BRUSSELS (Reuters) - The messages are tense, angry, cajoling.

Written between 2008 and January 2010 and sent between lobbyists, scientists and high-ranking European civil servants, they hint at the intense emotions in the debate over one of Europe’s most contentious environmental issues: the use of biofuels, long touted as an alternative to carbon-emitting petroleum.

But it’s not how the emails are written that’s important. It’s what’s in them — and the fact that if it were not for transparency laws, Europe's citizens would be unaware of how vested interests have influenced the science behind a cornerstone of the continent’s clean energy policy.

One of the mails calls the evolving science of biofuels “misleading”; another “arbitrary”. In one, sent last November, a European civil servant calls an attempt to quantify the damage from biofuels “completely flawed and incomplete”. Lobbyists pick holes in the evidence, using graphs, charts and tables. A worried official warns against “financial consequences” for farmers.

Most damaging for the European Commission is a leaked letter from the head of its own agriculture unit, Jean-Luc Demarty, in which he refers to mounting evidence that biofuels do serious harm to the climate. Unless handled carefully, Demarty writes, that scientific perspective could “kill biofuels in the EU”.
That it could. Read in their entirety, the documents — emails, letters and research reports released after Reuters invoked transparency laws — not only expose a huge rift in Brussels over biofuels policy, but also undermine Europe’s ambition of using alternative fuels to wean the continent off oil. Beyond this, they raise serious questions about whether some European Commission officials have deliberately skewed the findings of scientific studies to fit their policies.

It’s a war that pits the European Commission’s agriculture experts against its climate experts, and Europe’s auto and farming lobbies against environmentalists. The bottom line is this: Europe — committed to a goal of using biofuels to power 7 percent of its road traffic by the end of this decade — is seriously questioning the fuel’s use. That means the future of biofuels elsewhere must also be under threat, which will have huge implications not just for the way we tackle climate change, but for everything from the price of land, chemicals and commodities to foreign aid.

“I think it’s outrageous the Commission is hiding the science behind climate policy,” says Tim Grabel of ClientEarth, a group of activist lawyers who have sued the European Commission for greater transparency on the issue. “The science generally confirms this is something we should be worried about.”

AN INCONVENIENT TRUTH

Like many such tales, this story begins with good intentions.

Two years ago, Europe mandated that by 2020, 10 percent of transport fuels must come from renewable sources. Of that, some 70 percent would come from biofuels — those made from the oil of plants such as palms, soy beans or rape seed, or ethanol brewed from crops like wheat, sugar cane or sugar beet. Designed to help Europe cut carbon emissions to 20 percent below 1990 levels by the end of this decade, the plan foresaw a $17 billion (11 billion pounds)-a-year biofuels market. Europe, the bloc’s leaders said, would lead the world away from carbon dioxide-emitting oil.
But even as European leaders committed themselves to that ambitious goal, questions were growing over how green biofuels really are. Environmentalists warned that promoting them might encourage farmers to rip out food crops or burn and clear forests to grow cash crops that could be turned into fuel. That could leave the world’s poor with even less food and actually add to the amount of carbon dioxide we emit.

“When citizens are filling up their cars with biofuels, they have the right to know whether they are encouraging deforestation on the other side of the planet,” says Grabiel. “These studies really contain the answers to those questions, and this is what our lawsuits seek to reveal.”

The basic assumption with biofuels is that plants absorb as much carbon dioxide while growing as they release when burnt in an engine. If you use them as a fuel, their net impact on the climate is close to zero, except for emissions from farming machinery and fertilisers.

But this doesn’t take into account a relatively new concept that scientists drily call “indirect land use change”. Put simply, if you take a field planted with grain and switch that crop to something that can be used to make a biofuel, then somebody will go hungry unless the missing grain is grown elsewhere or farming yields are massively improved.

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The rush to biofuels means the quantities of land needed are huge. Satisfying the EU’s demand alone will require an additional 4.5 million hectares of land by 2020, according to Reuters calculations based on an average of 15 of the studies for the Commission. That’s an area roughly equal to Denmark.

Burning forests to clear that land — which in theory could be found anywhere around the globe — would pump vast quantities of climate-warming emissions into the atmosphere, enough to cancel out many of the theoretical benefits the biofuels are supposed to bring in the first place. EU sources say an upcoming report will point to a one-off release of around 200 million tonnes of carbon due to land-use change from biofuels, paid back slowly as the fuels do
their job over the following centuries. That one-off release is roughly the annual fossil fuel emissions of Germany.

As this inconvenient truth became apparent, obfuscation over the science increased. By the start of this year, more and more people were asking whether the EU had committed itself to biofuels before the science on them was settled.

**A PALM PROBLEM**

The studies at the centre of the email debate are meant to help clarify that confusion. They form part of an EU-sponsored strategy report that should provide the most detailed look yet at the complex global interactions between farming, biofuels and climate change.

The report, which will draw on work by researchers from Italy to Washington, is due later this year. But according to one of the studies that will feed into it, “many decades may be needed before the initial...carbon losses are compensated by the savings due to greater biofuel use.”

