

# The 3<sup>rd</sup> & 4<sup>th</sup> Noble Truths: Realizing the Vision of Ecological & Spiritual Community





## 宗教太陽光発電所

私たちは自然エネルギーの利用を進めます。

English

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現在の総発電容量

**2849.23 kW**

2849.23kWは、日本の太陽光総発電容量 263万kW (2009年末現在)の0.11%に当たります

年間発電量 285 万kWh / 年間CO<sub>2</sub>削減量 1593 トン

(1kW当たり年間約1,000kWhで算出) (排出係数:0.559kgCO<sub>2</sub>で算出)

Religious and Scholarly Eco-Initiative

Religious and Scholarly Eco-Initiative

### New Solar

#### **SNI Nagasaka Station 8 dormitory buildings 161.32kW**

March 23, 2014 in Yamanashi Prefecture: 19 , S: SNI



8 buildings [location] SNI Nagasaka Station dormitory  
(Hokuto City, Yamanashi Prefecture)  
[Generation capacity] 161.32kW  
February [operation] years 2014

Religion and solar power plants

I read an article in each prefecture

Select a State

GO



# From Ecology to The Pure Land

Honen (1133-1212), founder of Jodo Pure Land sect,

- First to bring Japanese Buddhism down to the masses by developing a faith based in the vow of Amida Buddha to abandon no sentient being no matter how deep their transgressions and defilements □

