# off the fence.

# **Green Wheels**

12 x 30'

**EPISODIC BREAKDOWN** 

## 1. Killacycle

The Killacycle team will attempt to officially break the world record for an electric vehicle on a 1/4 mile track. The bike goes from 0 to 60 in just a touch under 1.5 seconds. We'll go behind the scenes as the team prepares for the record. Will they make history or blow a fuse?

#### 2. Human Power

These muscle bikes are setting all kinds of records for human powered speed. They can reach speeds of 60mph, and they're 100% environmentally clean.

We travel to Santa Cruz to examine the design and strategy behind these amazing rides. From their modified cycle structures to their lightweight aerodynamic fiberglass shells, we uncover the tech being used to propel these pedalled machines to victory.

#### 3. Team Ethanol

The Team Ethanol car is a lighting-fast road racer fuelled on 100% ethanol. Recently the IndyCar Series has announced a switch to greener fuel, but what effect will this new innovation have on performance? Watch as the team implements the newest fuel-burning technology and follow as they see if the car has a shot at taking the title.

## 4. Battery Beach Burnout

It's the kick-off of the National Electric Drag Race Association's race season. We travel to Jupiter, Florida to see the world's most eccentric electric race warriors put to the test. Sure there's prize money, but it's the props of having the fastest megawatt vehicle that lures these daredevils to the track.

## 5. Lovecraft Biofuels

At Lovecraft Biofuels, they can convert any diesel engine to run on 100% vegetable oil. They've already transformed a thousand cars and they're working on establishing fuelling stations across the country. We also visit some bio-fuel aficionados brewing fuel in their garage.

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#### 6. The Shell Eco-Marathon

At the Shell Eco-marathon, high school and university students compete to see whose vehicle can go the furthest on the least amount of fuel. Top teams are gunning for up to 2000 miles per gallon. We also meet up with 'hypermiler' Wayne Gerdes. Wayne can get eye-popping mpg numbers on just about any vehicle he drives.

#### 7. Solar Power

The Stanford University Solar Car team will be putting their vehicle to the test before the World Solar Challenge in Australia next year. But getting there is easier said than done. It's high-stress, high-speed and zero emissions. Is this a precursor of transportation to come or just a college project?

## 8. Aftermath Technologies

We follow a team creating fuel-efficient green machines out of junk. Their current project is a 1968 Cadillac Hearse converted to run on propane. James' philosophy: don't buy another car just to throw it away in the future, take a junker and give it new life.

#### 9. Eco Fueller

We explore the newest eco-fuel: compressed natural gas. First stop is to check out the American Roadster CNG, a 70-mile per gallon vehicle that runs on CNG. Then on to the largest landfill in the US. They're processing the landfill's emissions into usable CNG for vehicles.

#### 10. Tesla Motors

The Tesla Roadster is the latest in electric-powered transportation. We investigate cutting edge technology like the lithium-ion batteries that make it possible to go 250 miles on a single charge, the software that makes the car safer and more secure and the durable motor that has only one moving part.

## 11. Buckeye Bullet

We visit Ohio State University and meet the team of students responsible for the Buckeye Bullet II, the world's first hydrogen fuel cell-powered land speed racing vehicle. The students are hoping the vehicle will reach a speed of 350 mph. We're there for the Bullet's very first speed runs and learn about the nuts & bolts behind this sleek speedster.

## 12. Fuel Innovation Excellence Award

In this series we've seen everything from cars running on used cooking grease to a vehicle that gets 1900 miles to the gallon. And now it's time hear from the viewers. This last episode re-caps the series, and reveals the award-winners for Innovation and Excellence.

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