



## SIGN UP FOR YOUR CLIMATE CHANGE LOYALTY CARD!

***Eating Oil: Food supply in a changing climate***, a major new report launched today, 10th December, by Sustain and Elm Farm Research Centre (EFRC) takes a comprehensive look at how far our food travels and our dependency on imports and on fossil fuels to produce, process, package and distribute food [1] [2] [3]. It shows how our food is travelling ever further both within the UK and through international trade.

Airfreight of food has expanded significantly and in the UK, the distance that food is transported by road increased by 50 per cent between 1978 and 1999. The food system now accounts for between a third and 40 per cent of all UK road freight. The distances involved in the distribution of fresh produce can be demonstrated by looking at a traditional meal. If bought at a supermarket, many ingredients will have been imported and could have travelled, cumulatively, over 24,000 miles. However, choosing seasonal products and purchasing them locally at a farmers' market, for instance, could reduce the total distance to 376 miles, 66 times fewer food miles [4].

This means our food supply is:

- ***Vulnerable***: The oil supplies that fuel the food system could be exhausted by 2040 [5]. In many regions oil production has peaked and most reserves lie in the Middle East. Food security is also threatened, for example, even if all UK fruit production was consumed in the UK, of every 100 fruit products purchased, only 5 will now have been grown in the UK.
- ***Inefficient***: For every calorie of carrot, flown in from South Africa, we use 66 calories of fuel. The huge fuel use in the food system means more carbon dioxide emissions which means climate change and more damage to food supplies as well as other major health and social problems.
- ***Unsustainable***: Even organic supplies are becoming hugely damaging as imports fill our shelves [6]. One shopping basket of 26 imported organic products could have travelled 241,000 kilometres and released as much CO<sub>2</sub> into the atmosphere as an average four bedroom household does through cooking meals over eight months [7].

Other problems highlighted include loss of nutrients in food, increased incidence and spread of diseases like Foot and Mouth, and major animal welfare problems. Poor countries producing food for distant markets are not necessarily seeing benefits through increased and often intensive production for export. The report reveals how such trends could be reversed through industry, government and public action.

The report's author, Andy Jones says *"The food system has become almost completely dependent on crude oil. This means that food supplies are vulnerable to increases in petroleum prices or any shortfall in oil supplies, as demonstrated during the fuel protests in the UK in 2000. Food distribution is also a major contributor to climate change and other forms of pollution. The environment and society cannot continue to bear the costs. We need to invest, now, in regional and local food systems combined with fair trade initiatives that will bring about a more secure, sustainable and fair food system."*

- ends -

**Also in the Media Pack: Summary of report (attached); press release for printout (attached); case studies for graphics; list of endorsing organisation and supporting quotes. A public information leaflet will arrive through the post.**

**Contact Andy Jones or Vicki Hird at Sustain 020 7837 1228 or mobile: 07903 478 249**

### Notes to Editors

1. *Eating Oil: food in a changing climate*, is packed with examples, diagrams and data and includes a set of recommendations for action. It cost £30 (£12 to individuals and non-profit organisations). A public information leaflet will also be available. The report is published by Sustain and Elm Farm Research Centre and written by Andy Jones.
2. **Sustain: The alliance for better food and farming** advocates food and agriculture policies and practices that enhance the health and welfare of people and animals, improve the working and living environment, promote equity and enrich society and culture. Sustain represents around 100 national public interest organisations working at international, national, regional and local level. Web: [www.sustainweb.org](http://www.sustainweb.org).
3. **Elm Farm Research Centre** is an international research, advisory and educational organisation based in the UK. The business of EFRC is to develop and support sustainable land-use, agriculture and food systems, primarily within local economies which build on organic principles to ensure the health and wellbeing of soil, plant, animal, man and his environment. Web: [www.efrc.com](http://www.efrc.com).
4. See **Case study 1** below
5. Medea – European Agency for international information, 2001. Oil Reserves. at - <http://www.medea.be/en/>
6. One way to reduce organic food miles is to increase UK production. **The Organic Targets Campaign** rally and lobby will take place on 23 January 2002 to encourage government to adopt an organic action plan with a target of 30% agricultural land to be organic by 2010. Such an action plan would reduce the UK's current reliance on imported organic foods. For more information please contact Annie Seeley on 0207 837 1228, mobile 07958 033 945, email: [otbrally@sustainweb.org](mailto:otbrally@sustainweb.org).
7. See **Case study 2** below

