

# SEATTLE Treasure Hunt

SAVINGS CERTIFICATES



## Biodiesel Challenge



Drive around the world without using fossil fuel



Enjoy E-Shoku-Ju

- Living in the Moment-Hospitality
- Enjoying a Garden is an Investment of the Heart

Check it out!

- Tianjin Sweet Chestnuts
- Giving a Good Presentation

Sesame's Culture Watch  
Karaoke Evolution

My Personal Pick  
Glass Nail Files

**FREE**

ENGLISH-JAPANESE  
BILINGUAL

SEPTEMBER-NOVEMBER

**FALL**  
2007

[www.seattletreasurehunt.com](http://www.seattletreasurehunt.com)

# Biodiesel Challenge



## Treasure Hunter

### Drive Around The World Without Using Fossil Fuel!

Photo Journalist and Rally Driver, Shusei Yamada encountered Biodiesel Fuel (BDF) in 2005. It was just simple curiosity to see how this 'eco-fuel' performed in the beginning, and while driving through the islands of Japan, he began to visualize a vehicle that could refine its own BDF. His idea was finally realized with the in-vehicle BDF refining plant.

While collecting household waste cooking oil and recycling it to fuel, he is going to drive around the globe. Communicating with people that support this incredible project, think and share the possibilities of our future and what we can do—a trip where people hold hands and connect the world, that is, the Biodiesel Challenge.

### What is Biodiesel Fuel (BDF)?

A kind of recyclable biomass fuel for diesel-engines refined from bio-based oils, such as; vegetable oils: rapeseed, soybean, sunflower, palm, flax, etc., animal fats: tallow, lard, fish oil, etc. and waste vegetable oil (WVO).

According to the Kyoto Protocol aimed at mitigation of global warming, the  $\text{CO}_2$  generated from the combustion of biomass fuel is originally absorbed from the atmosphere by plants and it is not counted as part of the accumulation of  $\text{CO}_2$  in the atmosphere at the global level. It is called Carbon Neutral. Therefore, using BDF is a clean alternative that at least does not accelerate global warming.

## System

BDF can be produced at home with a basic knowledge of chemistry. By separating glycerin from the fat or vegetable oil through a chemical treatment called transesterification, fatty acid methyl ester is refined. After purification and evaporation, it becomes BDF. The conversion rate is 98% and

side reaction is very minimal.

BDF conversion systems can easily be made to operate on a small scale. However, for this project it has to be shrunk to fit in a car—the reason this ‘dry system’ has been adopted. After transesterification, it filters the methyl-ester with



## Route

Shusei will drive around the globe eastward; taking off from Japan in October by boat and entering North America from Canada. He is planning to arrive in Seattle in November.  
Let's welcome and cheer him on during his trip!

**DRIVING PERIOD:** 8 months to 1 year

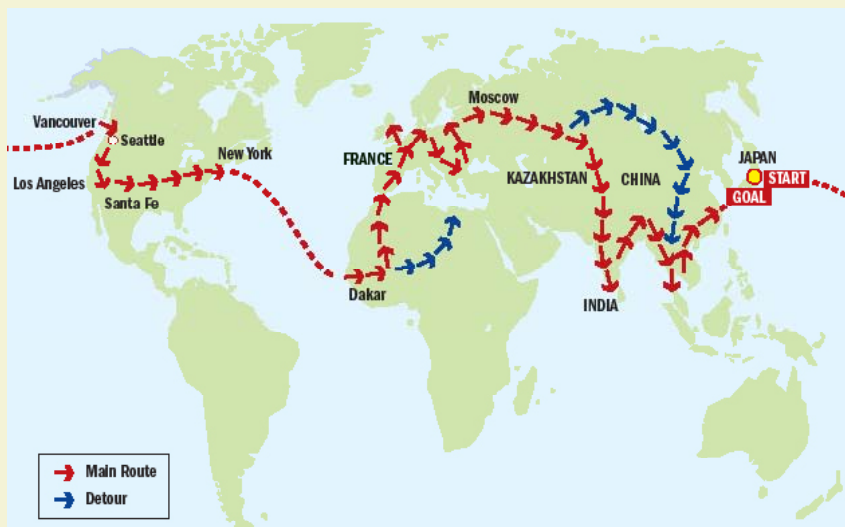
**DRIVING DISTANCE:** 37,000~50,000 miles

**SCHEDULE:** September 2007 — Demonstration in Japan

End of October 2007 — Arrive in Canada

**November 2007 — Arrive in Seattle!**

**MAIN ROUTE:** Japan [by boat]→North America (Canada, USA) [by boat] → North Africa (Senegal, Mali, Mauritania, Morocco) [Strait of Gibraltar]→ Europe (Spain, France, England, Belgium, Holland, Germany, Czech, Russia) → Asia (Kazakhstan, Kyrgyzstan, India, China, Thailand, Laos, Vietnam, China) [by ferry from Shanghai]→Japan [Cross Japan]



ion exchange resins, centrifuging and paper filtration, and thus it does not require washing with water. The super-small size of this conversion system has, for the first time, made this Bio-Diesel Challenge a reality!

### Contribute with Waste Vegetable Oil (WVO)

To complete this project, the donation of WVO is necessary. Shusei will drive while refining fuel and at the same time, convert BDF from the collected WVO. A large amount of WVO should not be stored in the vehicle because it may decrease fuel efficiency. It is very important for people from each region visited to donate WVO.

According to Shusei's estimation, about 1,600 gallons of WVO will be sufficient for driving around the

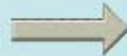
globe. Today, thousands of tons of WVO are disposed of annually. Many people don't know what to do with WVO-although 90% of it is reusable, most of it ends up in the garbage. Why don't we take this opportunity and recycle the WVO instead of throwing it in the garbage? Let's participate in this grand project!