Okochi's developed a vision from this of

1) 差別も搾取もない世界

A World without Discrimination and Exploitation

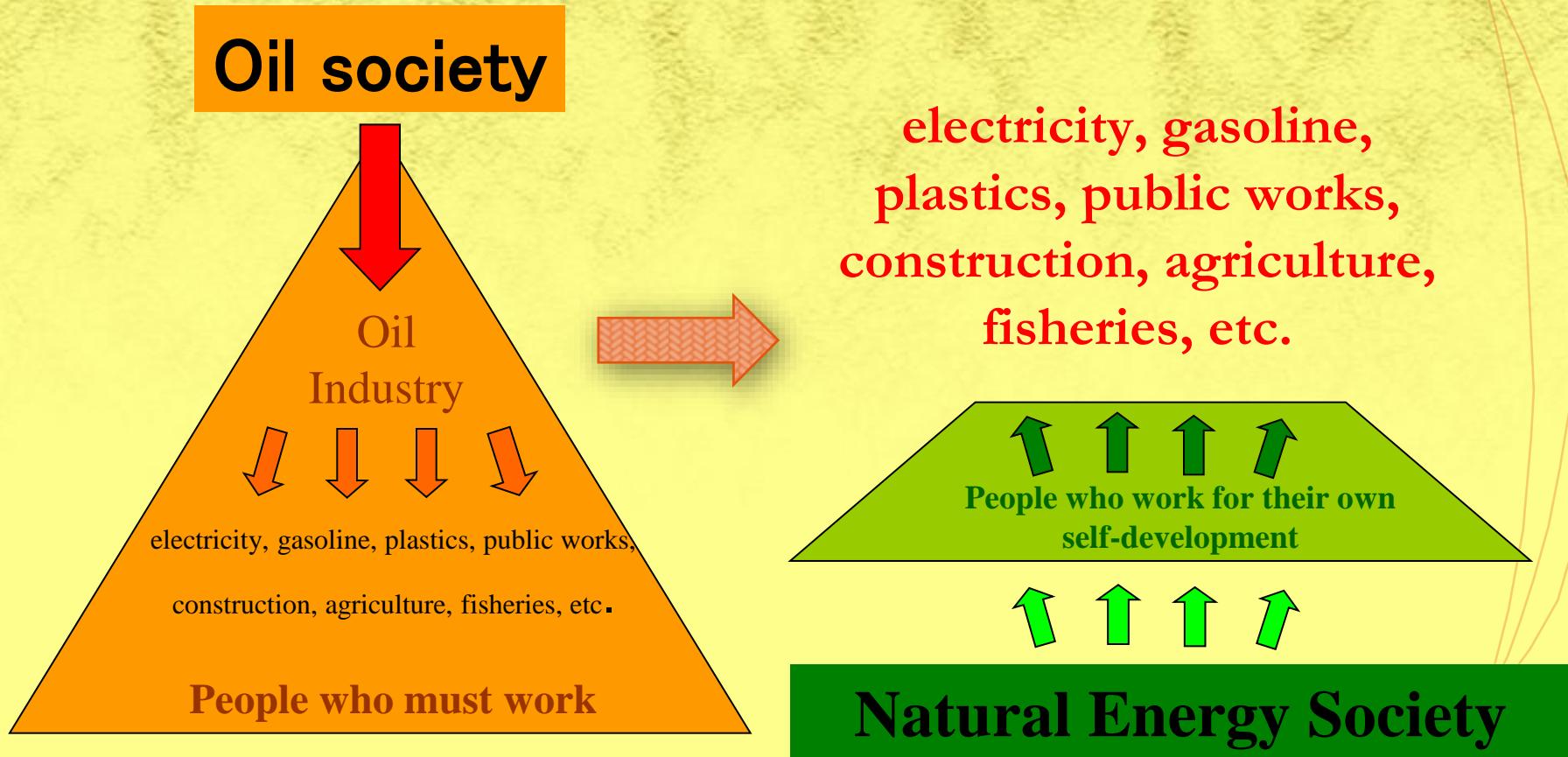
無核無兵 Nuclear and Military Presence

2) 信頼と自立のコミュニティ

Community based on self-reliance and independence



# from oil society to natural energy society



- The social hierarchy is reversed.
- Society comes to be made from small units in every locale.
- Practice of each citizen determines the world and the future.

# Photovoltaic Generation (Solar Power)

- Carbon Free Energy
- July, 1999: 1<sup>st</sup> Electricity Generating Center
  - \* Output 5.4 kW
  - \* Cost of Construction ¥6 million/ \$60,000
  - \* Installation on the roof of Juko-in Temple
- August, 2007: 2<sup>nd</sup> Electricity Generating Center
  - \* Output 3.0 kW
  - \* From receiving some used panels, construction costs were kept at ¥1.15 million/ \$11,500
  - \* Installation on the roof of an elderly home run by a local NGO on the property of Juko-in Temple.



# Community Funding Scheme

- ¥6 million/ \$60,000 came from: 1) ¥2.7 million grants from government foundations and NGOs; 2) ¥1.5 million yen from Juko-in Temple prepaying 10 years worth of its electric bills; 3) ¥1.8 million from a loan from the micro-credit Mirai (Future) Bank.
- Green Power Certificates: sold 200 certificates at 1,000 each at the price of 33/kWh, a figure between the 22/kWh price paid by Tokyo Electric Power Co. and the 55/kWh price paid for natural energy in Germany
- Paid back the loan in 9 years

