



Japan Environmental Management
Association for Industry



ACFN Conference 2015 in Hong Kong

CFP (Carbon Footprint of Products) Communication Programme in Japan and current state of play

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JEMAI's main activities

LCA

Life Cycle Assessment

Labelling programmes



LCA consulting

- Conduct 3rd party reviews for companies
- Assist CSR reports, e.g. critical reviews
- Organise LCA seminars

LCA expert certification

- Conduct LCA Society of Japan exams

MilCA (LCA calculation software)



<http://www.milca-milca.net/english/>

Secretariat

- LCA Society of Japan (JLCA)
<http://lca-forum.org/>

Overseas support

- Provide experts to overseas countries

ISO Subcommittee Secretariat

- ISO secretariat for ISO/TC 207 subcommittees
SC3: Environmental Labelling, SC4: Environmental Performance Evaluation, SC5: Life Cycle Assessment (LCA) SC7, greenhouse gas management, and related activities.

Chemical Risk Management

JEMAI iCHEM

(International Support Centre for Chemicals Management)

- Regulatory and strategic consulting, GHS services
- Help companies comply with chemical management regulations

JAMP

The Joint Article Management Promotion-consortium



<http://www.jamp-info.com/english>

Pollution Control Managers

Air Pollution, Water Pollution, Noise and Vibration Abatement, Specific Dust Pollution, General Dust Pollution, Dioxins Pollution

Environmental Management System Auditing

Eco Products exhibition (since 1999)

Largest environmental fair in Japan, attracting over 180,000 visitors from businesses, government, academia, general consumers interested in environmental issues.



Organised every December

<http://eco-pro.com/2015/english.html>

History of CFP Communication Programme

2008 Cabinet decision made to approve the Action Plan for Achieving Low-Carbon Society.

2009 Ministry of Economy, Trade and Industry (METI) conducted preliminary feasibility study for Carbon Footprint of Products (CFP) project.

METI launched CFP project as a pilot project

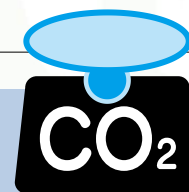
JEMAI joined the project.

2012 Pilot phase completed.

CFP project transferred to JEMAI.

Renamed as 'CFP Communication Program', with changes to improve cost-effectiveness of the programme.

- CFP Communication programme aims to:
 - visualise 'carbon-hotspots' in a product's life cycle
 - promote communication between companies and consumers, with a view to accelerate the move towards a low-carbon society.
- Programme conforms to ISO 14040, ISO 14044 and ISO/TS 14067.
- No legal framework for the programme.
 - all the activities related to the programme undertaken on a voluntary basis.

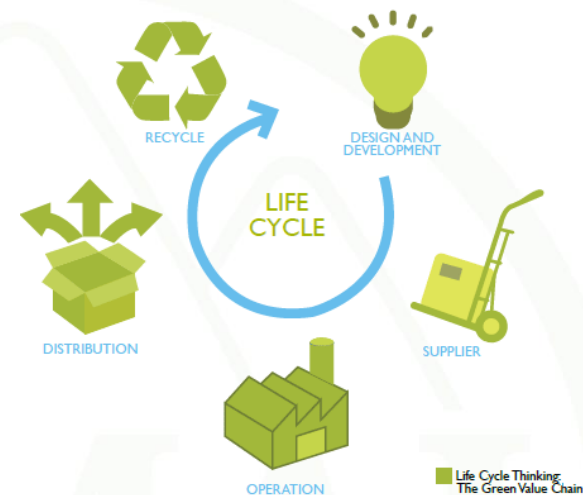




Assessment

Assessment standard of carbon footprint

- LCA is used in the CFP Communication Program to calculate the amount of GHG emissions associated with products.



Database

Three databases and one library are made available:

- Basic secondary database
- Database on distance data between countries and regions
- Heating value database
- Data library (as secondary data)

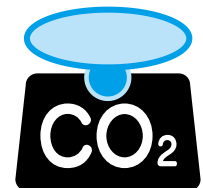


Application, Verification and Certification

Permission to use CFP logo is granted through 3-step application procedures:

