opportunities in their schools, contributing to the common goal of the conference, working towards a sustainable future.

Triam Udom Suksa School offers many environmental programs including an environmental club, support for individual environmental research projects as well as a new play about climate change. This play combined science students and art students with a shared mission of raising awareness about climate change and its long term impacts.

Similar environmental education is happening in Northern Thailand in Lampang Province where Somsak has established a youth camp for students focusing on sustainability and environmental education. Students at Assumption Youth Conference discuss global problems facing the environment and how they can develop realistic and sustainable solutions. The development of this camp in Lampang is a direct result of Somsak' s personal connection to his Toshiba Youth Conference experience.

Both of these schools are models of environmental education that can be replicated in our own countries. The success of the Toshiba Youth Conference is evident in the creative and ambitious work of both Nipon and Somsak.

Environmental Education in Poland

1. Ms. Katarzyna Piorkowska

She claims that student' s natural curiosity is most important on environmental education.

First, she mentioned film creation activities. Students can be creative in front of a video camera when they show environmental problems such as floods, tornadoes etc. After sharing the films, they discuss how they stop the undesirable circumstances.

Second, she explained an attempt to teach "the Domino effect" on global environmental issues. All the environmental phenomenon are connected to each other. It is necessary to find causal relation between them.

2. Ms. Malgorzata Bak

Her point of view on environmental education is that both solid basis of knowledge and activities outside of a classroom are important. Various activities, for example, excursion in woods, visiting universities, are planed and done. Some of activities such as cleaning up neighborhood, demonstrations about environmental issues are organized by students voluntarily. Students can obtain positive attitude to tackle environmental issues.



Katarzyna Piorkowska and Maigorzata Bak

Article written by Marissa BELLINO (U.S.A)
John P. GOLLISZ (U.S.A)

Hideho MOTOSUGI (Japan)
Takumi TANABE (Japan)
Yuji Arai (Japan)

Teachers' Summary

Day -5
Teachers' Program



TYC 2008

The Toshiba Youth Conference for a Sustainable Future has been a three-year program in which students and teachers from around the world discussed the causes and effects of climate change. The goals of the conference were cumulative: to encourage students to deepen their awareness of environmental concerns, to take the lead in their communities in working for a better future and to enhance teachers' ability to promote environmental, scientific, and intercultural communication education. Participants explored how to build a sustainable society by focusing on global environmental issues and looking at ways to halve CO2 Emissions by 2050. Participants in the conference included teachers and students from the Japan, Poland, Thailand and the United States.

Students participated in a variety of activities throughout the three years of the Toshiba Youth Conference. Activities were both culturally and environmentally focused, and occurred both in and out of the classroom. Field trips ranged from Ryokan (Japanese-style inn), a tour of the former residence of Professor Mizuta, and the Tokyo Yuden (a collection facility for cooking oil waste). The favorites in camp activities were Nihon University, a nuclear facility and the Toshiba Science Museum. All of the unique opportunities contributed to an unforgettable experience for both students and teachers.

All participants of the conference were provided with the opportunity to discuss, debate and find solutions for climate change. Using the above activities as well as team building, World Café and writing the Act-Eco Journal all helped provide a greater awareness of the lifestyle, business/political and scientific/technological effects of human activities on the environment, and how altering these factors may help create a sustainable environment.

Despite the fact that the schedules of the camps were quite demanding, both the students and the teachers learned a lot and gained precious experiences. The plethora of planned activities within tight time limitations provoked constructive discussions about the ways to cope with jet-lag and deadline stress for the students. Teachers and organizers decided that students should be given more active opportunities to engage each other. This would have the benefit of providing a more constructive and successful post-assignment process.

Article written by All Teachers of the Camp



TYC 2009



TYC 2010

Speak out!

Teachers ' comment on the conference

Atsushi Ohtaka (Japan)
Hitachi First High school



Spread your wings!

The world is in your hands!

Somsak Gathong (Thailand)
Assumption Lampang



We joined with students to plan the things that could be applied in our town.

Marissa Bellino (U.S.A)
Hitachi First High school



My years at TYC have provided a unique opportunity to share cultural and educational practices.

John P. Gollisz (U.S.A)
High School for Enviromental Studies



The Past three years have been a truly unique and meaningful experience about how we must care about the Earth each other.

Yuji Arai (Japan)
Hitachi First High school



Thinking about our environment is not enough. Now, let's act for it!

Katarzyna Piorkowska (Poland)
Academic High School at PJIIT



I am very impressed with the great atmosphere during Toshiba youth conference. I am sure that our students not only enriched their knowledge but also found new friends.

Hideho Motosugi (Japan)
Waseda University Senior High School



You are "Change-Makers" You have communicates beyond borders and made a first step to solve the environmental crisis.

Nipon Srinarumon (Thailand)
Triam Udom Suksa School



Thank you for Toshiba Youth Conference that try extremely to encourage every participants from different countries to deepen awareness of environmental concerns continuously.