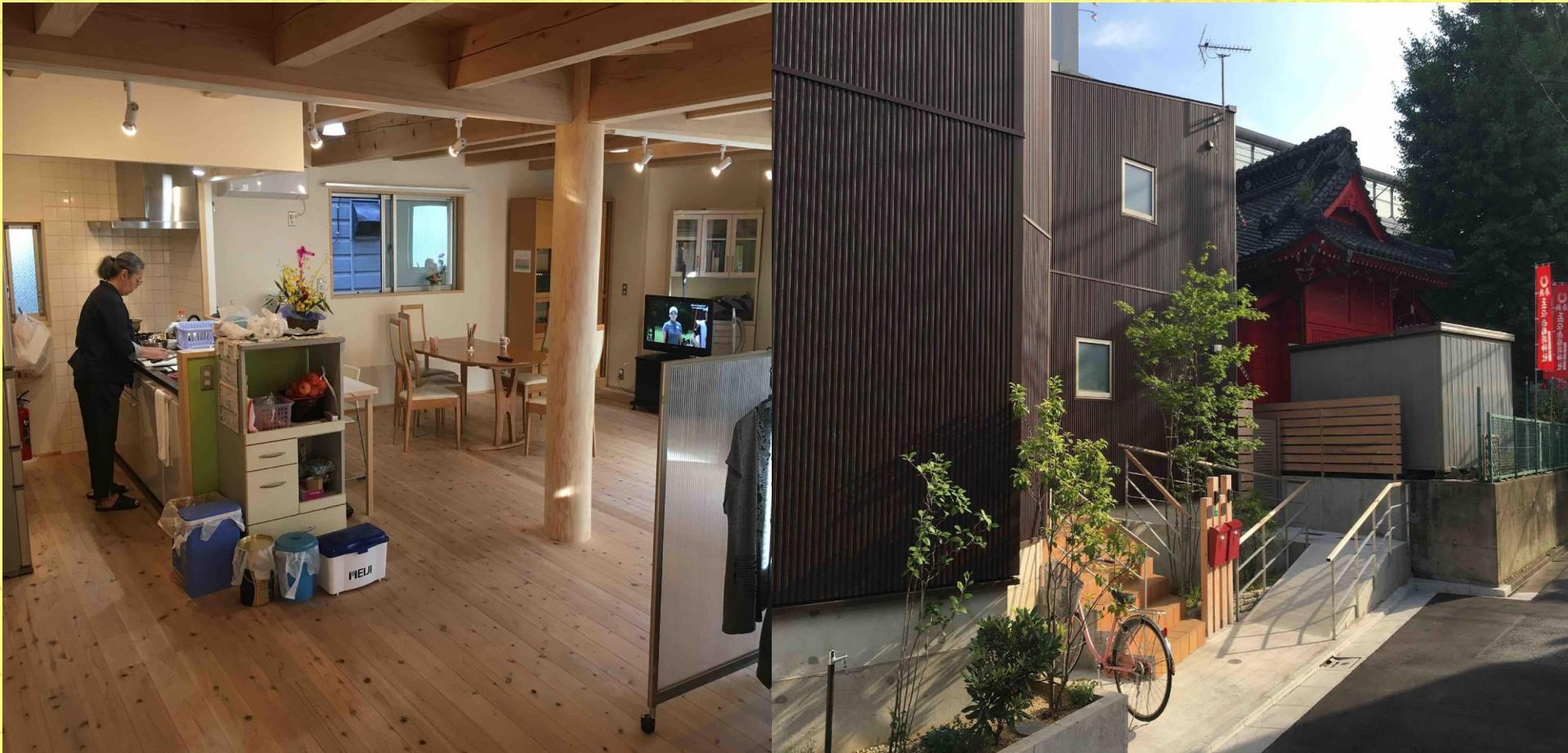
# Profits Go to More Community Work

From 2008, the profits have gone to The Edogawa Citizen's Network for Thinking about Global Warming (ECNG), a local NGO promoting clean energy and lifestyles, like solar panels installed on a nearby Shingon Buddhist temple in 2018



# Profits Go to More Community Work

- A Group Home for the Elderly made out of chemical free materials and lumber





- In 2012 installed another 10.58 kW of panels on the Juko-in roof. Generation averages around 11,500 kWh per year, which at a rate of 42/kWh creates 483,000 yen annually (\$4,200) in profits.
- In 2013 installed a new set of panels on the elderly home totaling 11.52 kW. Generation is around 15,200 kWh per year, which at a rate of 38 per kWh creates 577,600 yen annually (\$5,100) in profits.