When you save WVO to recycle, it needs to be filtered once with an ordinary paper towel in order to reduce sediment and then stored in a jar or plastic bottle with a tight lid. You can also bring unused cooking oil that has passed the 'best used by' date. Make sure the oil was not left out without a lid for a long time because it cannot be used as it may be oxidized.



Based upon an existing proven & highly reliable system

Utilizing Dry System that requires no rinse water



Super-small size allows it to fit in rear of vehicle!

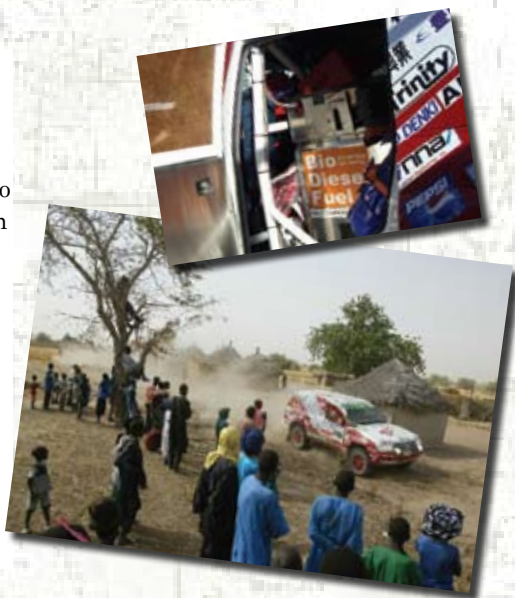




## Message to the People of the World

Another goal of this project is to share the ideas of “the world you want to create” collected from the people who are contributing WVO. Shusei plans on taking photographs and will introduce the messages via the Web and broadcast to the people of the world.

Also during the trip, he is planning to hold events and opportunities to introduce this project and talk about the environment while visiting schools and public facilities. Schedules in the Seattle area will be listed on [www.seattletreasurehunt.com](http://www.seattletreasurehunt.com).



## Shusei Yamada's Outlook on the World

Photojournalist, Rally Driver

After crossing the Sahara alone by motorcycle in 1983, Shusei traveled over 1.2 million miles through 140 countries. He has covered cross-country rallies and many adventure races. His unique reporting style is to enter undiscovered nature by 4WD vehicles, motorcycles, kayaks, and mountain bikes. He covered the Dakar Rally himself as well. Using BDF for the first time in the world, he raced and completed UAE Desert Challenge in November 2006 and the Dakar Rally in January 2007.

When he was young, he devoted every minute to work with enthusiasm and succeeded. However, an accident in which he became severely injured caused him to change his outlook on life. While undergoing rehabilitation for a year, he began to appreciate life's small, ordinary things and to feel the need for balance. And at that point he realized that living a balanced life was crucial to his happiness and self-fulfillment.

Through this Biodiesel Challenge, he is seeking to portray the lifestyles of people with photos taken throughout the world, especially local culture that we would never be exposed to without going there. Because of his encounter with BDF, this special project is about to begin, so we should think about what we can do to help and share it with the world.

**Send him an e-mail at:** [shusei@ex-station.com](mailto:shusei@ex-station.com)

**For more details:** [www.biodieselchallenge.com](http://www.biodieselchallenge.com)



# Biodiesel Challenge Supporters

Shusei Yamada is looking for volunteers to support the Biodiesel Challenge by planning events, providing places to collect waste vegetable oil (WVO), or simply making contributions of WVO. If you are interested in participating in this project, please contact:

**Seattle Treasure Hunt LLC**

tel: 425-996-7152

e-mail: [info@seattletreasurehunt.com](mailto:info@seattletreasurehunt.com)

url: [www.seattletreasurehunt.com](http://www.seattletreasurehunt.com)



The following groups and individuals are supporters of the Biodiesel Challenge. You can also contact those marked with an asterisk (\*) to coordinate with them or to find out more about events in your area:

**\*Djan's Modern Thai Restaurant**

(Wallingford)

206-633-03526

[www.djans.com](http://www.djans.com)

**\*Luminus Creations LLC**

(Mercer Island)

206-902-8872

[www.luminuscreations.com](http://www.luminuscreations.com)

**Mariko Mitsui**

(Bellevue)

[www.marikomitsui.com](http://www.marikomitsui.com)

**\*Market to Japan LLC**

(Issaquah)

425-378-9216

[www.markettojapan.com](http://www.markettojapan.com)

**Mayumi Shimizu**

(Lynnwood)

[www.mayumishimizu.com](http://www.mayumishimizu.com)

**Miyabi Japanese Restaurant**

(South Center)

[www.miyabisushi.com](http://www.miyabisushi.com)

**Vi Bacchus**

(Capitol Hill)

[www.vibacchus.com](http://www.vibacchus.com)

**Wann Japanese Izakaya**

(Belltown)

[www.wann-izakaya.com](http://www.wann-izakaya.com)

**Zen Japanese Landscape & Design, LLC**

(Lynnwood)

[www.zenjapaneselandscape.com](http://www.zenjapaneselandscape.com)

**BabyLegs LLC**

(Seattle)

[www.babylegs.net](http://www.babylegs.net)

**\*Fish Brain Design**

(Covington)

206-734-8211

**\*Keroko Net LLC**

(Renton)

425-572-5839

[www.kerokonet.com](http://www.kerokonet.com)

## ..... Tips for donating WVO

**1**

After cooling used cooking oil, strain it through an ordinary paper towel to reduce sediment.

**2**

Put it in a clear plastic bottle or jar fitted with a tight lid to prevent oxidation.

**3**

Add a note with your thoughts about the world you would like to create or a message to Shusei.

**4**

At the event sites, Shusei may take your photograph to introduce your message on the Web.