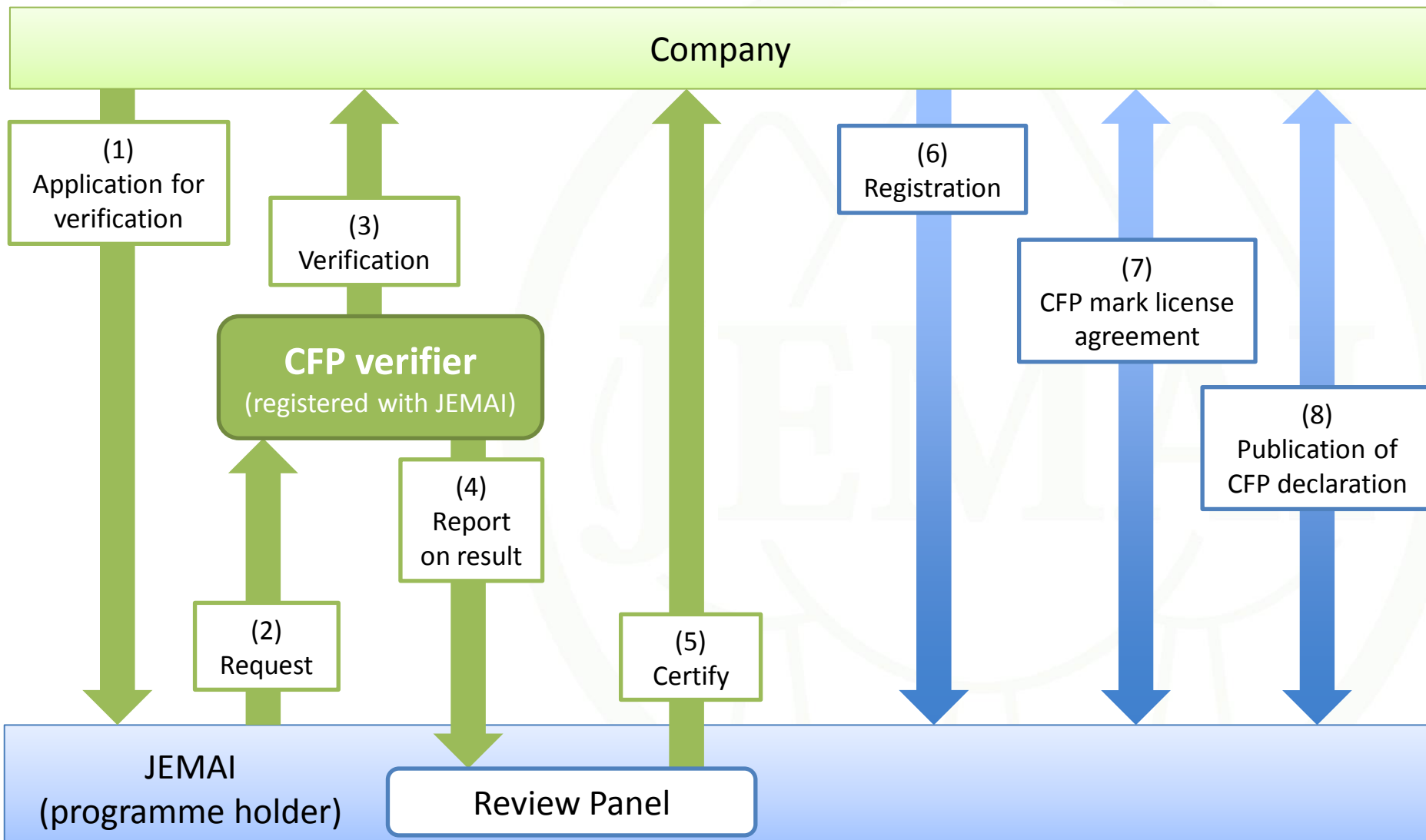
- 1) Selection of existing CFP-PCR or Development of CFP-PCR for a new product category
 - A company wishing to register its product selects a PCR from the existing CFP-PCRs.
 - If an appropriate PCR does not exist, the applicant company develops its own CFP-PCR.
- 2) CFP calculation and verification
 - Once the applicable PCR is set, the applicant company conducts the calculations for its product using the selected/developed PCR.
 - Submits the result to the third party verifier.
 - If the result passes the verification, the applicant company may apply for the registration
- 3) Application for registration and publication of CFP
 - Permission to use the CFP mark is granted to the company.
 - CFP logo may then be used for the product on the market.

- JEMAI's CFP Program offers two methods of verification:
 - Product-by-Product Verification
 - System Certification
- Both methods are third-party verified and equally valid.



