Europe Pushes to Get Fuel From Fields

ARDEA, Italy —

The previous growing season, thislush coastal field near Rome was filled with rows ofdelicate durum wheat, used to make high-qualitypasta. Today it overflows with rapeseed, a tall, gnarled weedlike plant bursting with coarseyellow flowers that has become a new manna for European farmers: rapeseed can be turnedinto biofuel.

Motivated by generous subsidies to develop alternative energy sources — and a measure ofconcern about the future of the planet — Europe's farmers are beginning to grow crops thatcan be turned into fuels meant to produce fewer emissions than gas or oil. They are chasingtheir counterparts in the Americas who have been raising crops for biofuel for more than fiveyears.

"This is a much-needed boost to our economy, our farms," said Marcello Pini, 50, a farmer,standing in front of the rapeseed he planted for the first time. "Of course, we hope it helps theenvironment, too."

In March, the European Commission, disappointed by the slow growth of the biofuels industry,approved a directive that included a "binding target" requiring member countries to use 10percent biofuel for transport by 2020 — the most ambitious and specific goal in the world.

Most European countries are far from achieving the target, and are introducing incentives andsubsidies to bolster production.

As a result, bioenergy crops have replaced food as the most profitable crop in severalEuropean countries. In this part of Italy, for example, the government guarantees thepurchase of biofuel crops at 22 Euros for 100 kilograms, or $13.42 for 100 pounds — nearlytwice the 11 to 12 Euros for 100 kilograms of wheat on the open market in 2006. Better still,farmers can plant biofuel crops on "set aside" fields, land that Europe's agriculture policy wouldotherwise require be left fallow.

But an expert panel convened by the United Nations Food and Agriculture Organization pointedout that the biofuels boom produces benefits as well as trade-offs and risks — including higherand wildly fluctuating food prices. In some markets, grain prices have nearly doubled.

"At a time when agricultural prices are low, in comes biofuel and improves the lot of farmers andinjects life into rural areas," said Gustavo Best, an expert

at the Food and AgricultureOrganization in Rome.

"But as the scale grows and the demand for biofuel crops seems to beinfinite, we're seeing some negative effects and we need to hold up a yellow light."

Josette Sheeran, the new head of the United Nations World Food program, which fed nearly 90million people in 2006, said that biofuels created new problems.

"An increase in grain pricesimpacts us because we are a major procurer of grain for food," she said. "So biofuels are both achallenge and an opportunity."

In Europe, the rapid conversion of fields that once grew wheat or barley to biofuel crops likerapeseed is already leading to shortages of the ingredients for making pasta and brewing beer,suppliers say. That could translate into higher prices in supermarkets.

"New and increasing demand for bioenergy production has put high pressure on the wholeworld grain market," said Claudia Conti, a spokesman for Barilla, one of the largest Italian pastamakers.

"Not only German beer producers, but Mexican tortilla makers have see the cost oftheir main raw material growing quickly to historical highs."

Some experts are more worried about the potential impact to low-income consumers. In thedeveloping world, the shift to more lucrative biofuel crops destined for richer countries couldcreate serious hunger and damage the environment if wild land is converted to biofuelcultivation, the agriculture panel concluded.

But officials at the European Commission say they are pursuing a measured course that willprevent some of the price and supply problems seen in American markets.

In a recent speech, Mariann Fischer Boel, the European agriculture and rural developmentcommissioner, said that the 10 percent target was "not a shot in the dark," but was carefullychosen to encourage a level of growth for the biofuel industry that would not produce unduehardship for Europe's poor.

She calculated that this approach would push up would raw material prices for cereal by 3percent to 6 percent by 2020, while prices for oilseed might rise 5 percent to 18 percent. Butfood prices on the shelves would barely change, she said.

Yet even as the European program begins to harvest biofuels in greater volume, homegrownproduction is still far short of what is needed to reach the 10 percent goal: Europe's farmersproduced an estimated 2.9 billion liters, or 76

8 million gallons, of biofuel in 2004, far shy of the3.4 billion gallons generate d in the United States in the period. In 2005, biofuel accounted foraround 1 p ercent of Europe's fuel, according to European statistics, with almost all of th at inGermany and Sweden. The biofuel share in Italy was 0.51 percent, and i n Britain, 0.18 percent.

