

*8<sup>th</sup> ICdA H&S Ctee*

*October 14<sup>th</sup> 2011*

# Statement of Compliance

- ❑ The purpose of the meeting is to address, under the applicable confidentiality rules, issues concerning cadmium and cadmium compounds producers and users and more particularly H&S issues, as reported in the Meeting's objectives .
- ❑ The minutes kept at the meeting will have to reflect all significant matters discussed during the meeting.
- ❑ No discussions will be held, formally or informally, during specified meeting times or otherwise, involving, directly or indirectly, express or implicit agreements or understandings related to: (a) any company's price; (b) any company's terms or conditions of sale; (c) any company's production or sales levels; (d) any company's wages or salaries; (e) the division or allocation of customers or geographic markets; or (f) customer or suppliers boycotts; or (g) any disclosure of information which may affect applicable rules on Competition Law.
- ❑ The International Cadmium Association, as a group will make no recommendations of any kind and will not try to reach any agreements or understandings with respect to an individual company's prices, terms or conditions of sale, production or sales levels, wages, salaries, customers or suppliers.

# Objective of H&S Com meetings

## □ Reminder:

- The H&S Ctee was set up **primarily** to assist ICdA members with the implementation of the ICdA Guidance document
- “ICdA Guidance on the management of the risk related to chronic occupational exposure to cadmium and its compounds”

## □ Source of this initiative:

- Cd/CdO risk assessment (RA) shows a conclusion that there is a risk to workers under current management methodologies (2007)
- Under the current “REACH” regulation, the same “risk management precautions” apply, for Workers and for the Environment

# Past (and future) H&S Ctees

- ❑ Launch of the committee, definition of the format and content
  - 1st Ctee, dated Nov 25th, 2008
- ❑ Measuring air quality
  - 2<sup>nd</sup> Ctee, dated March 10th, 2009
- ❑ Medical supervision adapted to cadmium risk
  - 3rd Ctee, dated June 16th 2009
- ❑ Individual and collective hygiene procedures
  - 4th Ctee, dated October 13th, 2010
- ❑ Detailed procedures regarding medical surveillance
  - 5th Ctee, dated June 8<sup>th</sup>: 2010
- ❑ Status a the REACH registration process
  - 6th Ctee, dated October 15<sup>th</sup>, 2010
- ❑ Choosing and maintaining the right PPE
  - 7th Ctee, dated June 7<sup>th</sup>, 2011
- ❑ **Implementing a prevention culture in our facilities**
  - **8th Ctee, date to be set: October 15<sup>th</sup>, 2011**
- ❑ Water treatment
  - 9th Ctee, date to be set: June, 2012 ?

# Implementation of a prevention culture

Simon Vljacic – Managing Director  
Floridienne Chimie

# OCdBIO 3 – Analysis / trends

Prof. A. Bernard - UCL



# Kunming 2011 - Eighth International Cadmium Conference





# **ICDA - 8TH HEALTH & SAFETY COMMITTEE**

**Brussels, october 14th 2011**

## **FLORIDIENNE CHIMIE**

**« Implementing a prevention culture in our facilities »**

**Simon Vlajcic, Managing Director, Floridienne Chimie**





We make everything fall into place.

## FLORIDIENNE GROUP

*WORLDWIDE 2010*

- Since 1898
- Sales: 245,2 mill. €
- Employees: 1.200
- Countries: 80
- Production sites: 30