Not only are forests already being felled to grow biofuel crops, but fragile peatlands are also being drained, particularly in Indonesia, to make way for palm trees. That will create even bigger problems as the peat oxidises, releasing massive amounts of carbon dioxide. One report, published in 2008 by the EU’s Joint Research Centre, said that if just 2.4 percent of European biodiesel came from palm oil grown on former peatlands, the entire climate benefits of EU biodiesel would be wiped out.

Palm oil currently accounts for 4-5 percent of Europe’s biofuels mix. Most of that still comes from non-peatland sources and ends up in food and cosmetics. But Europe’s demand for biofuels will treble over the next decade to meet the 2020 target. Could Europe be knowingly fuelling global warming under the guise of fighting climate change?

**A SAFEGUARD AGAINST CORRUPTION**
The job of finding a way forward falls to Guenther Oettinger, Europe’s new energy commissioner, who on June 10 this year stood before reporters in the European Commission’s giant press auditorium to launch new environmental standards for biofuels. Oettinger took the prestigious energy post in February after five years as the Conservative governor of Baden-Wuerttemberg, a rich industrial area in the south of Germany and home to some of Germany’s leading companies, including Daimler and Porsche.

He is the man who has to defend Europe’s gas and oil supplies against wars on its borders, such as the Russia-Georgia conflict in 2008, or the “pipeline politics” that so often cut supplies of Russian gas entering Europe via Ukraine or Belarus.

Oettinger has made a forthright start on biofuels, promising to get tough on them if the science shows they are not providing the benefits they are supposed to. “If you want to exclude all abuse, you would have to exclude all biofuels to start with,” he told reporters in June.

The extent of the mess may have remained hidden but for the strict freedom of information rules that require the European Commission to share most of its internal documents with the public. “Studies that have been executed with taxpayers’ money have to be made available to the public...and as early and as clearly as possible,” says retired judge and former Commission official Ludwig Kraemer. “Openness and transparency is a safeguard against corruption and excessive lobbying.”

The problem is knowing what to ask for. The first signs of a problem came when Reuters got hold of the leaked letter from agriculture boss Demarty warning that the emerging scientific view could be the end of biofuels in the EU.
“That letter was the first real evidence,” says Nusa Urbancic, a tenacious Slovenian campaigner with the European Federation for Transport and Environment (T&E), a Brussels team set up to delve into the nitty-gritty of EU transport policy. “They had been delaying and delaying their reports, and we had heard they had found something wrong with biofuels.”

Last October, Urbancic filed an official request demanding access to the documents that apparently sparked Demarty’s fears. In February, with snow clinging to the glass and steel buildings of the Commission and Urbancic still waiting for her documents, Reuters filed an identical request. Three weeks later, a first tranche of documents was released to Reuters, Urbancic and her colleagues — 116 studies, data files and emails, amounting to thousands of pages.

Some of the studies showed evidence of ecological problems. “The simulated effects of EU biofuels policies imply a considerable shock to agricultural commodity markets,” wrote one group of researchers handling a complex computer-modelling exercise. “It carries the risk of significant and hardly reversible environmental damages,” warned others.

Worried that biofuels might actually aggravate climate change, officials in the Commission’s environmental unit argued for the strategy to be refined or reconsidered.
But agriculture officials, backed by colleagues in the energy unit, have painted the new science as unrefined. “Trying to establish the amount of indirect land use change caused by EU biofuels production is simply ridiculous,” wrote one, whose name was blacked out in the released documents. “These models...cannot be used as a regulatory instrument, which would imply financial consequences for the concerned industries,” Demarty warned in another.

FRAUNHOFER’S DISCLAIMER

Rumours started circulating among environmentalists and in the European Parliament of officials meddling with research. Germany’s Fraunhofer Institute, a 60-year old research organisation with energy expertise, had been commissioned by the EU to look at Brussels’ biofuels policy. But when the final version of the institute’s report appeared, it carried a disclaimer saying the final presentation did not reflect the institute’s views. Some of Europe’s most respected energy technology scientists were unhappy with the way their work had been represented.

Reuters again invoked transparency laws to bring the disputed research to light, along with emails between Commission departments discussing whether the report should be published. These emails, released on June 18, show agriculture officials had been instrumental in cutting sections of the report that showed that biodiesel from soy beans could be four times more damaging to the climate than standard diesel or petrol.

The officials’ argument for doing so — the report used a scientific method that was widely disputed — may have been sound, but their intervention made it look like the Commission was tampering with the evidence to suit its political goals. The emails reveal a charged discussion between those in the frontline of biofuels research on whether indirect land use change was already taking place before 2007. In the end, it appears, the Commission’s energy czars cut the debate short. “We insist that the annex is deleted entirely,” one official, whose name has been blacked out, wrote on December 2, 2009.