# Energy Self Sufficiency is Possible





Off Grid Private  
Residence as Safe  
House for  
Children-at-Risk

# Converting old golf cart batteries into storage batteries



# Installation of small scale hydro-electric power station

This can be set up virtually anywhere

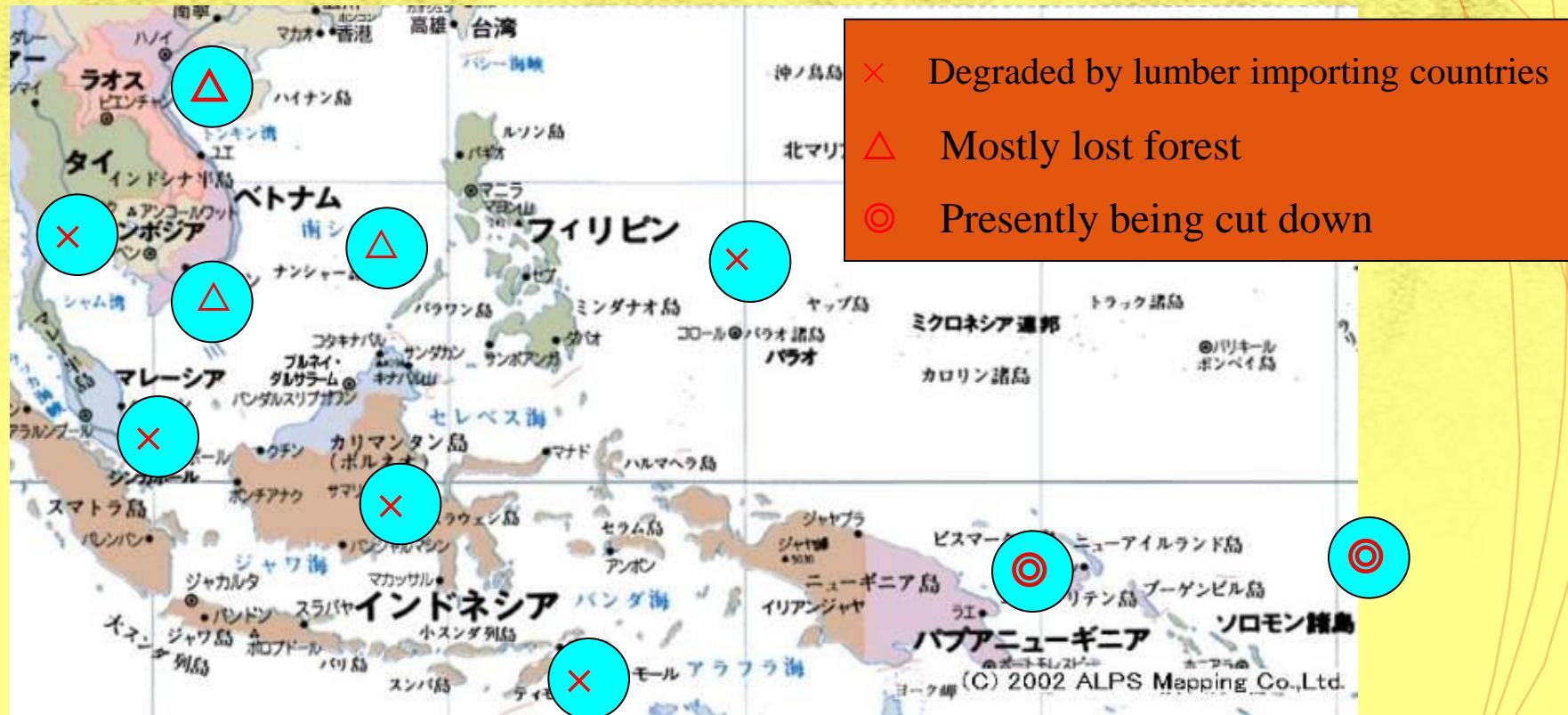
Japan has plenty of natural resources in solar, hydro, wind, & geothermal

The myth of the necessity of nuclear power is truly a myth



# Case Study II: Kenju-in Supporting Sustainable Regional Economics

# The Situation of the Destruction of Tropical Forests



- Through exports to Japan, tropical forests in Asia are being completely destroyed. At present, the forests in Papua New Guinea and the Solomon Islands are being targeted.
- Since 1960, through the exporting of lumber, the rate of self-sufficient domestic lumber in Japan has fallen to 2%, the Japanese lumber industry has been destroyed, and the forests have become overgrown and poorly managed.
- Every year, the amount of accumulated self-sufficient lumber from Japanese forests is worth about ¥70 million (\$700,000) to ¥100 million (\$1 million)/year.

# The Situation of Japanese Mountains – No Management



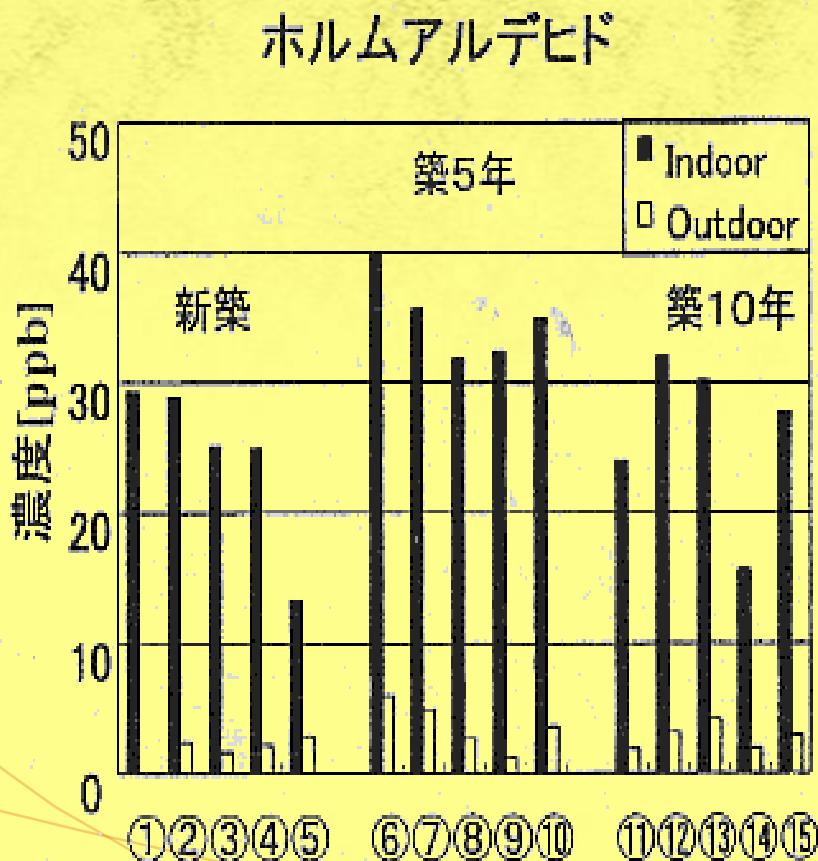
# The Situation of Japanese Mountains - Degradation