## Case study 1: Three very different meals

### Menu 1 – imported ingredients (apart from sprouts)

Product	Origin	Distance (Miles)	Mode of Transport	Quantity (kilograms)	Energy consumption (megajoules)
<b>To Britain</b>					
Chicken	Thailand	10691	Ship	5	5.0
Runner Beans	Zambia	4912	Plane	1	26.1
Carrots	Spain	1000	Lorry	2	1.4
Mange Tout	Zimbabwe	5130	Plane	0.5	13.6
Potatoes	Italy	1521	Lorry	5	5.2
<b>To Distribution Centre</b>					
Sprouts	British	125	Lorry	1	0.1
5 imported items		625	Lorry	13.5	0.7
<b>To Store</b>					
		360	Lorry	14.5	0.6
<b>Total</b>		<b>24364</b>			<b>52.7</b>

### Menu 2 – imported ingredients (apart from meat and sprouts)

Product	Origin	Distance (Miles)	Mode of Transport	Quantity (kilograms)	Energy consumption (megajoules)
<b>To Britain</b>					
Runner Beans	Zambia	4912	Plane	1	26.1
Carrots	Spain	1000	Lorry	2	1.4
Mange Tout	Zimbabwe	5130	Plane	0.5	13.6
Potatoes	Italy	1521	Lorry	5	5.2
<b>To Distribution Centre</b>					
Sprouts	British	125	Lorry	1	0.1
Turkey	British	125	Lorry	5	0.4
4 imported items		500	Lorry	8.5	0.7
<b>To Store</b>					
		360	Lorry	14.5	0.6
<b>Total</b>		<b>13673</b>			<b>48.1</b>

### Menu 3 – Local ingredients purchased at a farmers' market

Product	Origin	Distance (Miles)	Mode of Transport	Quantity (kilograms)	Energy consumption (megajoules)
<b>To London Farmers Market</b>					
Turkey/Chicken	Lambourn	76	Van	5	0.40
Carrots	Various	60	Van	2	0.13
Cabbage	Various	60	Van	1	0.06
Potatoes	Various	60	Van	5	0.32
Sprouts	Various	60	Van	1	0.06
Parsnips	Various	60	Van	1	0.06
<b>Total</b>		<b>376</b>		<b>15</b>	<b>1.04</b>

### Notes

1. Ratios of distances involved in supplying ingredients are as follows -

Menu 1 : Menu 2 : Menu 3

65 : 36 : 1

2. Transporting the ingredients in menu 1 requires 51 times more energy (and menu 2 - 46 times more energy) in the form of transport fuel than in menu 3.

3. For menu 1 the cumulative distance travelled by the 6 ingredients is equivalent to travelling around the world once (equator).

4. For menu 2 the cumulative energy consumption in transporting the 6 ingredients to the store is equivalent to operating a 100 Watt light bulb continuously for 133 hours or boiling a kettle 143 times!

Sustain: the alliance for better food and farming

## Case Study 2 An environmentally expensive basket of imported organic food products

### MULTIPLE PROBLEMS

TEL 920 1853 7415

**Hidden Costs – What a bargain!**  
 These are the some of the costs not included in the price of these imported organic products

	CO2 (grammes)	Distance (kilometres)
✚ DUTCH CUCUMBER 0.5 kg	10	100
✚ DANISH BUTTER 0.5 kg	24	1189
* ITALIAN LEMONS 0.4 kg	43	1738
* SPANISH PEPPERS 0.6kg	58	1542
* SPANISH CELERY 0.6 kg	58	1542
* SPANISH AUBERGINE 1.2 kg	131	1542
✚ AUSTRALIAN BEEF JOINT 1.6 kg	343	21466
✚ NEW ZEALAND ONIONS 1.8 kg	414	22992
✚ WASHINGTON STATE APPLES 3 kg	489	16307
* SICILIAN POTATOES 5 kg	771	2448
✚ 3 BOTTLES NEW ZEALAND WINE 3.6 kg	828	22992
→ ARGENTINIAN GARLIC 0.2 kg	1263	11082
→ TANZANIAN HONEY 0.5 kg	2114	7419
→ ZAMBIAN MUSHROOMS 0.5 kg	2253	7905
→ KENYAN SALAD ONIONS 0.6 kg	2327	6804
→ CALIFORNIAN BABY SPINACH 0.6 kg	3001	8774
→ CALIFORNIAN CHERRIES 0.6 kg	3001	8774
→ GUATEMALAN BROCCOLI 0.9 kg	4505	8782
→ CALIFORNIAN STRAWBERRIES 1 kg	5001	8774
→ THAI RUNNER BEANS 1 kg	5434	9534
→ MEXICAN AVOCADOS 1.1 kg	5606	8941
→ CHILEAN ASPARAGUS 1 kg	6648	11663
→ CHILEAN GRAPES 1 kg	6648	11663
→ MEXICAN CHERRY TOMATOES 1.8 kg	9173	8941
→ NEW ZEALAND BLUEBERRIES 1 kg	10738	18839
→ SOUTH AFRICAN BABY CARROTS 2 kg	10969	9622
<b>SUBTOTAL</b>	<b>81,853</b>	<b>241,375</b>
Shopping trip of 8.3 km in an average car	1,826	8.3
<b>TOTAL</b>	<b>83,679</b>	<b>241,383</b>