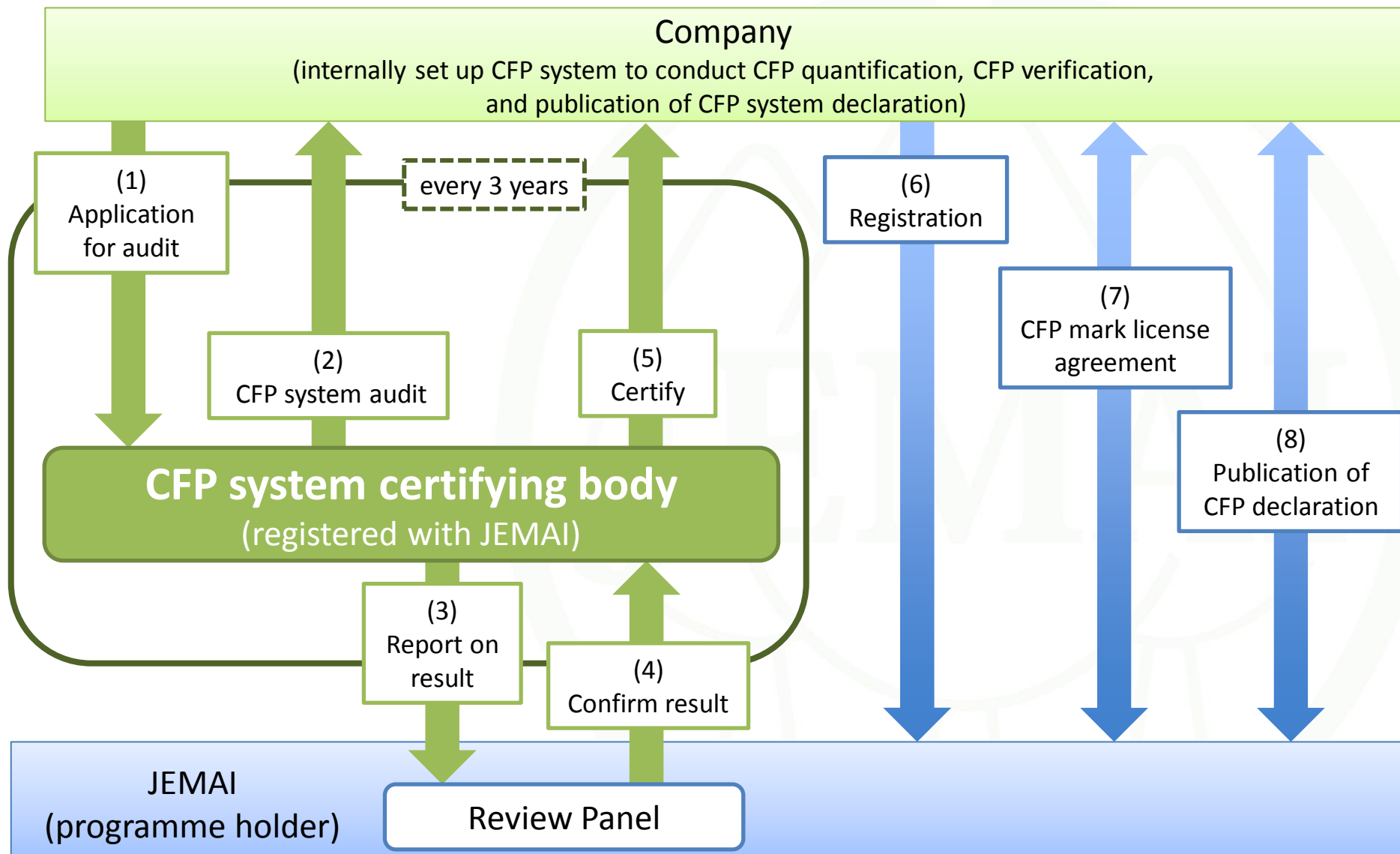


Product-by-Product Verification





System Certification





CFP publication: Internet

カーボンフットプリント 登録情報

1. 製品情報			
1.1	登録番号	CR-DH01-14003	1.7 製品写真 
1.2	製品名称 (日本語)	Galaxy Note Edge	
	製品名称 (英語)	Galaxy Note Edge	
1.3	製品型式	SC-01G (docomo model) SCL24 (KDDI model)	
1.4	製品の主要仕様・諸元	<ul style="list-style-type: none"> サイズ (約) : 高さ151mm×幅82mm×厚さ8.5mm 本体重量: 約177g ディスプレイサイズ: 約5.6インチ (2560×1440+160) バッテリー容量: 3000mAh 同梱品: アンテナケーブル、マニュアル、タッチペン 	
1.5	CFP算定単位	製品一個	
1.6	公開日	2014年10月8日	

2. 事業者情報		
2.1	事業者名 (日本語)	サムスン電子株式会社
	事業者名 (英語)	Samsung Electronics Co., Ltd.
2.2	電話番号	03-6234-2222

3. CFP算定結果およびCFP宣言の内容			
3.1	CFP算定結果 (カーボンフットプリント)	29	kg-CO ₂ e (調整処理により左記の値は内訳の合計値と若干異なる場合があります)
	内訳 (ライフサイクル段階別、プロセス別、フロー別、等)		
3.2	原材料調達段階	24	kg-CO ₂ e
	生産段階	0.53	kg-CO ₂ e
	流通段階	0.28	kg-CO ₂ e
	使用・維持管理段階	3.9	kg-CO ₂ e
	廃棄・リサイクル段階	0.023	kg-CO ₂ e
3.3	数値表示、追加情報の内容		
	数値表示	<記載内容> 29kg	<数値表示の単位> 製品一個あたり
	追加情報の記載内容	・使用想定期間: 2年間	

想定使用条件		
使用機能	想定使用時間 [h]	備考
アイドル	18.97	
音声通話	2	
音声再生	1	※1
動画再生	0.42	※2
テキストメッセージ (SMS)	0.6	
電子メール (WiFi)	0.315	※1
電子メール (LTE)	0.315	※1
Web閲覧 (WiFi)	0.19	※1
Web閲覧 (LTE)	0.19	※2

備考: PCRで規定された操作条件および手順について、測定回数を[※1]については10回から30回へ、[※2]については10回から5回へ変更して計測を行いました。(外部機関にて測定を実施)

計測対象の充電機としては、SC04アダプタが使用されました。
根拠: PCR 10-4 [本体1日あたり電力消費量: シナリオその1]

4. CFP算定結果の解釈	
4.1	CFP算定結果の解釈

- ・原材料調達段階における温室効果ガス排出量は約83%と最も多くなりました。これは、パネルや電子回路基板などスマートフォンを構成する多くの電子部品の製造について積算されているためです。
- ・このCFP値には、スマートフォン本体 (バッテリーを含む) およびタッチペン、アンテナケーブル、マニュアル、包装箱が算定対象として含まれています。
- ・使用段階については規定のシナリオを用いた場合、全体の約13%を占めています。
- ・電子部品などの原単位について一般的な値を利用しており、使用は特定の使用条件を想定した値となっておりますので、この結果は概算値としてご理解下さい。

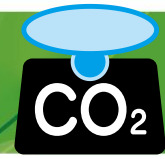
5. 算定条件				
5.1	認定CFP-PCR名称	携帯情報通信機器	5.2 認定CFP-PCR番号	PA-DH-01
5.3	利用した二次データの考え方	基本データベースver.1.01、国・地域間距離データベースを優先して利用しつつ、利用可能データ (国内) ver.1.04で補充した。		

6. 検証情報				
6.1	検証方式	個別検証方式	6.2 システム認証番号	-
6.3	検証番号	CV-DH01-14003	6.4 検証合格日	2014年10月3日

7. プログラム情報				
7.1	プログラム名	カーボンフットプリント コミュニケーションプログラム	7.2 プログラムウェブサイト	http://www.cfp-japan.jp
7.3	プログラム運営者	一般社団法人産業環境管理協会	7.4 プログラム運営者住所	東京都千代田区鍛冶町2-2-1

