

A Community Newsletter  
Produced by the  
Torrance Refinery

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## Fact or Fiction: *Oil Supply*

### Editor's Note

The following question was mailed to Neighbor to Neighbor by Torrance resident Tom Lambert. Because it is a common matter of debate, we decided to address it in this Fact or Fiction column.

“ How will you be affected by 'peak oil' and the ensuing depletion of the world oil supply, and what do you (ExxonMobil) plan to do about it? ”

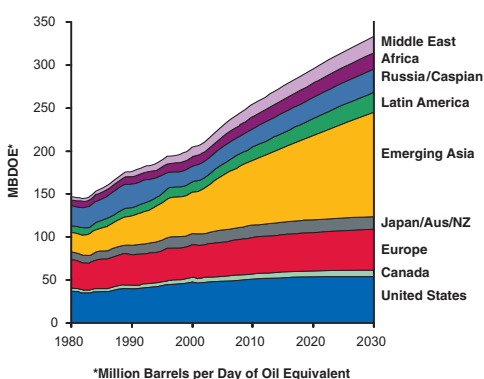
### Peak Oil Background

The term “peak oil” refers to the point of maximum oil production. After this point, production begins to decline. Peak oil, then, can be visualized as a spot on a bell curve, the high-point of which is a certain year.

This “peak” year is a matter of much debate. Some have pegged the peak at year 2005, others cite 2013 as the peak year, and others say that it will not occur until 2037.

What everyone does agree on is that

### World Energy Demand



to grow and prosper, the world will need much more energy in the future.

By 2030 global **energy** demand is likely to grow nearly 50 percent; developing economies will account for 60 percent of world **energy** demand. Global **oil** demand is expected to increase by approximately 35 percent from 2005 to 2030, reflecting a strong rise in the number of vehicles per capita, especially in developing countries.

### Abundant Resources Exist

We agree with the U.S. Geological Survey's findings that the conventional recoverable liquid resource base worldwide is about three trillion barrels of oil. If we add non-conventional petroleum resources, such as extra heavy oil, oil sands and oil shale, we believe that the biggest challenge is not how much oil there is, but how to extract it.

### ExxonMobil. Taking on the world's toughest energy challenges.

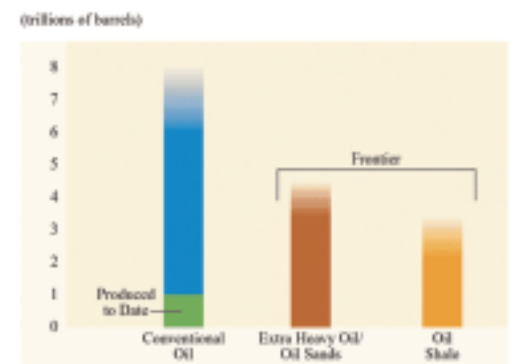
As shown throughout history, ExxonMobil has the technology, the financial strength and the largest resource base of all nongovernmental oil companies to get the job done. The company will pursue a dual strategy of expanding its resource base and increasing production. Some specific projects in this strategy include:

- Enhanced recovery of conventional oil
- Production of extra-heavy oil, tar sands and tight gas
- Liquefied natural gas (LNG) and gas-to-liquid technologies
- Deepwater and Arctic operations

### Energy Outlook

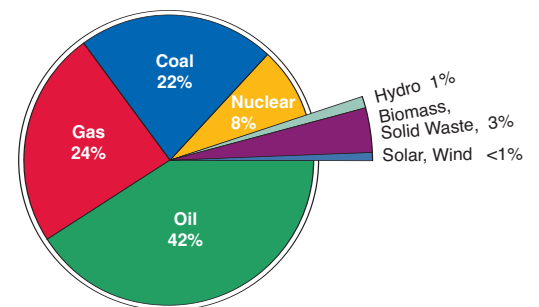
Each year, ExxonMobil prepares a detailed global energy outlook, now

### Estimated Oil in Place

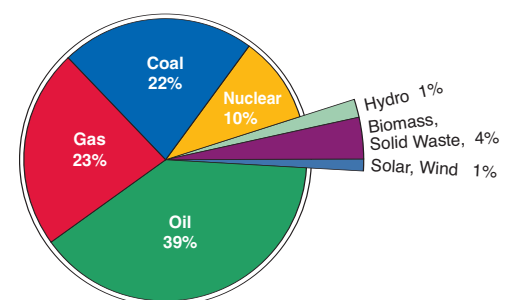


extending to the year 2030, available at [exxonmobil.com/energyoutlook](http://exxonmobil.com/energyoutlook). While we consider past experience, we also evaluate new technologies and trends, as well as insights from a wide variety of experts such as the International Energy Agency, the U.S. Department of Energy, and the European Commission. The result is an understanding of the fundamentals the underpin the world's growing energy needs.