# FLORIDIENNE CHIMIE

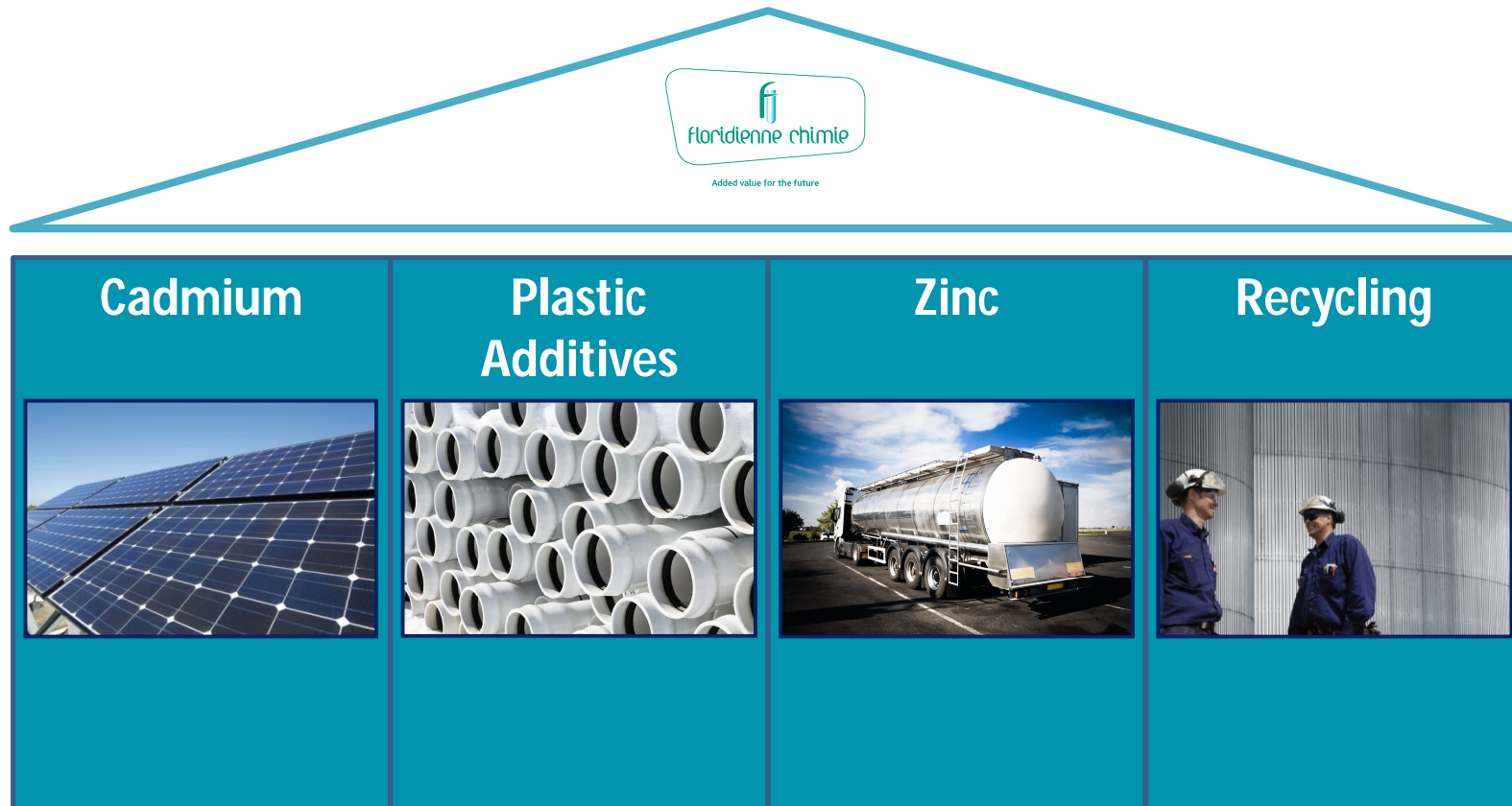
*SINCE 1928*







## 4 AREAS OF COMPETENCE





## CHEMICAL BRANCH

### *NON FERROUS METALS SALTS*

1. Cadmium

Cadmium salts

2. Plastic Additives

PVC Stabilisers, Flame Retardants

3. Zinc

Zinc salts

4. Recycling

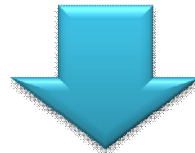
Batteries, Galvanising baths, Solar panels



## VALUE CONCEPT

### MISSION

1. To be a major producer of Non Ferrous and added value salts for our markets
2. Based on Innovation & Development
3. Respecting Quality, Environment, Health & Safety
4. To manufacture High Quality Products for a Sustainable life
5. Well integrated citizen company



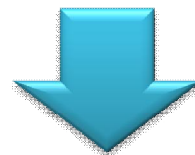
**Added value for the future**



## VALUE CONCEPT

### *VISION*

1. Driven by Passioned Qualified People
2. Respecting Floridienne's Values
3. Strive for Continuous Improvements
4. Serving Shareholders ' Interest