8	備考	-
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(※) 二次データについては、CFPウェブサイト下記ページ参照のこと。
<http://www.cfp-japan.jp/calculate/verify/data.html>



CFP publication: Product leaflet (washing powder)

カーボンフットプリントの具体例

【ヤシ油を主原料にした衣料用洗剤「セフターE 簡易パック」の場合】



毎日の洗濯からもCO₂は出ています。その半分は消費者によるものです。



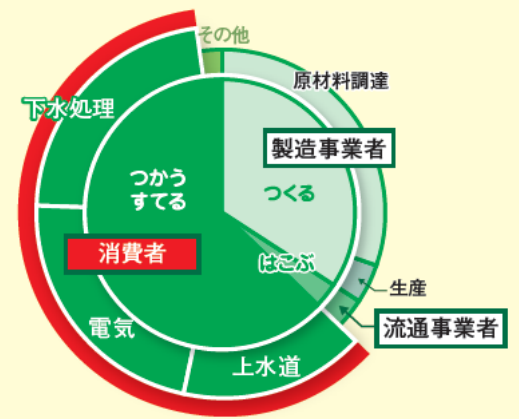
適切な水量や時間での洗濯もCO₂を削減するために大切です。風呂の残り湯の利用も、CO₂削減につながります。



CO₂の削減につながる水道水の節約や洗濯時間の短縮は、水道代や電気代の節約にもなります。

この合計をカーボンフットプリントといいます

「セフターE簡易パック」の段階別排出割合



表示例

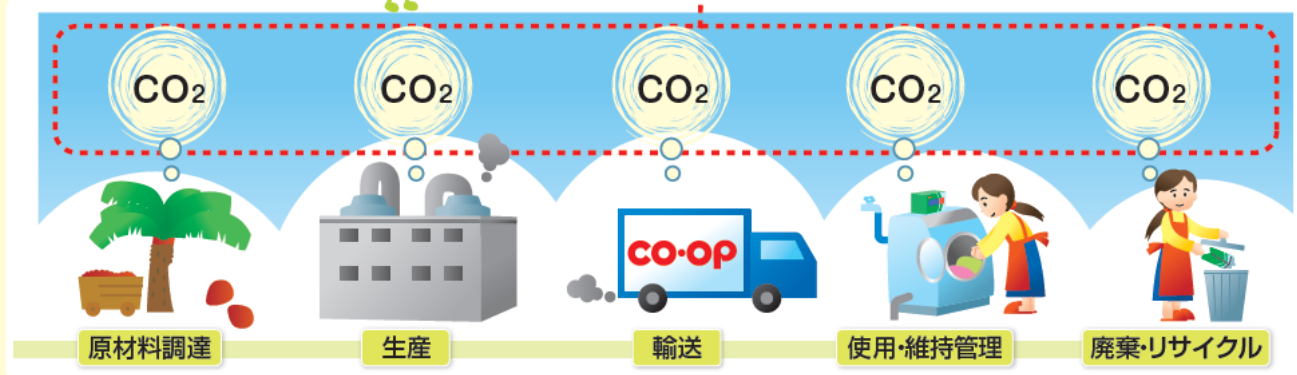
260g

洗濯1回あたり*

<http://www.cfp-japan.jp>

検証番号: CR-AC02-13009

本製品の想定使用回数は30回*です。*水位60Lの場合





Examples of CFP registered products



ASICS - Sports clothing



Japanese Consumers' Co-operative Union - Cling film



Sony Mobile Commutations – Xperia Z1



Hazama-Ando Corporation - Model building



Nippon Ham - Sausages



Denroku - Beans confectionery



Hitachi – Virtual storage platform

Companies that participate in JEMAI environmental labelling programmes





Mid-term plan (2013 - 2015)

1. Respond to international trends
 - Compliance and conformance to international standards and overseas environmental information disclosure systems
2. Create a new scheme
 - Unified operation of EcoLeaf and CFP programmes
3. Improve awareness and create demands
 - Improve awareness for JEMAI labelling programmes and market receptivity
4. Contribute to development of Low Carbon Society
5. Implement smart operation
 - Lower costs of operation



Support companies and verifiers through seminars and workshops



- **Introductory seminars & Consultations** (every 2 months) :
 - Concept, use of environmental labelling programmes, collection and quantification of life cycle data, etc, are taught. Also provided are support for starters to get first product registered.
- **Quantification method workshops** (every 2-3 months or when requested):
 - Train staff at companies which participate in JEMAI programmes.
- **Environmental labelling community** (1 or 2 a year):
 - Offer companies and verifiers the latest information on labelling programmes and LCA trends, best practices, etc. Also used as a platform for companies to exchange information.



- **Information exchange meetings for CFP licensed reviewers** (once a year):
 - Discussions and reports on the use of general purpose PCRs, how to enter formulae on application forms, correction verifications, etc.
- **Information exchange meetings for CFP system certifying bodies** (once a year):
 - Discussions and reports on revisions to the rules and specifications, etc.



