

Putting the Consumer in the Emission Reduction Driving Seat

Linking Carbon Footprints, Personal emission Monitoring, and Bonus Card Systems

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The CLIMATE BONUS research consortium

<http://extranet.vatt.fi/climatebonus>



- Climate change policies have to step up, this means
 - Extension of instrumental portfolio, notably when the current portfolio gets less effective
 - Extension to hitherto minimally addressed groups and mechanisms, i.e. the production-consumption chain -> **consumers**
- Current policies addressing household consumption
 - Taxes (positive income elasticity necessitates repetitive raisingpolitical acceptance issues)
 - Standards ('floor' in market; may fail to promote progress unless large bureaucracy)
 - Labelling (sometimes effective if combined with incentive schemes)
 - Information / Education (needs repetition to keep up the effect)

Quality effects can be offset by volume effects

VATT *The consumer's potentials and obstacles* www.vatt.fi

- Consumption: ~70% of GDP and GHG emissions
- According to recent surveys Finnish consumers (like many others) are willing to do some extra efforts and/or pay a bit extra for CC mitigation efforts
- Actual mitigation efforts of consumers (e.g. as indicated by their consumption choices) do not rate as well as the declared intentions, due to:
 - lack of understandable & applicable information
 - lack of trust and transparency regarding effectiveness
 - lack of supply of low emission alternatives
 - conflicting incentives in policies
 - conflicting messages in advertisements and from opinion leaders.....conflicting ambitions

VATT *Possible solution* www.vatt.fi

Essential elements:

- Incentives for households and retailers/producers
- Flexible design and development path
- Easy understandable information and advice
- Advance innovations in information systems and (consumer) products
- Adequate monitoring and transparency
- Appealing to the ever more self-assertive consumer, who is nonetheless prepared to take responsibility

A Bonus system

- Explicit incentives for consumers and retailers
- Bonuses represent a more positive message than emission rights or taxes
- The underlying information system should be solid and credible

VAT *Towards hybrid instruments –* www.vatt.fi *choice information + incentives*

Private sector examples

- Carbon offset brokerage + background info (quality: ??)
- Green credit & bank cards, e.g. VISA, Barclays (quality: ??)
- *Carbon footprinting* + background info
 - Initiatives in e.g. UK (TESCO), France (E.Leclerc, Casino), Japan, Finland (Elovena), (quality: usually better, but still in infancy stage)
- *Green bonus cards + carbon footprinting + feedback + info*
 - The **CLIMATE BONUS** concept (quality: better, but as yet unproven)

Public sector examples

- Personal/household carbon credit budgets
 - UK – process halted
- Mixed local initiatives
 - Climate, local produce, social issues (NU Spaarpas – Rotterdam (2003), Umwelt Plus Karte (German cities))

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Examples

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working with the Carbon Trust

The carbon footprint of this product is **850g** per wash and we have committed to reduce this

By comparison the footprint of Tesco non-biological washing powder is **750g** per wash

Help to reduce this footprint. Washing at 30°C rather than 40°C saves **160g** CO₂ per wash.

850g CO₂
Compared to non-bio powder **750g**
per wash

Carbon Trust / Tesco

Courtesy – Ari Nissinen (SYKE)

E.LECLERC WATTRELOS
POINT ACCUEIL
TEL : 03.20.20.09.09
BONJOUR,

Caisse 0400090 18 avril 2008 17:08
N°lot 18/04/040 1547 05200

*BIANC. DE PEARL	1.58
*CORNICES	1.39
*MONTRES POULE	2.50
*CERUI	1.83
*PARAUNCE	1.23
*PUB. BUS ETUAGINE	1.40
BIETPINE CHINE ME	1.20
CELESTIN K CHESTED	11.10
CEMENTE	1.10
Total Poubles	34.11
Stat au base = 138,72	
(1 tonne = 4,53953 tonne)	
Espace	34.12
Route	0

MERCI
DE VOTRE CONFIANCE
A BIENTOT !

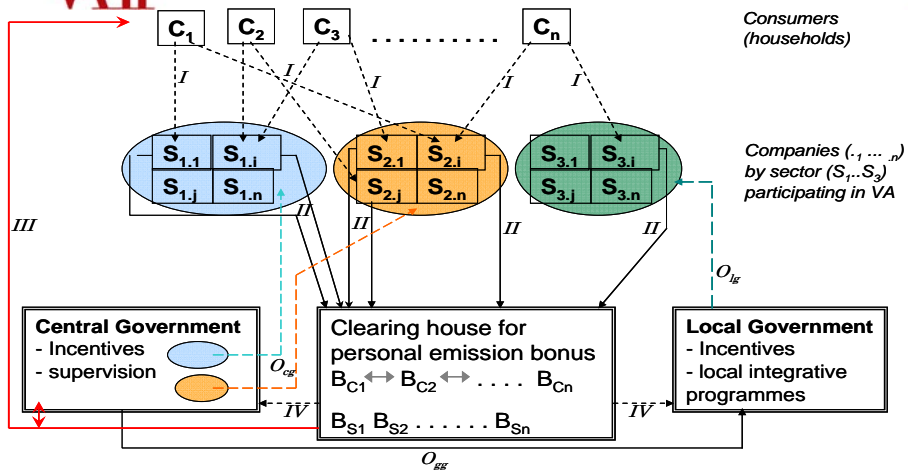
Le bilan CO₂ de vos courses est de : **45.12 kg eq CO₂**¹⁾

Plus le chiffre est faible, mieux c'est pour ma planète !!

