

The Environmental Challenges of Clarion



clarion®

AGUSTIN PECINA QUINTERO
March , 2006

www.clarion.com



Summary:

1. Clarion Co. Outline

2. Clarion Mexico Outline

3. Clarion Mexico Main Products

4. Baselines for Environmental Challenges

5. Implementation Progress

6. Concerns

7. Actions, Perspectives, Challenges

Corporate Outline

Headquarters	35-2, Hakusan, 5-chome Bunkyo-Ku Tokyo	
Date of Establishment	December 18th, 1940	
Capital	26,100 Million Yen	
Employees	9,211 persons (group total)	
Net Sales <small>of Mar, 2004)</small>	<small>(As Millions of Yen</small> 185,530	<small>Thousands of U.S. Dollars</small> \$1,662,600

Major Production Items

- *Auto-PC*
- *Car Audio Systems*
- *Car Speakers*
- *Car TV & Video Systems*
- *Car Navigation Systems*
- *Mobil CB Transceivers*
- *Radio & Audio Systems for Buses*
- *Rear View Monitor Cameras & TV Systems*
- *Precision Device (DVD,MD,CD, Cassette, Tuner)*

Main Products



■ Auto-PC



■ HDD-Navi



■ DVD-Navi



■ McIntosh Audio



■ Mechanism



■ S-Navi



■ Combination



■ CD changer



World-wide Customers List



Overseas production sites

7 countries 10 locations

CHE
Hungary

DCOE
CDF
Dongguan, China

CXEE
Fuchen, China

CF
Nancy, France

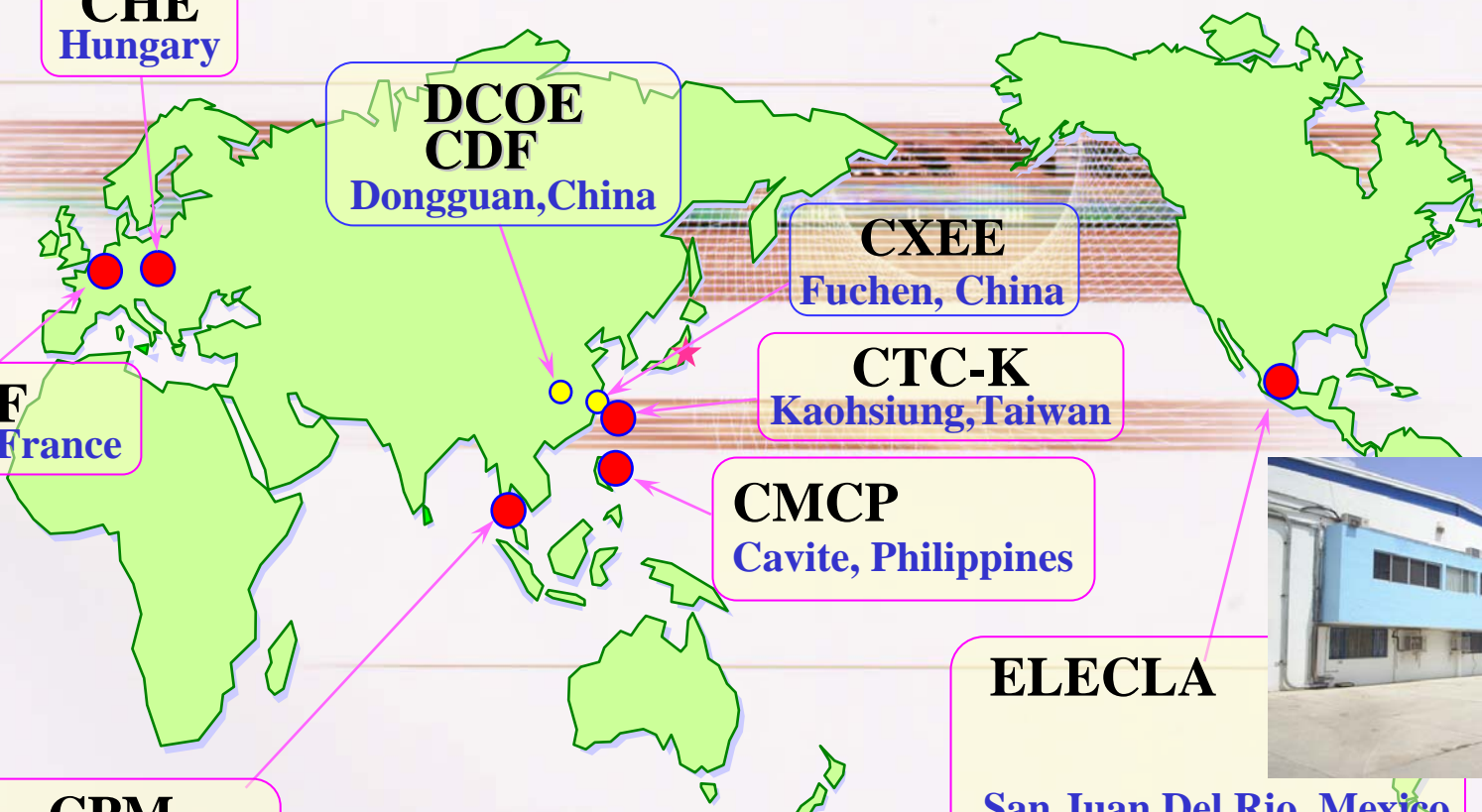
CTC-K
Kaohsiung, Taiwan

CMCP
Cavite, Philippines

ELECLA

San Juan Del Rio, Mexico
ISO-9001, ISO-TS16949, ISO-14001

CPM
CM
Penang, Malaysia



Clarion Mexico Outline