Online activities

Facebook/Twitter



YouTube



E-newsletters

件名:【エコリーフ/カーボンフットプリント・メールマガジン】 2015年6月26日号

【エコリーフ/カーボンフットプリント・メールマガジン】 2015年6月26日号
 エコリーフ環境ラベルプログラム: <http://www.ecoleaf-jemai.jp/>
 カーボンフットプリントコミュニケーションプログラム: <http://www.cfp-japan.jp/>

こんにちは。JEMAI環境ラベル(エコリーフ/カーボンフットプリント)事務局です。
 事務局から、エコリーフ/カーボンフットプリントプログラム動向についてお伝えするメールマガジンをお届けします。

【コンテンツ】

★★★重要なお知らせ★★★メルマガ名の変更について★★★

- 1 「エコリーフ環境ラベル一覧」を更新しました ***NEW***
- 2 「CFP宣言認定製品一覧」を更新しました ***NEW***
- 3 各種セミナー・研修会申込受付中です ***NEW***
 エコリーフ/CFP入門セミナー: 8/7 / CFP認定研修会: 7/3
- 4 サンプル製品・ポスター等の貸し出しを行っています。

◆CFP関連情報◆

★7月24日(金)・東京 第20回日本LCA学会/LCA日本フォーラム共催 講演会
 「環境マネジメントにおけるマルチクリテリア評価と意思決定」***NEW***

★JEMAI-LCA研修:入門・実践コース

★★★重要なお知らせ★★★メルマガ名の変更について★★★



Participate and support events

Year	Dates	Event names	JEMAI support
2014	August 6 - 7	経産省子供見学デー エコ学「地球温暖化からの脱出ゲーム」	Sample lending and implementation support
	August 3 and 24	湘南工科大学オープンキャンパス	Sample lending
	August 29 - 30	ワークショップコレクション エコ学「妖怪eco庵」協力	
	August 29	東京都市大学伊坪研究室 オープンキャンパス	Sample lending
	September 27	中津川ソーラー武道館	Sample lending
	September 28	湘南工科大学オープンキャンパス	Sample lending
	October 11 - 12	りふ環境まるごとフェア(みやぎGPN)	Samples and posters lending
	October 15 - November 14	東海三県一市グリーン購入キャンペーン協賛	Environmental labelling posters at 4,000 shops in campaign region
	November 8 - 9	あいち・なごやESD交流フェスタ(東海三県一市グリーン購入キャンペーンブース)	Panel display
	December 11 - 13	エコプロダクツ展ブース出展 & 12/12 エコプロダクツ展セミナー	Booth and seminar
2015	May 25 - 2	尼崎市立消費生活センター 消費者月間展示	Sample display
	June 3 - 5	兵庫県立武庫之荘総合高校 文化祭	Panel and sample display
	June 6 - 7	東京都市大学伊坪研究室 学園祭	Panel and sample display
	July 18 - 19	東京都市大学伊坪研究室 オープンキャンパス	Sample display
	July 19, August 2 and 23, September 27	湘南工科大学 オープンキャンパス	Sample display
	July 29 - 30	経済産業省子ども霞が関見学デー(エコが見える学校協力)	Sample display
	August 29	東京都市大学伊坪研究室 オープンキャンパス	Sample display
	August 29 - 30	ワークショップコレクション(エコが見える学校協力)	Sample display
	September 11 - 16	IGAS2015(印刷関連展示会)	Panel and sample display
	October 1 - 31	東海三県一市グリーン購入キャンペーン	Environmental labelling posters at 4,000 shops in campaign region
	October 31	かなんまつり(みやぎGPN)	Panel and sample display
	October	りふ環境まるごとフェア(みやぎGPN)	Panel and sample display
	December 10 - 12	エコプロダクツ2015	JEMAI booth



Dissemination of information to overseas

- JEMAI participate in seminars and conferences abroad to exchange information with key organisations working in the similar fields
 - PEF World Forum
 - EU's Product Environmental Footprint pilot projects
 - GEDnet





Strategies & Review Working Groups

WG for Printed Matter

- Revisions made to CFP-PCRs for Publications, Commercial Printed Matter, and Printed Matter for Advertising & Business Use
 - Basic units expanded and are now easier to work on
 - Scope expanded
 - Handling of composition of printed matter clarified and basic units set accordingly
 - Further revisions planned

WG for Building Materials

- Reviewed possible use of EcoLeaf and CFP Programmes in GP Law
 - Exchanged information on LCCM (Life Cycle Carbon Minus) Houses and LEED with members
 - Discussions on developing a general purpose PCR for building materials





Easing effort to develop new PCRs

- General purpose PCRs for Processed Food, Houseware, Recreation and Miscellaneous Goods, and Event developed
- Cover a wide range of products and services, eliminating the need to develop many new PCRs.
- PCRs can now be developed in working groups without incurring fees to JEMAI