That could pose a threat to European markets as foreign producers like Brazil or developingcountries like Indonesia and Malaysia try to ship their biofuels t o markets where demand,subsidies and tax breaks are the greatest.

Ms. Fischer Boel recently acknowledged that Europe would have to import at least a third ofwhat it would need to reach its 10 percent biofuels target. Polit icians fear that could hamperdevelopment of a local industry, while perversel y generating tons of new emissions as "green"fuel is shipped thousands of kil ometers across the Atlantic, instead of coming from the farmnext door.

Such imports could make biofuel far less green in other ways as well — for example if SoutheastAsian rainforest is destroyed for cropland.

Brazil, a country with a perfect climate for sugar cane and vast amounts of la nd, started withsubsidies years ago to encourage the farming of sugarcane fo r biofuels, partly to take up"excess capacity" in its flagging agricultural sector .

The auto industry jumped in, too. In 2003, Brazilian automakers started prod ucing flex-

fuelcars that could run on biofuels, including locally produced ethanol. Today, 70 percent of newcars in the country are flex-

fuel models, and Brazil is one of the largest growers of cane forethanol.

Analysts are unsure if the Brazilian achievement can be replicated in Europe —

or anywhereelse. Sugar takes far less energy to convert to biofuel than almo st any product.

Yet after a series of alarming reports on climate change, the political urgency to move faster isclearly growing.

With an armload of incentives, the Italian government hopes that 70,000 hec tares, or 173,000acres, of land will be planted with biofuel crops in 2007, an d 240,000 hectares in 2010, up fromzero in 2006.

Mr. Pini, the farmer, has converted about 25 percent of his land, or 18 hectar es, including his"set aside" land, to Europe's fastest-

growing biofuel crop, rapeseed. He still has 50 hectares ingrain and 7 in olive

s.

He has discovered other advantages as well. In Italy's finicky food culture, fo od crops have tolook good and be high quality to sell—

a drought or undue heat can mean an off year. Cropsfor fuel, in contrast, ca n be ugly or stunted.

"You need fewer seeds and it's much easier to grow," he said.

Section 2 Chinese-English Translation

中国历来重视人才工作 并实施"人才强国"战略 大力开发人力市场资源 为人才发挥作用创造必要的条件和环境 中国目前实行的是工程技术人员职称聘任制度 经过多年的实践 中国已经形成了一套比较完整的工程技术人员技术 并探索实行工程技术人员职称聘任制度

工程技术人员职称聘任制度形成于计划经济时期 随着社会主义市场经济的建立和经济社会的发展需要进一步完善和改革 人事部 建设部 教育部 中国工程院 中国科办等部门专门成立了领导小组 组织关于技术人才的研究 提出工程技术人才改革框架 建立以业绩和能力为导向的 科学的人才绩效评价制度 并积极促进工程师国际互认和资格准入制度

欧洲竞相从农田获取燃料

阿尔代亚 意大利——上个生长季节 罗马近郊植物葱茏的靠海农田 遍布成排的纤细的硬质小麦 过去用于制作高品质意粉 今天 这里却长满了油菜花 一种高高的 多节的类似杂草的 盛开野黄花的植物 它已经成为上帝赐给欧洲农民的一种新的作物 因为油菜籽能被转变为生物燃料

在丰厚补贴的驱动下 人们正在开发各种可替代能源——这是对地球未来一定程度的关注——欧洲农民正开始种植可转换为燃料的作物 这意味着比汽油或石油产生更少的排放物 他们正在追随美国同伴 后者种植用于生物燃料的作物已超过5

"这对我们的经济和农田 是一种急需的激励 "50 .皮尼 站在他第一次种植的油菜籽田前面说 "当然 我们也希望这有助于环境 "

3 对生物燃料产业成长缓慢感到失望的欧洲委员会 批准了一条包括"约束力目标"的指令 要求成员国到2020 生物燃料占运输用燃料的10 ——这是世界上最雄心勃勃和具体的目标

大部分欧洲国家还远远未实现这一目标 正引入激励和补贴 以提高产量

结果 生物能源作物已取代粮食 成为几个欧洲国家最有利可图的作物 例如 意大利在这方面 政府保证以每100 22 13.42 ——这几乎是20 06 100 11 12 更好的是 农民可以在"搁置"地上种植生物燃料作物 欧洲的农业政策曾要求这些地休耕