Headquarter	Camino a Santa Teresa No. 1257 Col. Jardines del Pedregal, Mexico
Date of Establishment	Dic 1983
Capital	35'000,000 USD
Gross Sales 2005	125'000,000 USD
Employees 2006	747

Clarion Mexico Customers List



Central and South America

Mexico Elecla

Clarion Latin America

Derivelca

Clarion Do Brazil

Clarion Argentina



Clarion Mexico Products

Car Audio System



Home Audio and Video

Multimedia Devices



Clarion Mexico Products

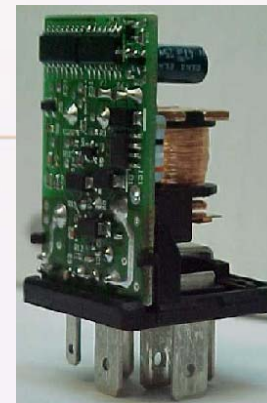
Security Systems



Pwb Manufacture



Automotive Switch's



Baselines of Clarion Environmental Challenges

EU

2003.07 ELV (End of Life Vehicle) Directive

2005.07 WEEE (Waste of Electrical & Electronics Equipment) Directive

2006.07 RoHS (Restrictions on Hazardous Substances in EEE) Directive

USA

1990 Prohibiting the use of Lead in all products except electronics

JAPAN

2001 Electronics Household Appliance recycling law

2004 Automobile recycling Law

2005 Voluntary restraint by Japan Automobile Manufacturers Association Inc.

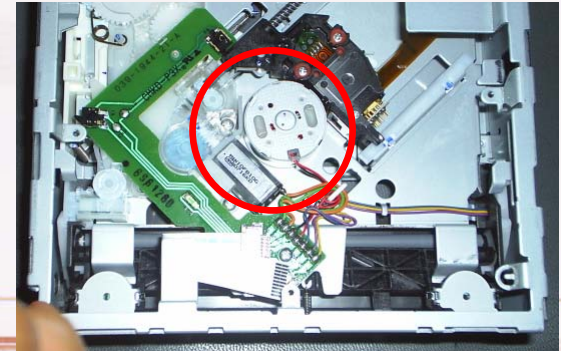
Clarion Environmental Corporate Policy

According to our environmental policy, we will comply with laws and regulations including “End of Life Vehicle” (ELV).

In order to adapt to future trends in environmental conservation, laws and regulations, we will decide the schedule of reduction and the date for abolishment, taking technical and economical aspect into consideration.

