Journal of Oil Palm &

2. A Coasean view of the climate change

The dispute about palm oil and climate change, I suggest, is being conducted on terms that are too narrow. The green NGOs rightly perceive world greenhouse gas emissions as a root cause of much climate change. Oxford economist Paul Collier cautions, though, “Typically in an attempt to find a solution to a problem people look to its causes, or yet more fatuously, to its *root* cause. However, there need be no logical

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Source: MPOC & APOC, "Palm Oil Development and Performance in Malaysia" (February 2010)

for instance, have made it plain that they will not sacrifice their economic growth rates on the altar of GHG control.[5] Stocks of capital and of natural resources, in effect, wealth, are required for a country to adapt to climate change.[6] The countries that choose economic growth over GHaloueof hHG vti66-2(c)-7(r)3(i)18((t)-) Tm [(S)7oTm [(t)- , r GHalouf gouer GHalouwaf ooffG 397.68 T

oils and fats (see figure 1). Globally, palm oil output is spreading, but it remains quite concentrated. Malaysia and Indonesia are the two main producers. Between them, these two countries accounted for over 85 percent of global output in 2008.[8]

Factors beyond rising wealth and population have added impetus to the growth in palm oil output. The palm oil sector has conducted a vigorous R&D effort. Partly as a result, during the last two decades, new uses have appeared for both palm oil and its by-products. Uses now include many food and grocery products, cosmetics, surfactants, diverse industrial products, and biofuels. In fact, 50 percent of all packaged products sold in grocery sold today contain palm oil.[9]

Output is likely to continue to rise. On the demand side, global population and wealth will climb. On the supply side, output per hectare also seems likely to go on climbing. Therefore, by about 2050, total production may be roughly double that of today. In the future, other equatorial regions, like Latin America and Africa, may also become more important growers.

Table 1

Source : MPOC & APOC, "Palm Oil Development and Performance in Malaysia" (February 2010)

These trends have already provided a substantial boost to the Malaysian and Indonesian economies. The sector as a whole accounts for about 7-8 percent of Malaysia's total GDP.[10] In Indonesia, palm oil plantations contribute about 1.6 percent of GDP.[11]

For both of these countries, the sector is a major source of export earnings:

The palm oil sector has been a major contributor to the export earnings of the producer countries. In Malaysia, the export value of palm oil and its derivatives rose from RM 2.98 billion (USD 903 million) or 6.1 percent of national total in 1980 to RM45.61 billion (USD 13.8 billion) in 2007. During the Asian financial crisis during 1997/98, palm oil was the top foreign exchange earner, exceeding the revenue derived from crude petroleum and petroleum rner,

programs to promote advanced biofuels. The resulting disputes have sparked a demand for

Small differences in assumptions about what is 'typical' can make large differences in the study findings. For instance, one recent study showed that palm oil-based biodiesel, depending on prior land use, can either produce net GHG reductions almost immediately, or that it can take hundreds of years to do so.[19] Further, the world is not static; markets, institutions, and infrastructure are all changing. They do so in ways that scientists find hard to measure and economists find impossible to predict.

Accounting for Indirect land use change (ILUC) is especially vexing. Producing biofuel can cause emissions as new land is opened to replace the crops diverted from food to fuel. Palm oil's high yield per hectare means that it is likely to have a smaller ILUC effect than other oil seed feedstocks. Also, the oil palm is often grown on soils unsuited to other crops.[20] This feature is a plus in comparing its ILUC effects.

Yet the models used by the European Commission take no account of ILUC.[21] The Commission has proclaimed that it intends eventually to account for ILUC effects in its standards, but it has postponed any doing so until 2016. The EPA has taken the opposite tack. Indeed, EPA rightly states that it could not validly certify that a biofuel meets the emission standards without calculating the indirect land use impacts. That the effects are uncertain, it notes, does not imply that they were unimportant.[22]

It is, therefore, useful to juxtapose the claims of the two regulators. The EPA can strongly support its claim that GHG measurements that ignore ILUC are of little value. The European Commission can strongly back its claim that ILUC is as yet too poorly understood for estimates based on it to carry much weight. Each agency's defense of its own approach effectively indicts that of the other. The only honest conclusion is that neither regulator actually has a valid basis for its policies.

4.3. A question of standards

Further, the regulatory standards appear to be as arbitrary at the 'measurements' that they are used to judge. Take for instance the EU's standard.

> *From a legal point of view, the 35% criterion is chosen arbitrarily. There is no specific scientific consensus saying it should be 35% rather than 30% or 40%. The 35% threshold, however, ensures that domestic rapeseed oil will qualify with a small margin but that the default greenhouse gas saving of palm oil biodiesel and soybean biodiesel—the main foreign competitors to domestic rapeseed biodiesel— will not. This is one principal effect of the directive: it effectively closes future market expansion for the main biodiesel competitors.*[23]

The same point can be made about the EU's 50 percent standard for 2017. It applies just as well to the new U.S. standard, which is also 50 percent. The rationale for any of these numbers seems to rest on thin air.

True, EPA claims to find benefits from GHG emission abatement that range from $0.6 to $12 billion yearly.[24] On closer inspection, though, the study on which EPA rests this claim is deeply flawed. Two errors in it are easy to spot.

First, the analysis is likely to have underestimated the costs of switching to advanced renewable fuels. A recent study of the National Research Council found that the rapid commercialization of advanced biofuels is unlikely to occur.[25] By inference, the costs of meeting the current standard may very well exceed those assumed by EPA. So far, EPA has been shown to be overly optimistic about the pace of progress in this area.

Second, EPA has admitted to basing its benefits for GHG abatement on estimates of avoided *global* harm from climate change.[26] The United States, though, as discussed above, is a highly developed country with a temperate climate. As such, it is much less exposed to harm from climate change than