但是 联合国粮农组织召集的专家组指出 生物燃料热潮有利有弊 需要权衡——包括跌宕起伏的粮食价格波动 在一些市场 谷物价格已几乎翻番

"一旦农产品价格降低 生物燃料就会进入 改善农民的命运 并给农村地区注入活力 "位于罗马的粮农组织专家古斯塔罗.贝斯特说 "但随着规模增长 对生物燃料作物的需求似乎无穷

无尽　我们看到一些负面影响　需要举起黄灯　”

联合国世界粮食计划在2006　　9000　　其新领导人乔塞特希兰说生物燃料制造了新问题　“粮食价格的增长对我们造成了冲击　因为我们是粮食的主要生产者　”她说　“因此　生物燃料挑战与机遇并存　”

供应商说　在欧洲　成熟后的小麦或大麦改为像油菜籽那样的生物燃料作物　已经引起了制作意粉和酿造啤酒所需的配料短缺　这转化为了超级市场里更高的价格

“对生物能源产品新的和不断增长的需求　已给整个世界粮食市场施加了高压　”意大利最大的意粉制造商之一　百得阿姨的发言人克劳迪亚科蒂说　“不仅德国的啤酒制造商　而且墨西哥的玉米饼生产者　都已注意到他们主要的原材料成本增长迅速　已达历史最高水平　”

一些专家更担心其对低收入消费者的潜在冲击　农业小组断定　在发展中国家　如果荒地转为种植生物燃料作物　这种以富国为目的　向更多高利润生物燃料作物转变的做法　可能造成严重的饥饿　并损害环境

但欧洲委员会的官员说　他们正在寻求一种审慎的进程　它将避免在美国市场上看见的一些价格和供应问题

欧洲农业和农村发展委员会的马里兰.菲舍尔.波伊尔

在最近一次演讲中说　10　目标并非“误打误撞　”但是小心选择一个增长水平以促进生物燃料产业　并不会给欧洲的穷人产生过度困难

她估计2020　　这种做法将把世界谷物原材料价格提高3　至6　　而含油种子的价格可能增长5　到18　　但她说货架上的食品价格几乎不变

然而即使欧洲的计划已开始大量收获生物燃料　本地产量仍然远远低于需要的10　目标　2004　　29　　7.68　　远低于美国同期生产的34

　　根据欧洲的统计数据　2005　　生物燃料已占到欧洲燃料的1　　德国和瑞典几乎全采用了　意大利的生物燃料份额为0.51　　英国的是0.18

巴西那样的外国生产商或印度尼西亚及马来西亚那样的发展中国家　试图将他们的生物燃料用船运输到那些需求　补贴和减税最大的市场　这可能对欧洲市场造成了威胁

菲舍尔.波伊尔女士最近承认　为达到10　目标　欧洲将不得不至少进口所需生物燃料的1/3　政治家担心其将妨碍本地产业的发展　而持续产生新排放物的“绿色”燃料跨越大西洋不远千里地运来　却不是来自隔壁的农场

这样的进口可能使生物燃料在其他方面也远远达不到环保——例如　如果东南亚的雨林毁于生物燃料作物的耕作

巴西拥有适于甘蔗生长的完美气候和大量耕地　数年前就开始发放补贴以鼓励用于生物燃料的甘蔗的耕作　在其标志性的农业部门部分地产生了“产能过剩”

汽车工业也牵涉进来　2003　　巴西的汽车制造商开始生产能用生物燃料驱动的弹性燃料汽车　包括本地生产的酒精　今天　该国70　的新汽车属弹性燃料车型　巴西是最大的酒精用甘蔗的生产国之一

分析家并不确定巴西的成就是否能在欧洲或其他任何地方复制　糖转换为生物燃料所需的能源

比其他任何产品都少

然而在一系列令人震惊的关于气候变化的报告后　更快行动起来的政治紧迫感明显增加了

意大利政府希望从2006　　2007　　7　　17　3

2010　　24

农民皮尼先生　已经把他25　　或18　　转为欧洲增长最快的生物燃料作物　包括

他的"搁置的"土地　他仍然有50　　7

他也发现了其他益处　在意大利过分讲究的饮食文化中　粮食作物要卖　必须卖相好　质量

高——干旱或酷热意味着一年绝收　相比之下燃料作物可以其貌不扬或发育矮小

"你需要更少的种子　它更容易生长　"他说