Clarion Mexico progress

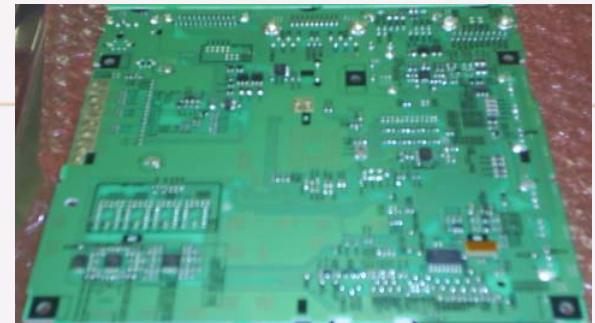
1. Cadmiun Elimination. Done



2. Hexavalent Chrome Replacement. Done



3. Lead Elimination in Main Products. In progress



Clarion Mexico progress

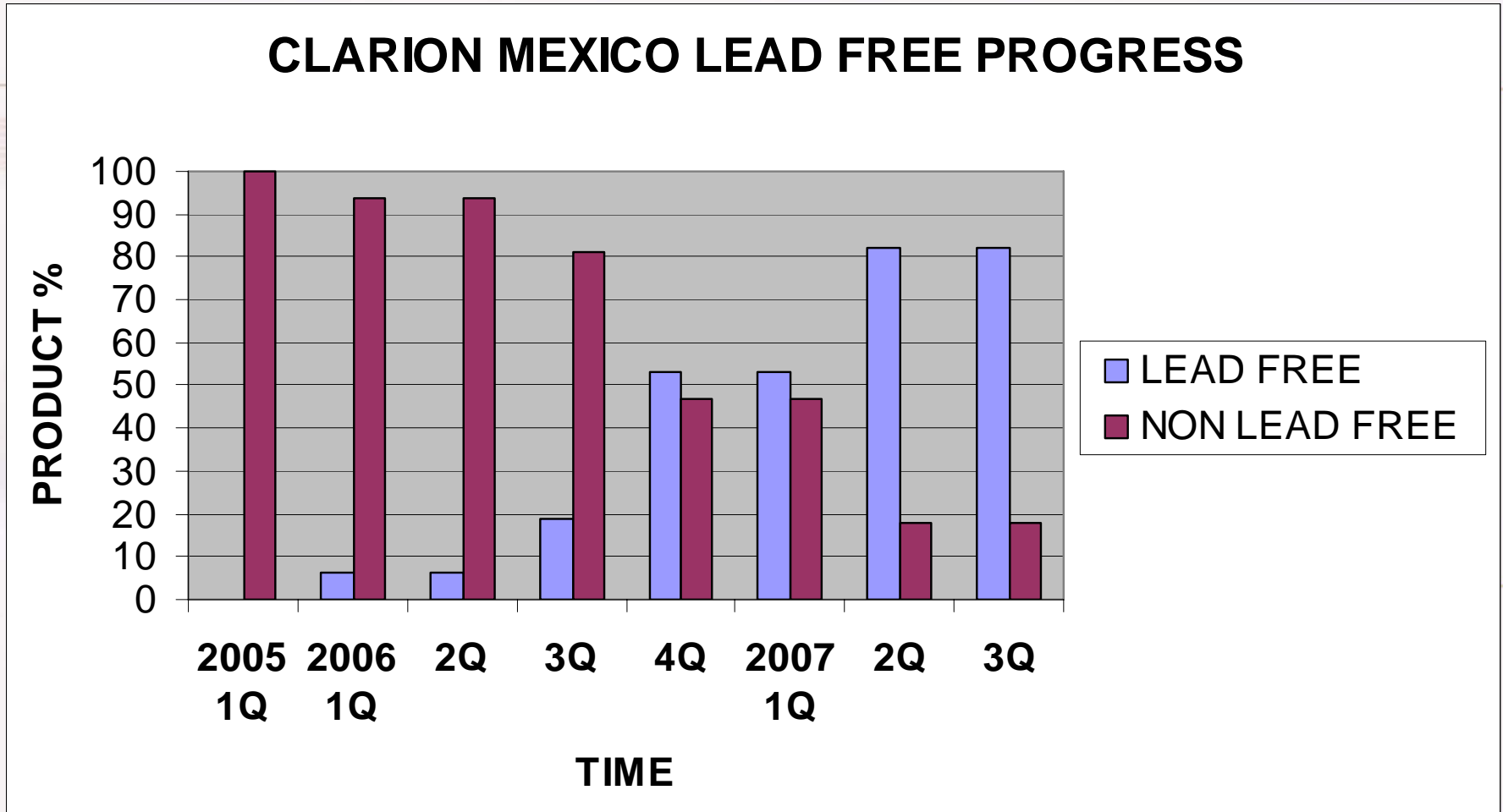
Lead Elimination Program

CLARION MEXICO LEAD FREE IMPLEMENTATION PROGRAM

Activities	timing	2004		2005		2006		2007	
		1Q	2Q	1Q	2Q	1Q	2Q	1Q	3Q
DESIGNATION OF IMPLEMENTATION COMITEE	→	[Green shaded area]		[Green shaded area]		[Green shaded area]			
IMPLEMENTATION PROGRAM (MODELS, TARGETS, BUDGET)	→	[Green shaded area]		[Green shaded area]		[Green shaded area]			
COMPONENTS REPLACEMENT BY LEAD FREE COMPATIBLE	→	[Green shaded area]		[Green shaded area]		[Green shaded area]			
DESIGN AND DEVELOPMENT, NEW MODELS	→	[Green shaded area]		[Green shaded area]		[Green shaded area]			