Houseware, and Recreation and Miscellaneous Goods



Hibiku – Hakata doll



OralPeace - Toothpaste



Lion - Kirei Kirei handwash



Shiseido - Tsubaki shampoo



Ehime Shinbun - Newspaper

Processed food



Yamazaki - Double soft bread



Denroku - Beans confectionery



MSS - Rusk waffle



Nisshin Flour Milling - Oh My Pasta



Yokohama Green Peas - New Year dishes



Pasona Farm - Bagna cauda



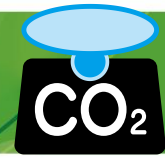
Kokubun - Tinned nibbles



Marumoto - Dried and roasted sardine

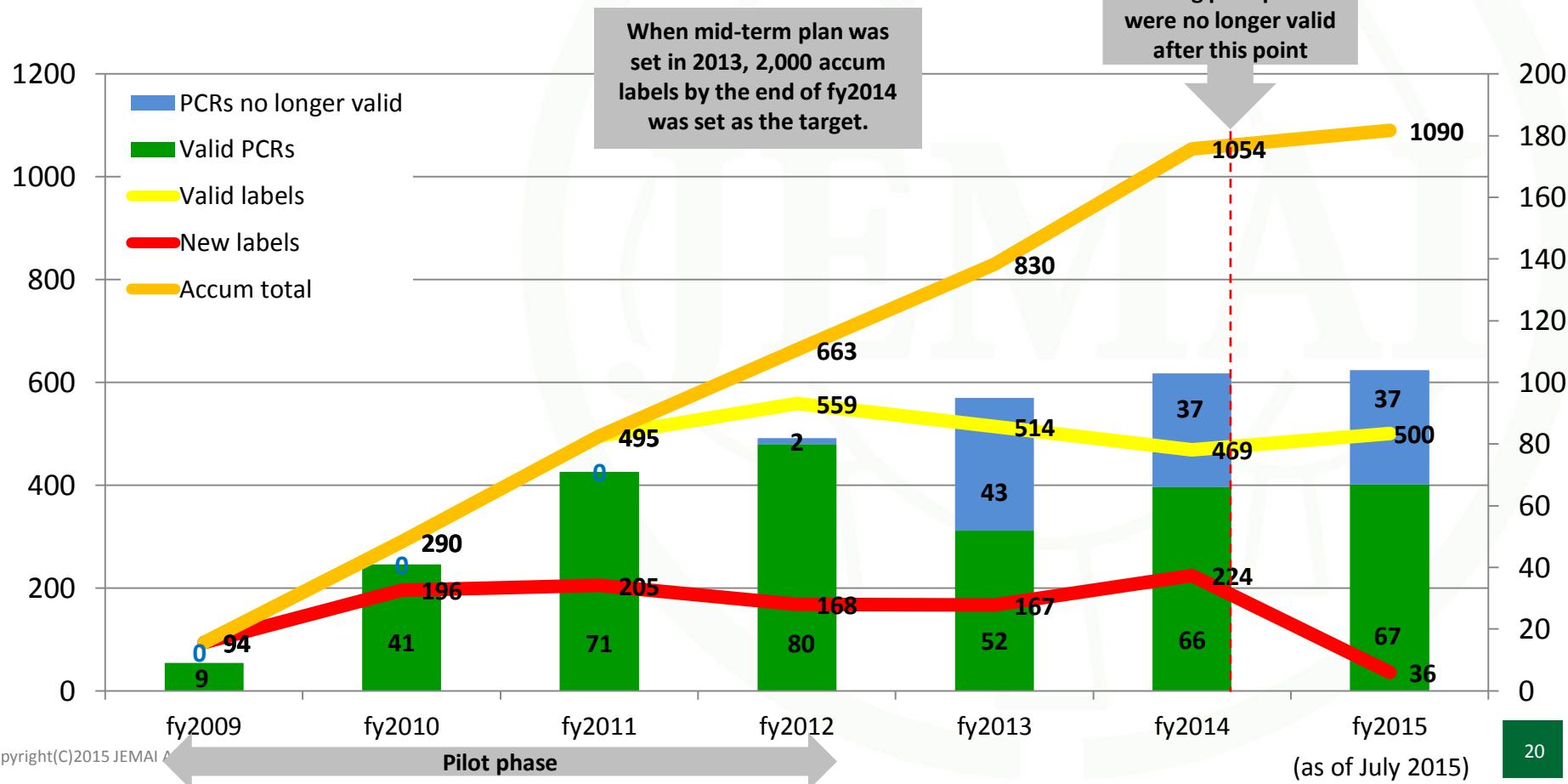
Event

Quantification being discussed



No of PCRs and labels over the years

- Labels published during the pilot phase were valid for 3 years. The numbers of labels becoming invalid in fy2013 & fy2014 were larger than the number of newly published labels, hence the number of valid labels was down.
- Because all labels published during the pilot phase were no longer valid after the end of fy2014, those currently valid have been published after the pilot project.
- The number of PCRs hasn't increased much, but the product categories for quantification have greatly increased with the introduction of the general purpose PCRs.