### U.S. Fuel Supply by Type 2000



### U.S. Fuel Supply by Type 2030





# Ask PETE

**Q:** *Your huge cement building along Crenshaw is a huge eyesore. ... The building is streaked with black and green marks from the dirty water coming off the roof. ... Please consider cleaning the sides. ... This would be a huge improvement and let the building blend into the background.*

*Asked by Rich Windisch, Torrance resident*



**A:** Dear Rich, I believe you are referring to the building we call the “coke barn.” There, we store petroleum coke, a compound resulting from refining crude oil into gasoline. The coke is transported by conveyor under Crenshaw Blvd. and deposited in the coke barn for storage until it is carried by truck to area ports.

Because we use water in the process that produces coke, it enters the barn wet. In addition, the barn is made from concrete, a porous material. So, the moisture from the wet coke causes algae to grow on the side of the coke barn and is visible to drivers along Crenshaw. In order to minimize the algae’s appearance, we periodically power-wash the building. In fact, you may have seen us doing this recently. I’ve included “before and after” photos here.

## 24-Hour Neighborhood Hotline LIVE!



Mary Nardone, Environmental Foreperson and Neighborhood Hotline Manager

**(310) 505-3158** is linked to a phone that is linked to a LIVE person, a Torrance Refinery environmental foreperson.

Sometimes, you will reach a voicemail when you call the 24-Hour Neighborhood Hotline because the environmental foreperson is on the

other line with another caller.

Please leave a message. You will ALWAYS receive a return call.

*Questions or concerns about our Hotline? Call Public Affairs during “standard” business hours. (310) 212-1852*



Doug Boyd, Environmental Foreperson and Neighborhood Hotline Manager

### A S K P E T E

**Pete Trelenberg, Torrance Refinery Manager, wants to hear from you!** Please submit questions you have about the refinery and Pete will answer as many questions as space allows in each edition of Neighbor to Neighbor. Questions not printed in the newsletter will be addressed by direct mail or by phone. If you have an immediate concern, please contact Public Affairs at (310) 212-4756. We can't wait to hear from you!

**Q:** \_\_\_\_\_

Name\*: \_\_\_\_\_ Daytime phone number\*: (\_\_\_\_\_) \_\_\_\_\_

Address\*: \_\_\_\_\_  
Street City Zip Code

Comments: \_\_\_\_\_

**To submit your questions** tear off this form and mail to:  
**ExxonMobil • Public Affairs/Ask Pete • 3700 West 190th Street • Torrance, CA 90509**

\* By submitting your name, you agree to be identified in Neighbor to Neighbor as the author of the question you submitted. Only questions submitted with name and contact information will be considered for publication. Addresses and phone numbers are required for verification purposes and follow-up and will not be published.

# Mr. Tanouye Goes to Washington

## *Torrance History in Teacher Workshops and Beyond*

**T**ed Tanouye didn't set out to be a hero. He started off like any other Torrance High School student.

He loved playing football and baseball, and lettered in both sports. He also was president of his sophomore class, and even a proud member of the Future Farmers club. In short, Ted was a typical Torrance teenager. That is until the day Japan bombed Pearl Harbor.

A friend who saw him that fateful day recalls, "Ted was just sitting on the edge of the sidewalk crying, saying, 'now look what those SOB's have done to me.'" He and his five brothers and sisters were born in Torrance, and his family was well liked in the tight-knit community. But as an American of Japanese ancestry, Ted feared the worst.

He knew he wanted to help, so Ted was inducted as an American soldier on February 20, 1942. He was eventually transferred to Camp Shelby, Mississippi, to join the newly formed 442nd Regimental Combat Team, which was a segregated army regiment assembled primarily of American soldiers of Japanese ancestry. This group would later be recognized as the most highly decorated unit for its size and length of service in U.S. military history.

Ted later traveled home to visit his family. Instead of finding them in the home he grew up in, he found them at the Jerome Relocation Center in Arkansas. His family and thousands of other U.S. citizens of Japanese descent were locked away there, having been deemed "enemy aliens" solely because of their heritage.



**"...Ted was a normal Torrance teenager. That is, until the day Japan bombed Pearl Harbor."**

Isao "Easy" Tanouye, Ted's brother, says, "He was kind of happy that we were all together, but he wasn't very pleased that we were behind barbed-wires (while) he was in the service...I think he had the intuition that he had to go out and prove himself, and prove to the U.S. that we are worthy of the country that we live in." Ted left his family at the relocation camp, and shipped out to the battlefield as a proud American soldier not knowing that the last time he would ever see his family would be at this camp.