“I’ve dealt with a lot of agencies in my time, and I can’t recall seeing one so opaque,” says Gabriel of ClientEarth.
There were other eyebrow-raising incidents. Those following the biofuels debate had long awaited a report commissioned by the Commission’s trade unit. Researchers at the Washington-based International Food Policy Research Institute (IFPRI) had fine-tuned a powerful global economic database called GTAP to help in their work, and promised the deepest exploration yet into the complex global ramifications of biofuels. This, several EU officials predicted, would be the final word in the debate.

Needless to say, it wasn’t. The report, which appeared on March 24, concluded that Europe’s biofuels strategy would do little of the damage it had been charged with. But when experts began to look at the data that had been fed into the study by the Commission’s energy officials, they were surprised by what they found.

For example, key assumptions played down the contribution traditional biofuels would make towards the EU’s 10 percent goal, while simultaneously pushing up the role of other types of less-damaging renewable energies, such as electric cars and advanced biofuels made from waste.

Most striking was the assumption that by 2020, 20 percent of all new cars sold would be electric — a figure which massively exceeds most reliable forecasts.

The European Automobile Manufacturers’ Association predicts 3 to 10 percent of European cars will be electric in 10 years. The Commission itself launched its electric vehicle strategy in April with a forecast of a 1 to 2 percent share for electric cars and a similar figure for hybrids. When it comes to assessing the environmental damage of biofuels, the Commission had apparently asked its researchers to use a five-fold exaggeration of its own electric car forecasts.

Other problems emerged. The Washington researchers based their modelling on the assumption that about 15 percent of biofuels used in Europe in 2020 would be less-damaging “second generation” fuels brewed from straw and crop residues rather than grain. But numerous European Commission forecasts, most notably its Strategic Energy Technology plan
of October 2009, predicted that the technology needed for second-generation biofuels production would only begin to come on stream “around 2015-20.”

“A public authority is always obliged to be factually correct,” says Bernhard Wegener, professor of law at Germany’s University of Erlangen-Nuremberg. “It is always a breach of that obligation if somebody willingly and deliberately feeds wrong information into the decision-making process.”

Last week, as Brussels baked under the hottest temperatures this year, the author of the IFPRI report, David Laborde, attempted to explain his methods to a fractious crowd of commission officials and critics, among them T&E’s Urbancic and Grabiel of ClientEarth.

Standing before his slideshow in a Commission meeting room, Laborde navigated a delicate line as Grabiel drilled into his research. No, said Laborde, he didn’t think European officials had fed him biased assumptions, or at least he wasn’t in a position to judge. And yes, he was “relatively optimistic” the policy would have a “slightly positive” effect on climate change.

But in one area, he clearly disowned the assumptions the Commission had given him — that almost half the EU’s new thirst for biofuels would be quenched with bioethanol, which has much better climate credentials than biodiesel. The Commission predicts a 55/45 split between biodiesel and bioethanol in 2020 but “if you look at the trends, we’re not going to reach this target,” Laborde said. “It would be more like 80/20.”

Some officials looked uncomfortably around them, or at the floor, apparently eager to move on.

POLICY CHANGE?

Rumours have now begun to emerge of a deliberate campaign. Two EU sources say Commission officials coached lobbyists on how best to attack the emerging science of indirect land use change.
The biofuels industry continues to argue that the science is so poorly understood that it would be premature for Europe to change its goal.

Environmentalists counter that amid such uncertainty it would be foolish to continue. “I was never happy with this 10 percent target, and I’m still not happy,” says Bas Eickhout, a Dutch Green group politician who previously worked as a renewable energy analyst. “We’ll have to consider how to deal with the factor of indirect land use change, and let’s put in place a review clause, acknowledging that the science will become more and more clear.”

The European Biodiesel Board says it is ready for a debate as long as the oil extraction industry comes under the same intense scrutiny as biofuels. “Let’s have that debate, but let it be fair,” says secretary general Raffaello Garofalo. “Nobody is talking about the indirect effects of oil. Look at what’s happening in the Gulf of Mexico with BP. Or we could talk about impacts in the Niger Delta.”

If a proper public debate does ever happen, even more difficult questions may emerge. What gives Europe the right to lecture developing countries on how they should use their land? After all, Europe has spent millennia deforesting its lands and is one of the major historical culprits behind climate change. Why impose tighter standards for the vegetable oils that are burnt in cars than those that are used in the kitchen? How do we account for waste animal fats that are as likely to end up in cosmetics and beauty products as they are in the fuel tank of a car?

Biofuels have become the first real test-case for a post-oil era in which food, animal feed, fuel and chemicals compete for land in a new bio-economy. Whatever conclusion Europe reaches “may set the agenda for sustainable land use for the future”, says Eickhout. “It touches on social issues, environment issues, trade issues, energy issues and more.”

Even without a debate, the likelihood of a policy shift in Brussels has grown. After 20 years in German politics, Guenther Oettinger is the kind of man who loathes controversy and policy dysfunction. Many of the architects of the biofuels policy were replaced in an overhaul in January.

“We promote only sustainable biofuels and take the phenomenon of indirect land use very seriously,” he said in a written response to Reuters. “This is why we have launched several
studies on this. If it is confirmed that indeed that there is a serious problem related to indirect land use, we may adapt our legislation.”

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