Takumi Tanabe (Japan)
Keio SFC High School



After listning to the teacher' s presentations of Thailand and Poland, I really feel that the environmental education of Japan should follow these countries. Yes We Can!

Hiroaki Narita (Japan)
Keio SFC High School



The camp is the big chance of studying, thinking, discussing, deciding what we do!

Maigorzata Bak (Poland)
Liceum Ogolnoksztalcace nr 14



It was very meaningful to see my students exchanging ideas and experiences with their new friends from all over the world.

Opinion for Solutions

Each of the schools reflect on the camp



Keio Shonan Fujisawa Senior High School

Shota Utsumi

Maya Hirohara

Local Production, Local Consumption

We should encourage local production for local consumption to cut down on CO2 emissions. This will help protect agriculture, forestry and the fishing industry, and it leads also to the promotion of economic growth and saves our environment. This is a true sustainable future, and it is connected directly with natural symbiosis. Through this camp, we' ve come to see that all of our dreams are founded upon a healthy, clean environment, and protecting the environment is one step towards realizing our dreams.



Hitachi First High School

Yusuke Horie

Mariko Kikuchi

Pick one! Inconvenience or Climate Change?

We strongly felt that `communication` is truly the key to a healthier future. Our inspiration is from Mr. Hayashi at the Kamogawa Nature Kingdom. His village is very environmentally friendly, but is full of inconvenience. Still his life consists due to the communication he has with his neighbors. We learned that we can begin an environmentally friendly lifestyle with good communications with others.



Assumption College Lampang

Tanachit Sangchan

Teerapat Sutjalak

BIODIESEL FOR COOLER ATMOSPHERE

Tokyo Yuden is an amazing idea because they collect used oil from restaurants and homes and turn them into the Vegetable Diesel Fuel (VDF), which reduces CO2 by 2.62 kg per liter compared to conventional CO2. In Thailand we also have something similar initiated by our King, by turning Jatropha oil into biodiesel. Back to Lampang , we will try to promote this VDF usage more because if more people use it, we will halve CO2 emissions.



Liceum Ogólnokształcące nr 14

Arkadiusz Kacała

Jakub Ubysz

Everything matters, from high technologies to conscious lifestyles!

During the camp, we saw variety of modern technologies and examples of people' s eco lifestyles in Japan. We discovered that there are many differences in characteristic of those: modern vs. traditional, fast vs. slow, big budget companies vs. good will of people in local communities. Although they are incomparable, they are working towards a common aim which is to build a sustainable future.



High School for Environmental Studies

Diana Eng

Ashley Hernandez

Nina Luksanapol

Alejandro Vinueza

Send It On!

Starting small can make great changes. We learned that by spreading the word to our friends and family, it could create a chain reaction to make a bigger difference in out society. The ideas we got from the Toshiba Youth Conference have inspired us to promote a sustainable lifestyle in the United States.



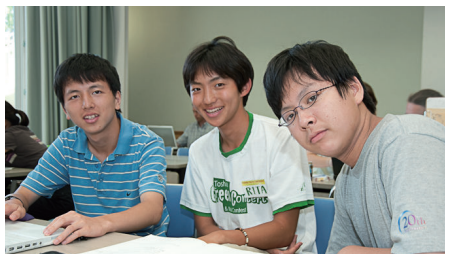
Triam Udom Suksa School

Supawich Wongkietkachorn

Thawatchai Sangdee

Back to the Basic!

Nothing is perfect. We have a lot of technologies to comfort us, but they damage our world in some ways. Maybe the most simple and effective way is "to change our lifestyle." We think that the most dangerous enemy of the world is the human habit to use a lot of things that are not necessaries. Finally, let think "Which things in the past we can use for a sustainable future?"



Waseda University Senior High School

Shinya Hara

Ritaro Kasai

Takumi Nagashima

Lets Raise Awareness of C.I.T!

We think that there are three elements when considering environmental issues. These are COEXISTENCE, INDIVIDUALITY, and TWO DIFFERENT KINDS OF HAPPINESS(C.I.T.). First, we knew that people in the past coexisted with nature. Second, people must be independent, interconnected, and engaged. Third, we observed that richness often leads to environmental disruption and humans must be content psychologically. Considering these points, we are thinking of recycling used oil in our school cafeteria.



High School by Polish-Japanese Institute of Information Technology

Anastazja Karolewska

Aleksander Martyniak

Give It Your Best!

The paths of students from four distant countries crossed at the Toshiba Youth Conference for a Sustainable Future 2010. Together we took a closer look at a wide range of eco-friendly solutions and lifestyles. This opportunity allowed us to learn about environment al protection and cutting edge technology. Both of them help to reduce CO2 emissions and energy consumption and - at the same time - make our lives easier and more entertaining.

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