Technical Sgt. Ted Tanouye died on September 6, 1944 as the result of a landmine explosion. More than 50 years later, Ted and 19 other members of his regiment were honored by President William J. Clinton with their nation's highest award, the Medal of Honor. President Clinton lauded these heroes

with the words, "Rarely has a nation been so well served by a people it has so ill treated."

Today his story lives on in Torrance and beyond with the Torrance High School student-driven documentary "Citizen Tanouye." Craig Yahata and Robert Horsting produced "Citizen Tanouye" for the Ted Tanouye Memorial Foundation. The documentary won the "Chris Award" for education through film in the High School/College category, as well as accolades from national film festivals. The Go For Broke National Education Center, through its funding partnership with ExxonMobil, sponsored a teacher-training workshop for the Torrance Unified School District about this little-known yet profound piece of American history. The workshop incorporated the documentary and an entire curriculum developed by the Ted Tanouye Memorial Foundation, the co-host of the event.

This curriculum and the film prompted an impassioned response among Torrance Unified School District teachers this spring. Shery High School teacher Barbara Faulkner was at the workshop. Having taught for more than 30 years, Barbara said, "I've taken jillions of workshops and didn't know what to expect coming here this morning—I've never been to any as powerful as this."

At the end of the workshop, it was Ted's brother Isao who put it all in perspective. With a gentle handshake and a kind smile, he told attendees: "Don't take anything for granted."

Visitors are welcome at the Ted Tanouye Memorial in front of Torrance High School at 2200 Carson Street, Torrance, CA 90501. To learn more about the Ted Tanouye Memorial, contact Gail Morgan, President Torrance High School Alumni Association, at either (310) 326-8676 or [gslmorgan@aol.com](mailto:gslmorgan@aol.com). To learn more about The Go For Broke National Education Center, please visit: [www.goforbroke.org](http://www.goforbroke.org). To learn more about the "Citizen Tanouye" documentary and upcoming screenings, please visit: [www.citizentanouye.com](http://www.citizentanouye.com)

Torrance Refinery  
Neighborhood Hotline  
(310) 505-3158

## Energy Efficiency at the Torrance Refinery

*Improving energy efficiency is a priority.*

**F**or us, saving energy significantly lengthens the time during which petroleum will be able to meet the world's growing energy needs, and it also reduces our manufacturing costs.

For you, the consumer, the wise and efficient use of energy saves on your pocketbook.

For everyone, improved energy efficiency will help reduce emissions that could be harmful to the environment.

ExxonMobil has a comprehensive Global Energy Management System (GEMS) focused on continually improving energy efficiency. Since GEMS' launch here in 2003, the Torrance Refinery has found innovative ways to

- improve heat transfer and heater efficiency by reducing heat loss
- increase power generation from existing high-efficiency cogeneration facilities
- manage operation of motors and turbines more efficiently
- reduce steam venting and steam losses
- run furnaces more efficiently, saving fuel and cutting emissions

Currently, ExxonMobil is committed to improving energy efficiency by 10 percent by

2012, from a 2002 baseline, across U.S. refining operations. Some ideas for reducing consumption include equipment upgrades or modifications, while others relate to operating equipment more efficiently. Ken Moke, Energy Group Leader, recently explained, "In your home, you can save energy by turning off unneeded lights or setting your thermostat lower. We can do similar things at the refinery, only on a bigger scale. This will take a concerted effort by all employees."

An important issue is the sustainability of energy consumption changes. "Just as it does little good to reduce your thermostat one day only to increase it the next day, the same is true for the myriad of energy efficient ideas in the refinery," Moke said. To make sure that the changes are sustained, ExxonMobil has developed a system to track "Key Energy Variables" in the refinery. Personnel continuously track those variables and calculate the costs of not achieving internal targets for efficiency improvement. The tracking system is invaluable. Moke explained: "Once we know that we are not achieving an energy efficiency target, people in the refinery can work to bring the Key Energy Variable(s) back to where they should be."

Why does ExxonMobil support energy efficiency?



Reduce environmental emissions associated with providing and using energy.



Reduce operating costs.



Extend the availability of a very large, though finite, base of energy resources to support growing prosperity.



Make energy more affordable to consumers.

### PUBLISHER'S BOX

*Neighbor to Neighbor* is published periodically as a community service by the ExxonMobil Torrance Refinery • 3700 West 190th Street • Torrance, CA 90509-2929.

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