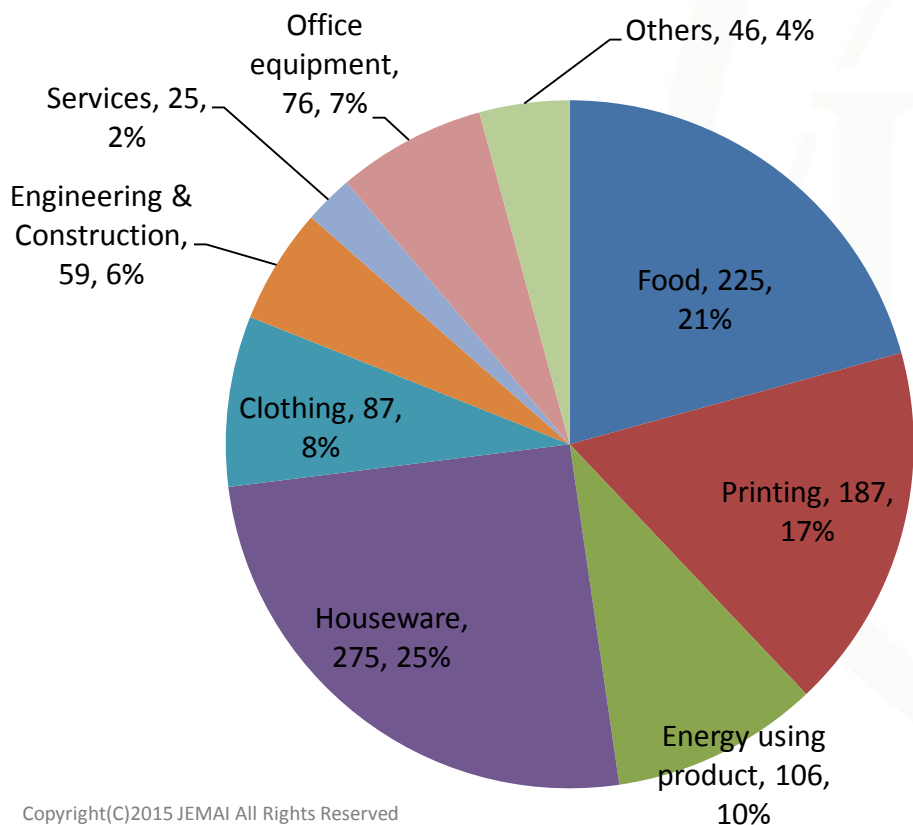




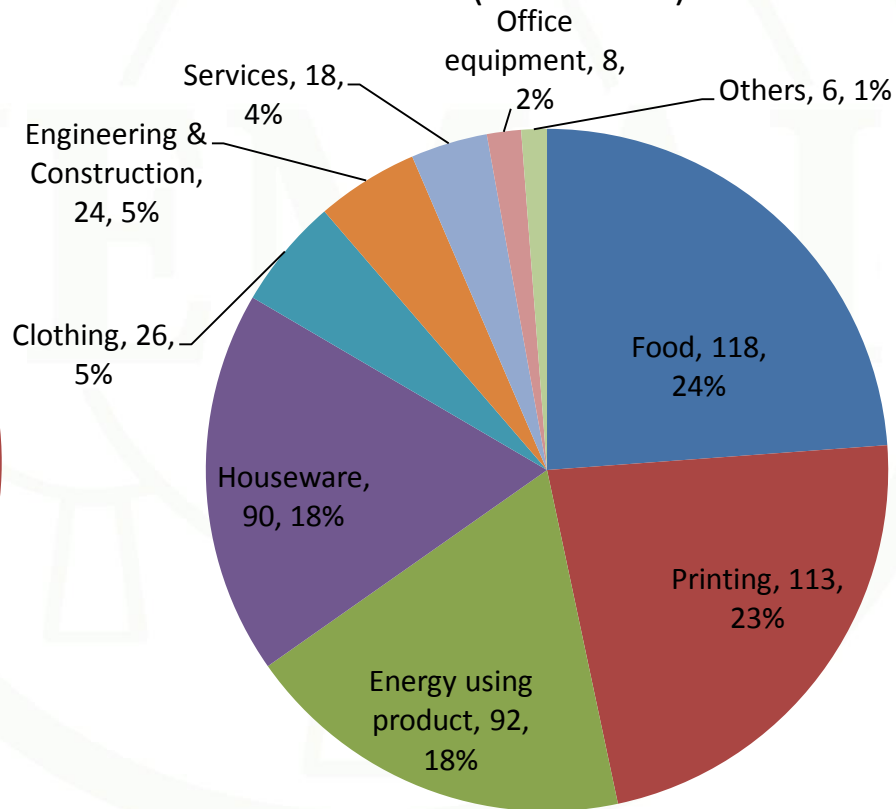
CFP registered products

- With the introduction of the general purpose PCRs and the Acorn Reward Scheme, many food and houseware products have been registered.
- Many labels were no longer valid after the end of fy2014, but the component percentages remained similar.

Categories of registered products
(accumulated total)



Categories of registered products
(valid labels)



(as of July 2015)

Survey on reduction mark

- **Background:**

Third party environmental declarations based on LCA do not necessarily mean the registered products & services are environmentally superior.

Thus, need for 'a reduction mark' to more clearly appeal environmental considerations has often been requested.

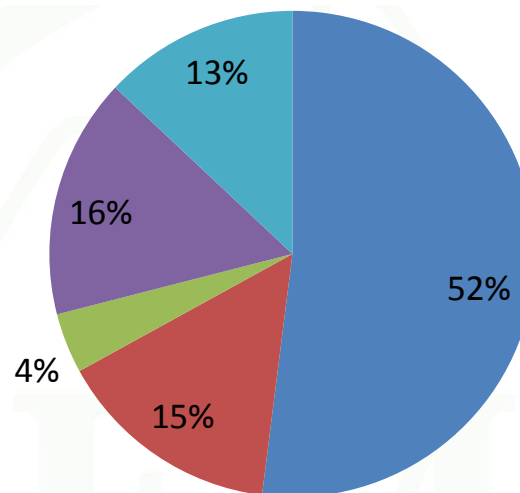
Both advantages and disadvantages as well as challenges to adopt a reduction mark must be reviewed.

- **Method:** Internet

- **Survey period:** Mid-January to mid-February 2015

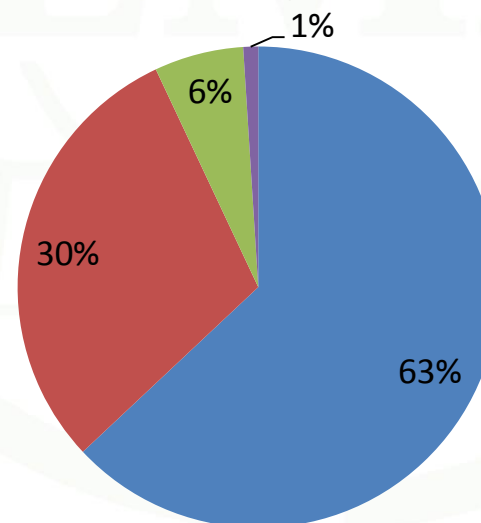
- **Valid responses:** 145

Respondents breakdown



- Companies with products registered with EL/CFP
- Companies with no products registered with EL/CFP
- Consumers
- Researchers and consultants
- Others