PRODUCTION MASSIVE STARTS	→	[Green shaded area]		[Green shaded area]		[Green shaded area]			

Clarion Mexico progress

Lead Elimination progress



Clarion Mexico Competitiveness Concerns & CEP3

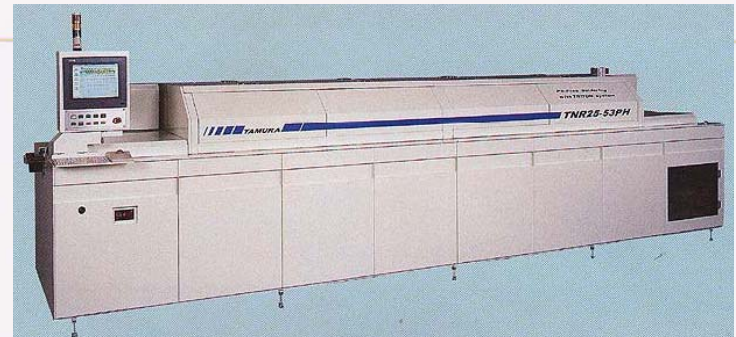
1. High cost of Consumption Materials

Cost USD	Sn63 - 37 Pb	Sn - 3.0Ag - 0.5 Cu
Solder Bar	3,9	13,0
Wire Solder	7,0	17,4
Solder Paste	36,5	69,6

2. New Investment for Lead Free Solder Process



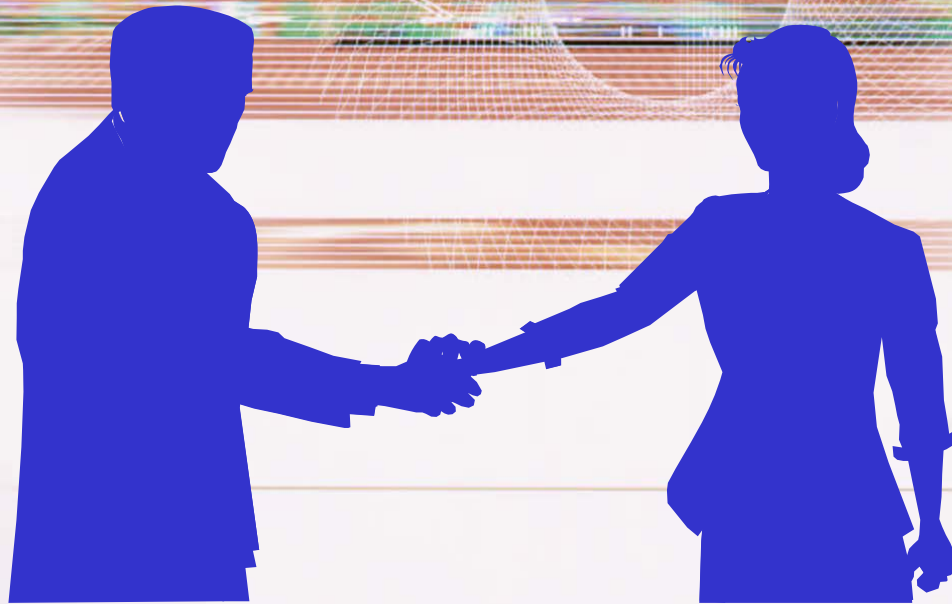
3. Lack of benefits to participating companies



Actions, Perspectives, Challenges

- 1. More information dissemination is required to all involved stakeholders**
- 2. Implement incentives to participant companies in cooperation with governments**
- 3. Gradual implementation of the CEP initiative. If mandatory, good enforcement will be needed.**
- 4. We subscribe this initiative**

Thank you very much



March 28, 2006