# The Situation of Japanese Mountains - Landslides



# What Happens to a House Over Time



- A usual house is made of not only one barrel of glue and adhesives
- There are also antiseptics and insecticides used to preserve the housing materials, which are much more dangerous.
- As the years go by, they hardly dissipate

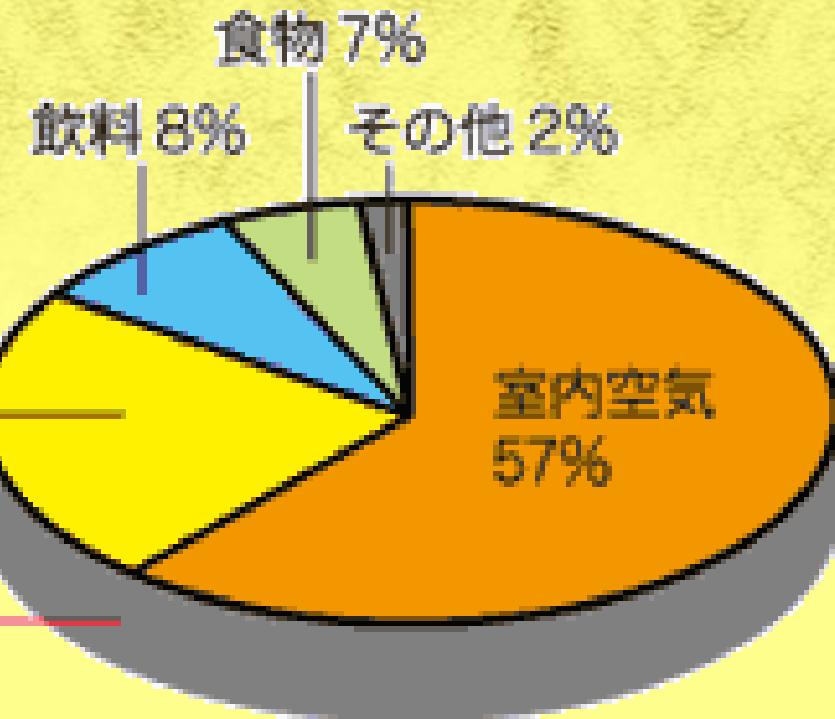
# The air we breathe and not the food we eat is more dangerous

## 人の平均的な 物質摂取の割合

出所:財團法人 日本建築学会

外出時空気 26%  
(外気・公共施設など)

空気の比率80%強



<http://homepage2.nifty.com/giken-lec/>より

- The amount we intake from what we eat and drink is only 15% compared to 83% from what we breathe.
- Of this 83%, 69% comes from air inside of rooms and buildings.
- So we need to pay more attention to pollutants within rooms than what we are eating.