**Create Value**





*NEW CORPORATE IMAGE, NEW CULTURE*

**“We make everything fall into place.”**





## *NEW PRODUCTION PLANTS, more H&S efficient*







*NEW FAÇADE – Well integrated citizen company – NEW CULTURE*



Floridienne Chimie  
A new Image in the Heart of the City





## OUR FACADE UNTIL AUGUST 2011

Different  
steps



different  
architectures







## OUR TARGET - *RESTYLED HEADQUARTERS*

New ECO - facade

Smooth integration  
in city surroundings





## OUR NEW FACADE - *RESTYLED HEADQUARTERS*

**New ECO - facade**

**Wood-plastic and  
vegetable walls**







## HEALTH AND SAFETY

- Cultural change based on behavioural change.
- In 2008/2009, implementation of a safety method based on behavioural change: BAPP® developed by BST® (5-years project)

**BAPP® = Behavioural Accident Prevention Process®,  
named Goliat in our plant.**

- In 2010, implementation of the 5S method

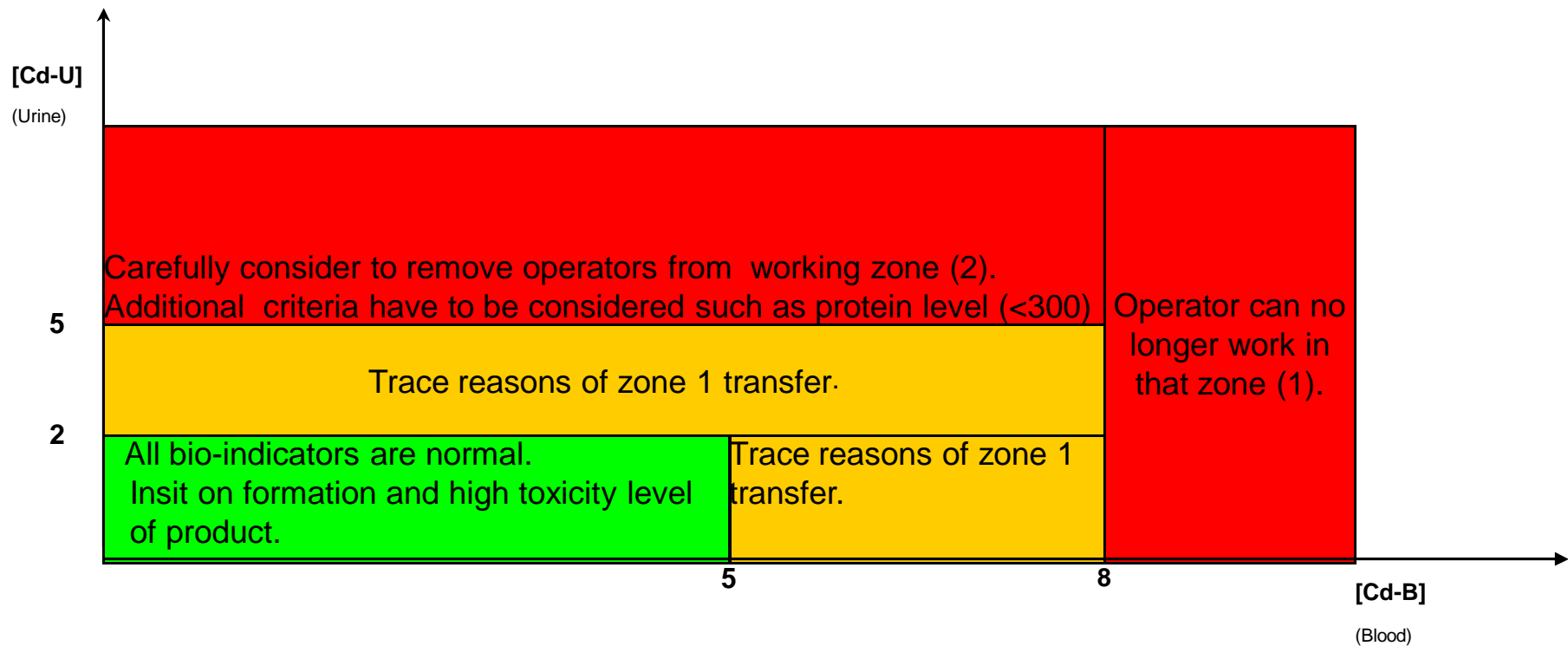


## **FLORIDIENNE CHIMIE'S H&S PREVENTION STRATEGY - BU Cadmium**

- 1. to cope with REACH's biological indicators strategy, such as applied by ICDA, and mentioned in our eSDS under Exposure Scenarii ;**
- 2. to monitor CdU and CdB of our workers ;**
- 3. none of our workers has been above Biological Indicator limit of Beta-2-microglobuline of 300  $\mu\text{g/g}$  creatinine in the last 5 years ;**
- 4. Internal Policy to take away workers from operating zone (set in place with Securex medical doctor) in line with ICDA recommendations under Exposure Scenarii**
- 5. Use the behavioural safety method to help workers respecting H&S rules**



