01-19 G 32 A 20 Durée : 02 heures Série : S3 - Coef. : 2 Epreuve du 1^{er} Groupe

A N G L AI S

HybridCars.com's Brad Berman Examines Recycling in Auto Industry

Recycling is on the upswing in the automotive industry, but what else can be done? Brad Berman tells us what is on the horizon.

Most conversations about the environmental impact of cars focus on drivetrains — hybrid versus diesel versus electric, etc. At our two websites, HybridCars.com and PluginCars.com, we take a more holistic view by examining the eco-impact of the entire product lifecycle. For example, I recently interviewed Debbie Mielewski, technical leader, Plastics Research Group at Ford. She said, "One day,

I hope to see the automotive world go totally compostable, removing the use of petroleum-based 5 parts 100%."

Ford Technical Leader of Plastics Research Debbie Mielewski observes a polyol separation in the laboratory. The use of new bio-based materials — used in everything from seats to dashboards could have a big impact on energy, as well as the environmental safety of passengers. That's why

- Ford is expanding its use of bio-based soy foam throughout nearly all of its vehicle lineup this year as 10 part of an ongoing effort to use more renewable and recyclable materials. Ford's use of bio foam has helped the company reduce its petroleum oil usage by more than 3 million pounds annually and its carbon dioxide emissions by 11 million pounds annually. "Right now, most of the vehicle is comprised of metals, which are already recycled," Mielewski said. "Plastics compose about 300 pounds of the
- typical vehicle, and although some of that plastic is already recycled and we are working on 15 technologies to recycle more — there is plastic going into landfills." She hopes that growing materials for cars and putting them back into soil at their end of life will reduce the company's overall environmental impact. "It'sjust going to take some time, and some growing pains, to get there," she said.
- Meanwhile, automakers are racing toward bringing electric cars, such as the Nissan LEAF and Chevy 20 Volt, into the mainstream. As a result, environmentalists worry about the ability to properly recycle the batteries that power those cars. Good news: The first lithium battery recycling plants are already being established. Last year, the U.S. Department of Energy granted \$9.5 million to California-based Toxco to build America's first recycling facility for lithium ion vehicle batteries, which can be lighter
- and smaller, while carrying more energy and providing more power. The DOE grant will help Toxco 25 transfer the Trail recycling process to its Ohio operations, laying the foundation for an advanced lithium battery recycling plant that can expand to meet expected rapid growth in the U.S. electric car market. To keep up with this kind of news, visit HybridCars.com and PluginCars.com. Our mission is to provide trustworthy, clear information about the next generation of alternative energy vehicles —
- creating a movement of consumers eager to purchase cars and trucks that use less oil, have a smaller 30 environmental impact and are fun to drive. Brad Berman is the editor of HybridCars.com and PluginCars.com.

By RecycleNationSeptember 7, 2010

https://recyclenation.com/2010/09/hybridcars-brad-berman-examines-recycling-auto-industry/





I. READING COMPREHENSION

A.A part of this text is about an interview. Complete the chart with information from it.	(2.5 marks)
INTERVIEW REPORT	

Rubrics	Answers
Interviewer	1
Interviewee	2
Position of interviewer	3
Position of interviewee	4
Theme of interview	5
Main concern	The environmental impact of cars
Main objective of the automotive	6
industry	
New recycling technology	7
Target automakers	8
New lab process to make material for	9
car parts	
New recycling material obtained	10

B.Find out the meaning of these ideas by circling a, b, or c.

(2.5 marks)

- **11. "Recycling is on the upswing in the automotive industry**" means Recycling is
 - a. flourishing in the car industry"
 - **b.** a major issue in the car industry"
 - c. now easier for the car industry"

12. "to see the automotive world go totally compostable" means All car parts are

- a. composed of plastic
- b. biodegradable
- c. easy to shape
- 13. "there is plastic going into landfills" means Plastic waste is
 - a. filling the land
 - **b.** removed from the land
 - **c.** still found in dumping grounds

14. "It'sjust going to take some time, and some growing pains, to get there," means

- **a.** Much effort will be needed before automakers are able to reduce the overall environmental impact of cars.
- **b.** Much effort will be needed by car manufacturers to grow materials for cars.
- c. Not much effort will be needed to reduce cars impact on the environment.

15. "automakersare racing toward bringing electric cars into the mainstream" means

- a. Electric race cars are designed to compete in the car market.
- **b.** Making electric cars popular is a challenge automakers are facing.
- c. Automakers are competing to impose electric vehicles in the car market.

C. Find in the text what these words or expressions refer to.

(2 marks)

16.	"we" (line 2)
17.	"this year" (line 9)
18.	11 million pounds (line 12)
19.	"this kind of news" (line 26)



(2 marks)

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D.If True, write T. if False, write F. Justify quoting from the text. 20. With the use of bio-foam, the reduction cost of petroleum oil usage is approximately 4 times as low as the reduction cost of carbon dioxide emissions.

21. The next generation of cars will be running on alternative energy in accordance with HybridCars.comand PluginCars.com mission view. _____ **II. LINGUISTIC COMPETENCE**

E. Complete the paragraph with the correct PREPOSITIONS. (1 mark = 0.25x In addition to the sustainable efforts being made ²² the automotive industry, environmentalists are expecting financial support ²³ the US government. To carr - ²⁴ an efficient environmental program, strict sanctions will be imposed ²⁵ any offenders.	- /
 F. Complete with the right derivative of each word. (1.5 mar 26. Despite the fact that they are reliable, car batteries may (unexpect to operate because of misconception in the initial product. 27. There is a total (commit) of both environmentalists and car enging find efficient and eco-friendly alternatives to polluting car parts. 28. Recharging at home is highly (benefit) and time saving to electric owners and users. 	ted) fail eers to
G.Complete with the right form of each verb in brackets. (3 mark Big car manufacturing companies ²⁹ (BE) eager, throughout the year reduce gas emissions by cars. The first electric vehicle ³⁰ (TEST) a few ago to serve that purpose.Besides, it ³¹ (DECIDE) recently by high rank political officials together with engineers that the priority of priorities ³² (ANTICIPA consequences of climate change due to pollution, global warming ³⁴	rs, to years king
 H.Reformulate the sentences using the prompts given. (1.5 mar 35. Technologies for recycling batteries are inexistent, yet automakers are racing toward bringing up electric cars into the mainstream. Despite	
36. The Ford Company has improved the environmental safety of passengers with the expanding use of bio-based soy foam. Thanks to	
37. Consumers can now purchase cars having a smaller environmental impact with clear information about the next generation of alternative energy vehicles available on HybridCars.com As consumers	



III. <u>WRITING</u>: Choose one topic and write a passage of not more than 150 words. (4 marks)

Topic 1:

For achieving higher performance and sustainable development, do you think that engineers can develop car technologies without taking into account their impact on our environment? State your point of view.

Topic 2:

In your country, which of these technologies hybrid, diesel and electric cars will be more appropriate and efficient? Make your choice and give your reasons.

