

PICKUP TRUCK COMPARISON TEST

# Popular Mechanics

## Mission: Moon

HOW WE'LL GO BACK  
—AND *STAY* THIS TIME!

SCIENCE <

AUTOMOTIVE

TECHNOLOGY

OUTDOORS

HOME

MARCH 2007

POPULARMECHANICS.COM

HOME HOW-TO

BUILD  
BETTER  
STORAGE

### Oil Sands

TAPPING NORTH  
AMERICA'S VAST  
RESERVES

DIGITAL  
TECH  
PREVIEW

### Jay Leno's

7-TON ENGINE

## diy

INSTALL A HARDWOOD FLOOR,  
REPLACE A TIMING BELT,  
TRANSFER MOVIES FROM PC TO TV,  
REMOVE A CAR BATTERY—SAFELY,  
EXTEND PRINTER INK LIFE

### YOUR GREEN HOME

25

SMART IDEAS &  
THRIFTY PRODUCTS

NASA'S NEW CREW EXPLORATION  
VEHICLE, ORION, BLASTS INTO SPACE  
ATOP AN ARES I ROCKET.



\$3.99 US  
\$4.95 CANADA/FOREIGN

THE  
BEST  
OF

# GREEN DESIGN

BY JIM GORMAN

THE SMARTEST NEW IDEAS ARE OFTEN THE ONES THAT GET BACK TO BASICS: IN THIS CASE, BY SAVING MONEY, ENERGY AND NATURAL RESOURCES. PM SALUTES 25 INNOVATORS WHO ARE DOING THINGS RIGHT.



**IDEAL SEAT** Haworth's Zody proves that superb functionality can apply to both lumbar support and eco-performance. The chair, made with 51 percent recycled content, is 98 percent recyclable at the end of its life span—which, because of Zody's easily replaceable parts, should be a long time in coming.

> "GREEN DESIGN" MAY BE A RELATIVELY new term for describing ideas that are environmentally sensitive, but the concept is timeless—particularly as it applies to the home. The principles are simple: Use materials wisely, conserve water and energy, save money in the long term, and create surroundings that are safe and healthy. In other words, follow the standards of good engineering. The systems and products on the following pages do all of these things. They include a house that can sell energy to the grid, a countertop made from glass that would otherwise go to a landfill, and a cable that wires sunlight through solid walls. The innovations even extend to how neighborhoods are built and how beer is brewed. Clean, efficient, problem solving. That's the kind of progress that PM admires.

PHOTOGRAPH BY DAN CHAVKIN

#### MODEL HOUSE

Assembled in a single day in April 2006, LivingHomes' prefab house in Santa Monica, Calif., is a residence anyone would be proud to own. It's gorgeous, sturdy and easy on the environment—so easy, in fact, that it earned the highest rating from the U.S. Green Building Council's pilot certification program for homes.





INSIDE STORY

LivingHomes prefabricates houses with nontoxic materials, making for healthy shelters—both outside and in.

PHOTOGRAPH BY DAN CHAVKIN

Factory-built houses tend to be far less wasteful than site-built ones since prefabrication cuts construction waste from as much as 40 percent to 2 percent. But LivingHomes takes sustainability several steps further. Photovoltaic panels

and a solar hot water system grace the roof. A gray-water recycling system and 3500-gal. cistern provide water for landscaping. And inside, the furnishings, fixtures and appliances maximize energy and water conservation.

- ❶ **WALLS** Western red cedar paneling by Eco-Lumber Co-op comes from forests that have been certified as responsibly managed.
- ❷ **LIGHTING** Recessed LED lights

- by Permlight draw 33 percent less electricity than already thrifty compact fluorescents.
- ❸ **REFRIGERATOR** Bosch's Evolution 800 refrigerator is 16 percent more energy-efficient

- than federal energy-use standards require.
- ❹ **HEATING** Radiant heating tubes—fed by an Apricus solar water heating collector on the roof—snake through concrete floors,

- warming the home's interior.
- ❺ **FLOOR** Cork planking from Natural Cork is milled from naturally regenerating tree bark and contains no formaldehyde.