## ICDA INDICATIVE DIAGRAMM.





## CONCLUSIONS

- **Implementing a new Safety culture is a long and slow process, as it is first of all a human process (5-years project);**
- **Ultimately, the objective is to create a common safety vision that encompasses the company's systems and include H&S at all levels**
- **Consolidate and maintain good results is very challenging as nothing is ever completely finished – refreshing the process with continuous improvements is key**
- **Improving H&S conditions is a crucial step for our industry, in Europe, today ;**





Added value for the future

**THANKS FOR YOUR PARTICIPATION**



Simon Vlajcic  
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# **Biomonitoring of occupational exposure to cadmium: survey of current exposure levels**

**Alfred BERNARD**

**Unit of Toxicology and Applied Pharmacology  
Catholic University of Louvain**

**Brussels, October 14, 2011**

## Risks of Cd-induced renal dysfunction according to urinary Cd in occupationally exposed subjects

	Cd-U ( $\mu\text{g/g cr}$ )	Risk of Cd-induced renal dysfunction (urinary RBP/ $\text{b}_2\text{-m} > 300 \mu\text{g/g cr}$ )
	< 2	none
	2-5	unlikely
	5-10	only in highly sensitive subjects
	>10	increases linearly with Cd-U

Bernard A, 1996

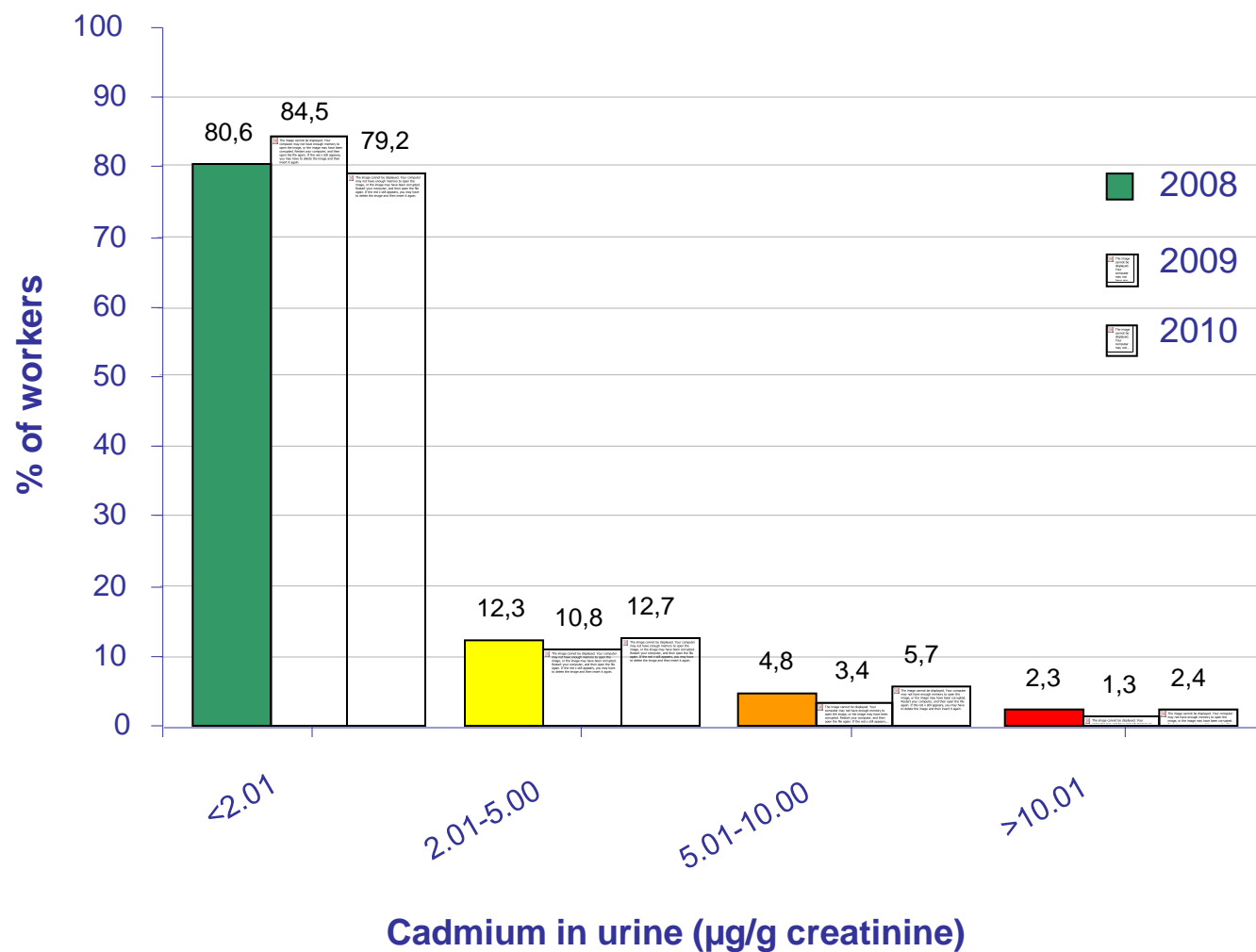
# Distribution of cadmium values in EU-sites 2008-2009 - 2010