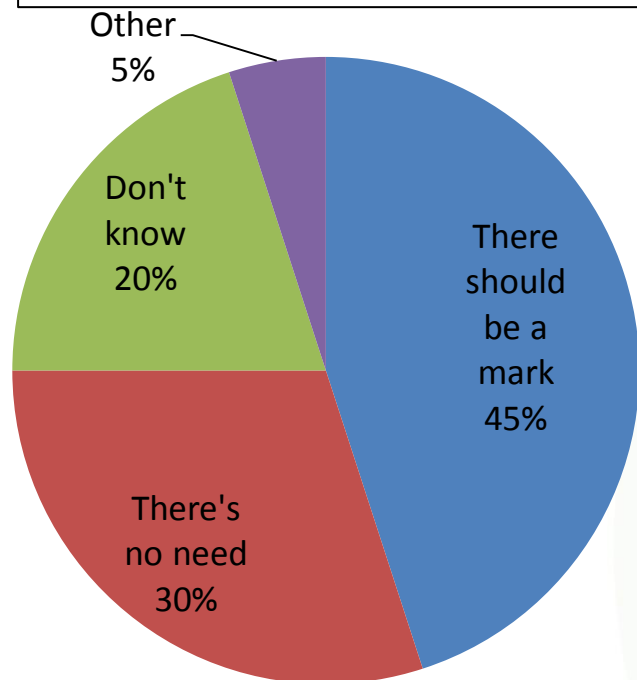
Experience in LCA quantification



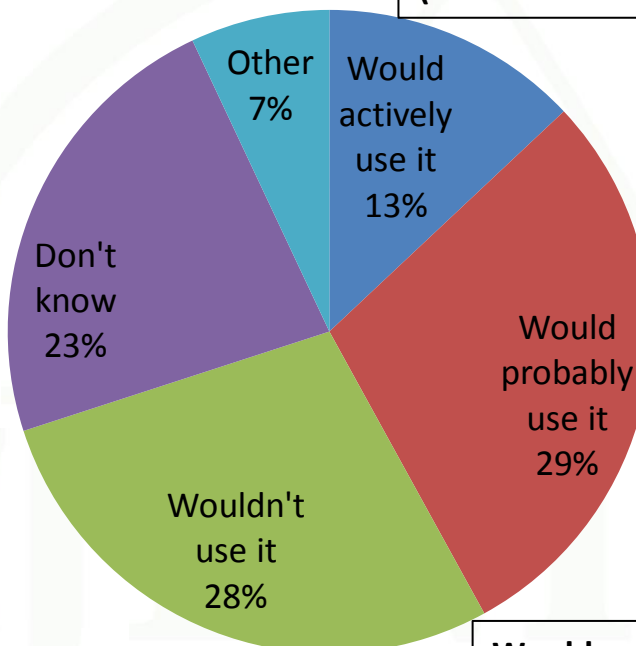
- Have experience in quantification
- Know general rules but no experience in quantification
- Know the words but not in details
- Have no knowledge

Survey on reduction mark – Results

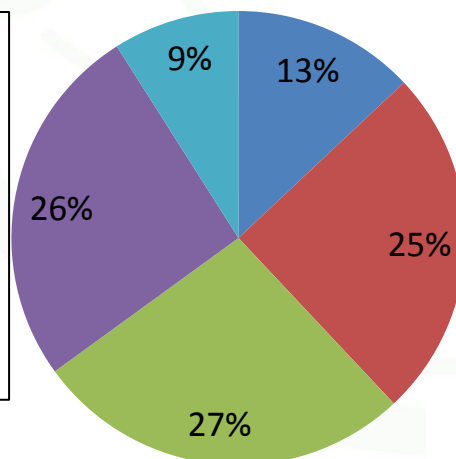
Should there be a reduction mark?



Would you use a reduction mark? (answers from the companies)



Would you use a reduction mark? (answers from the companies with products registered with EL\CFP)



- Would actively use it
- Would probably use it
- Wouldn't use it
- Don't know
- Other

Next action:

1. Working Group is being set up to discuss:
 - challenges and issues
 - case studies and other similar programmes
 - review possibilities
2. Announce outcome at next Environmental Labelling Community



Recent trend in Japan

Concept of “life cycle thinking” is slowly introduced to government policies and corporate actions.

- **Green Purchasing Law:**

- Basic principles state “when purchasing goods and services, they must be selected by their ability of reducing environmental impact throughout products lifecycle”.
- The GP Law Premium Criteria Guidelines, set up in 2013, state that products and services are verified and registered with CFP/EcoLeaf programmes equivalents to meet the criteria.



- **Ministry of Land, Infrastructure, Transport and Tourism**

- In their programme to be completed by 2030, Ministry carries out the life cycle CO2 evaluation and display by implementing the zero energy support for houses & buildings and the promotion of LCCM (life cycle carbon minus) rating of houses.



- **Japan Business Federation (Keidanren)**

- Keidanren’s Low-Carbon Society Action Plan requires that the electrical & electronics industry collects, evaluates, and publishes the amount of CO2 emission reduction contribution by their products.



- **Kawasaki-City**

- Kawasaki mechanism has been set up which visualises the amount of CO2 emission reduction contribution by the technologies adopted by the companies in the city and which leads to mechanisms for companies to be properly evaluated in the market.



Thank you for listening.

For further information

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JEMAI

<http://www.jemai.or.jp/>



EcoLeaf

<http://www.ecoleaf-jemai.jp/>



CFP communication program

<http://www.cfp-japan.jp/>



Life Cycle Assessment Society of Japan (JLCA)

<http://lca-forum.org/>



MiLCA (LCA Calculation software)

<http://www.milca-milca.net/>