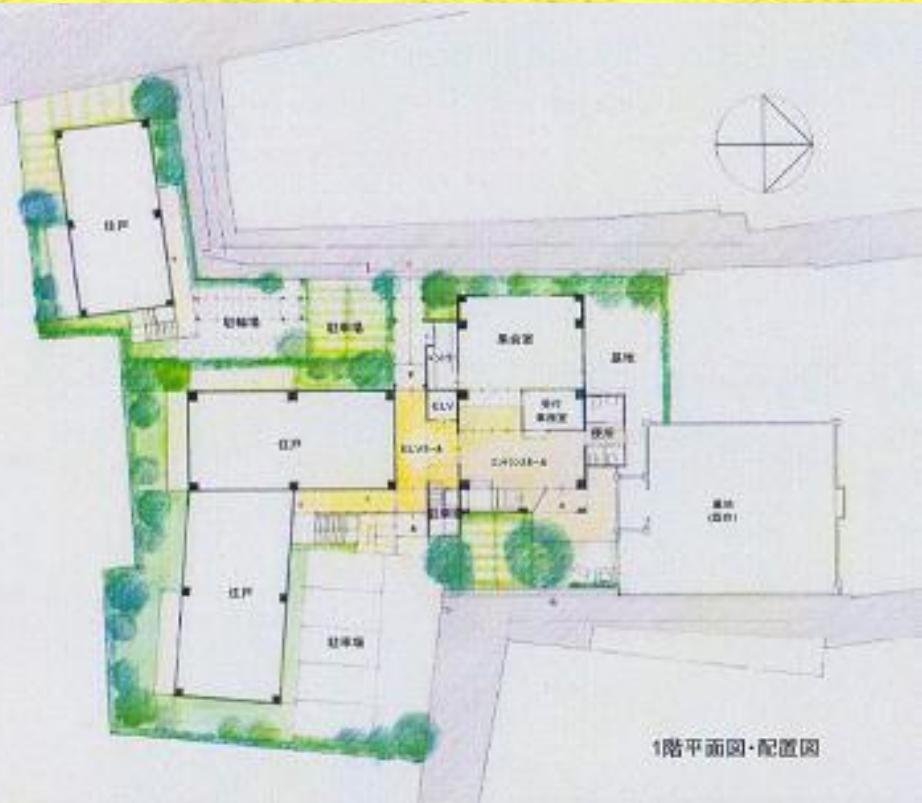
# Chemical Substances Give Rise to Suffering

- Hypersensitivity to chemical substances (the movie: *The Apple of Life*)
- Skin atopi
- Allergies
- And many others

**Japanese standards are the most dangerous in terms of eliminating these substances.**

**We want them to simply use safer materials.**

# Project to commemorate the 800<sup>th</sup> anniversary in 2011 of our founder Pure Land Master Honen's Death



Temple as Urban Eco-Village  
Kenju-in Temple 見樹院

- Chemical Free
- Minimum Running Cost
- Long Life: 100-300 years
- In Cooperation with Forest Conservation
- Cooperatively owned

- ◆ Collaboration with civic groups
- ◆ Create a sustainable community
- ◆ Construction of true social capital

# Thinning the Forest Layer & Peeling the Bark



The tree dries while standing and then can be carried off by a small woman



# Kenju-in Temple

## Affordable Eco-friendly Housing for Urban People



14 individual apartments built as cooperative and connected complex with the temple.

since the building is considered to have a 300-year durability, at the end of the 100-year lease period, there is a contract that the plot will return to Kenju-in Temple without any extra fees.

# Outer Long Lasting Shell from Traditional Smoking Technique



# Inner Chemical Free Apartments



# Conclusion: Sharing Wisdom with Like-Minded Local Activists in Other Parts of the World



April 2015 in Fukushima with new Eco-Temple Design Group



# Eco-Temple Project

# Seed Planting

## 6 Design Components of an Eco-Temple Community:

encouraging collective responsibility  
and sustainable life quality  
improvement



Sufficiency  
Economy

Education  
for Ecology  
& Dharma

Eco-  
Temple  
Structures

Surrounding  
Environments

Energy  
Sector

Community  
Development







THERE ARE  
10 TYPES  
OF PEOPLE  
IN THE WORLD:  
YOU DON'T NEED TO  
UNDERSTAND

MUD



# Tera Energy:

## Buddhist Temples providing clean energy for social renewal

- Rev. Ryogo Takemoto, a suicide prevention priest from the Jodo Shin Pure Land denomination in Kyoto, started this company in 2018 to rebuild community and get at the root of the suicide problem in human isolation
- 11 temple suppliers for 30 temples and their parishioners of 2 sub-sects of the Rinzai Zen denomination and of the Jodo Shin Hongan-ji denomination in both Hiroshima and East Hiroshima cities will begin in June 2019
- The revised goal for contracts in 2019-20 is 300 temples with 1,200 attached family households for a revenue of 420 million yen (\$3.87 million)
- returning of 2.5% of the electrical charge to the temple provider, which will need to then show their plan of using these returns on a social (welfare) activity, like building a cafeteria for local children or developing a plan for community restoration for the future.”



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～こころ豊かに、安心なみらいへ～



TERA Energy