Number of EU-sites included in the Cd biomonitoring:

- 15 EU-sites in 2008
- 15 EU-sites in 2009
- 21 EU-sites in 2010

	Cd in urine (µg/g creatinine)	2008		2009		2010	
		N	%	N	%	N	%
	0.00 - 1.00	1325	66.0	1861	70.8	1344	64,1
	1.01 - 2.00	294	14.6	359	13.7	317	15,1
	2.01- 3.00	122	6.1	148	5.6	146	7,0
	3.01 - 5.00	125	6.2	136	5.2	120	5,7
	5.01 - 7.00	57	2.8	50	1.9	59	2,8
	7.01 - 10.00	40	2.0	38	1.5	60	2,9
	>10	46	2.3	34	1.3	51	2,4
	Total	2009	100	2626	100	2 097	100

# Distribution of cadmium values in EU-sites 2008 - 2009 - 2010



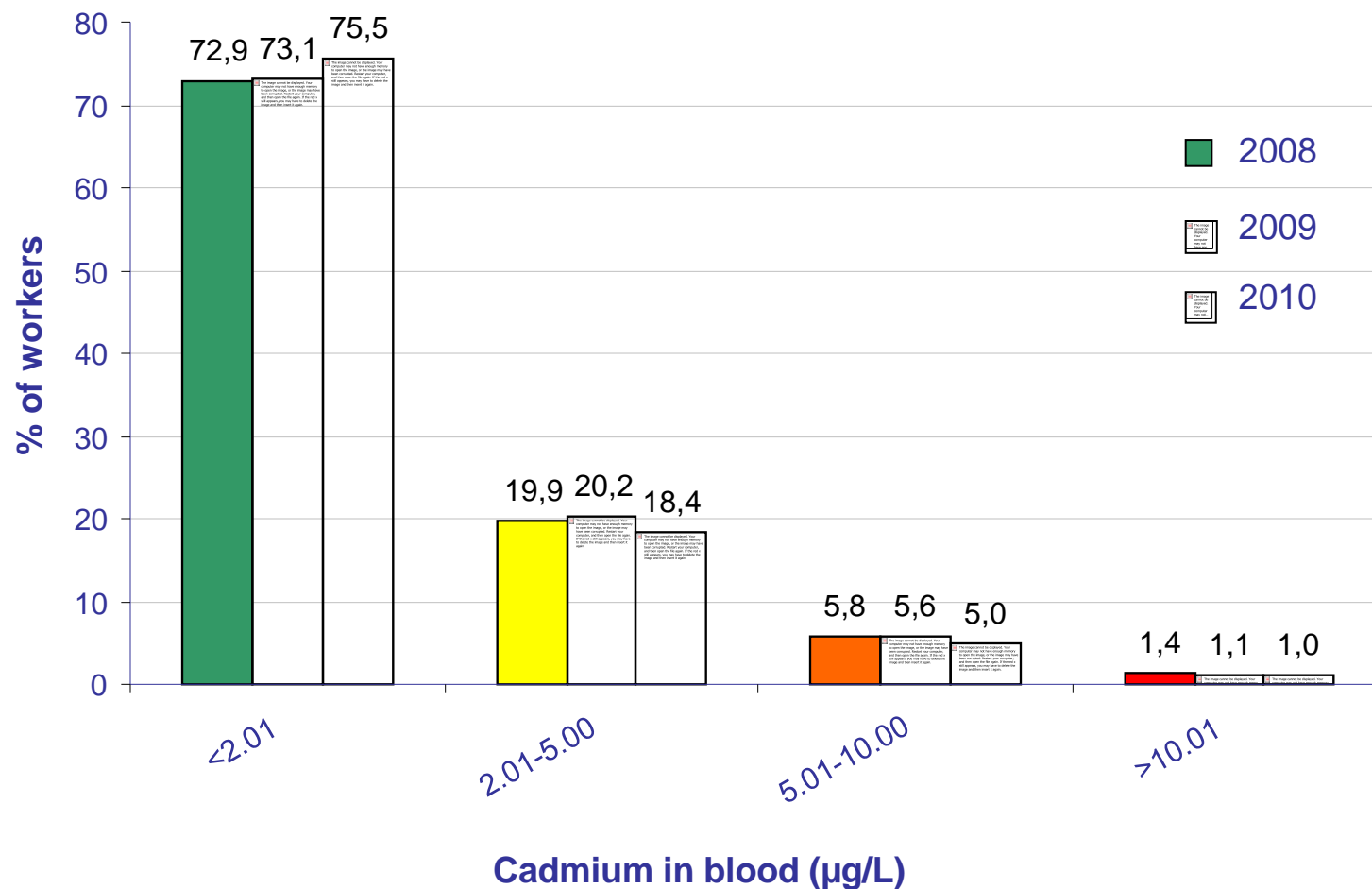
# Distribution of cadmium values in EU-sites 2008 - 2009 - 2010