Pour en savoir plus, visitez le site et l'annuaire de magasins en ligne
www.leclerc.com/planete

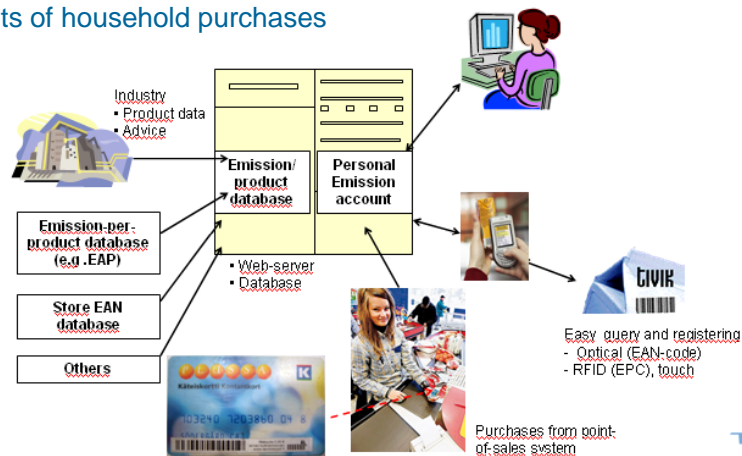
1) Ce chiffre correspond au total des données de gaz affecté de son own dépendant CO₂ des produits indiqués par une étiquette dans la liste de transaction.

Test of E.Leclerc

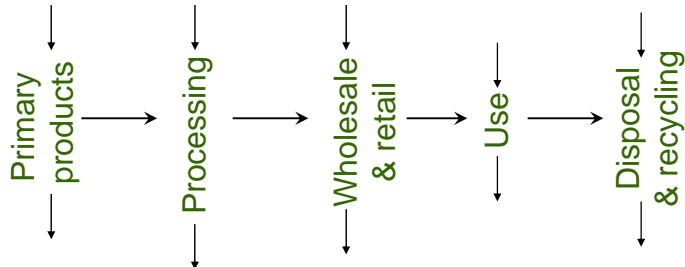


I : purchases that affect bonus account of consumer (household)
 II : crediting and debiting of personal bonus accounts as induced by purchases
 III : feedback about bonus accounts, options for internal trade \leftrightarrow , end of year settling, tax incentives
 IV : feedback about sector and company performance as basis for VA incentives
 O : incentive packages for sector voluntary agreements and local governments

A demonstration system ('mock up') will be made which will use the Ravintokoodi (Nutrition code) system as a basis for a household information & monitoring system showing (cumulated) emission contents of household purchases



Carbon footprinting across the supply chain & informational demands www.vatt.fi



- (emission) data supply of all (significant) suppliers across the chain
- standardisation & verification (at least EU level)
- Information to consumers:
 - $kgCO_2eq/product$; $kgCO_2eq/kg$; $kgCO_2eq/€$
 - Accumulated $kgCO_2eq$ per month; year (CO_2 budget)
 - Comparisons and earned (climate) bonuses



Challenges www.vatt.fi

- **Cost of carbon footprinting per product should get dramatically lower (e.g. factor 20)**
- **Combining chain specific systems into an overall view for the consumer**
- **Derived incentive system for retailers**
- **International standardisation of:**
 - Calculation procedures (LCA & verification)
 - Reliability categories
 - Data formats and data transfer protocols
 - Rules for admission of products, suppliers and retailers

VATT *What should the project produce?*

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- A data acquisition and co-ordination strategy and a data quality assurance strategy
- A demonstration version of the intended information system (a mock-up)
- A test of the usability and feasibility of the system from a consumer and from a retailer perspective
- An evaluation of the intended system's economic and environmental impacts (a sort of SCBA)
- An overview of prerequisites for the development of an actual system (while clearly recognising its different constituent parts) and recommendations for the various partners and interest groups

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Consortium

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- TEKES
- Kesko
- Elisa
- Nokia
- Stora Enso
- HK Ruokatalo
- Tuulia International

Domestic and foreign co-operation:

- Oxford University ECI (UK)
- Foundation 'Milieu Centraal' (NL)
- Manchester University
 - Sustainable Consumption Institute (UK)
- Motiva (Finnish energy agency)
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