#### SIGN UP FOR YOUR CLIMATE CHANGE LOYALTY CARD!

Transporting these products to you has made a significant contribution to climate change by releasing the same amount of carbon dioxide into the atmosphere as an average four-bedroom household does through cooking in eight months.

Key: → - imported by plane; ✚ - imported by ship; \* - imported by lorry

## Supporting quotes for *Eating Oil: Food Supply in a changing climate*, December 2001

*'If you want a road map of how to move to a sustainable food system, this is it! Eating Oil sets out the enormous damage done by our current petrol-hungry food supply system, and shows how to replace this with relocalised food production. At a time when the future of EU agriculture is under intense scrutiny, this is a vital contribution to the debate. Packed full of up to date facts and figures, it makes its case clearly and persuasively - relocalising the food supply is good for the environment, good for jobs, good for consumers and good for farmers.'*

Dr Caroline Lucas MEP

*'As the debate about addressing climate change really begins to bite, this report is both timely and hugely informative. A real challenge to policy makers - and indeed to anyone trying to work out what sustainable food supply means in practice.'*

Jonathon Porritt, Chair, Sustainable Development Commission

*'Eating Oil shows that there is something very wrong with a global system that supplies New Zealand onions to supermarkets in the UK - and supplies them more cheaply than local sources.... Unfortunately, some organic food suppliers are following the same pattern in the form of mass production, marketing and long distance distribution.... This report provides a comprehensive analysis of the problems facing us and also the solutions - those serving the public interest would be well advised to take note and.....take action.'*

Professor John Whitelegg (Foreword), Stockholm Environment Institute, University of York

*'Eating Oil provides invaluable facts to support what is increasingly becoming the indisputable - that local food production is crucial to combat climate change and rebuild local economies. Individuals have a role, but as the report makes clear the biggest responsibility lies with government. The UK must take the lead.'*

Colin Hines, author of 'Localisation - a global Manifesto'

## The following organisations have endorsed the publication of *Eating Oil*

Agricultural Christian Fellowship  
Allergy Alliance  
Arid Lands Initiative  
Association of Public Analysts  
Association of School Health Education Co-ordinators  
Association of Unpasteurised Milk Producers  
Baby Milk Action  
Bio-Dynamic Agricultural Association  
British Heart Foundation Health Promotion Research Group  
Butterfly Conservation  
Centre for Food Policy  
Common Ground  
Compassion in World Farming  
Consumers International  
East Anglia Food Link  
Ecological Foundation  
Ecologist  
Elm Farm Research Centre  
Faculty of Public Health Medicine of the Royal College of Physicians  
Family Farmers' Association  
Farm Retail Association  
Farmers' Link  
Federation of City Farms and Community Gardens

Food Additives Campaign Team  
Food Commission  
Foundation for Local Food Initiatives  
Friends of the Earth  
Gaia Foundation  
Genetics Forum  
Guild of Food Writers  
Henry Doubleday Research Association  
Intermediate Technology Development Group  
International Institute for Environment and Development  
International Society for Ecology and Culture  
Land Heritage  
McCarrison Society  
National Federation of Women's Institutes  
New Economics Foundation  
Pesticides Action Network - UK  
Royal Society for the Protection of Birds (RSPB)  
Rural Agricultural and Allied Workers' Union (TGWU)  
Soil Association  
UK Public Health Association  
UNISON  
Vega Research  
Women's Environmental Network  
Worldwide Fund for Nature

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