Number of EU-sites included in the Cd biomonitoring:

- 14 EU-sites in 2008
- 16 EU-sites in 2009
- 19 EU-sites in 2010

	Cd in urine (µg/g creatinine)	2008		2009		2010	
		N	%	N	%	N	%
	0.00 - 2.00	1234	72.9	1376	73.1	1808	75,5
	2.01 - 3.00	174	10.3	208	11.0	264	11,0
	3.01- 5.00	162	9.6	173	9.2	178	7,4
	5.01 - 7.00	55	3.3	73	3.9	75	3,1
	7.01 - 8.00	25	1.5	15	0.8	20	0,9
	8.01 - 10.00	18	1.1	18	1.0	25	1,0
	>10.01	24	1.4	20	1.1	25	1,0
	Total	1692	100	1883	100	2395	100

# Distribution of cadmium values in EU-sites 2008 - 2009 - 2010







# Kunming 2011 - Eighth International Cadmium Conference



# History: the former Cadmium Conferences

Number	Date	Location
First	Jan 31 – Feb 2 1977	San Francisco
Second	Feb 6 – 8 1979	Cannes
Third	Feb 3 – 5 1981	Miami
Fourth	Mar 2 – 4 1983	Munich
Fifth	Feb 4 – 6 1986	San Francisco
Sixth	Apr 19 – 21 1989	Paris
Seventh	Apr 6 – 8 1992	New Orleans

# 8th International Cadmium Conference

- ❑ **Venue:** Kunming, China 10-13 November 2011
- ❑ **Theme:** Risk Management and Control of Cadmium
- ❑ **Organizational Committees:**
  - Steering Committee (Arrangements, Program, Sponsoring, Promotion): Christian Canoo, Hugh Morrow, Noömi Lombaert, Raymond Sempels & Frank Van Assche
  - Contractor 'Shanghai Metals Markets' (SMM)

# Program

## ❖ **KEYNOTE PRESENTATIONS FOR CADMIUM 2011**

- Markets and Applications
- Health Effects of Cadmium
- Environmental Effects of Cadmium
- Cadmium Regulations

## ❖ **MANAGING CADMIUM RISKS AND CONTROLLING CADMIUM EXPOSURES**

- Controlling Cadmium Exposure in the Workplace
- Controlling Cadmium Exposure in the Environment
- Controlling Cadmium Exposure in the General Population
  - ✓ Recycling of Cadmium
  - ✓ Cadmium in Consumer Products
  - ✓ Cadmium from Non-Product Sources

→ Scientific program includes the world's top experts in those different fields related to cadmium



## 第8届镉高峰论坛

8th International Cadmium Conference

10-13 November 2011,  
Kunming, China

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### Event Agenda

#### Preliminary Program Eighth International Cadmium Conference

Thursday, November 10, 2011

#### CONFERENCE REGISTRATION AND WELCOMING RECEPTION

Friday, November 11, 2011

#### Morning session

**WELCOME SPEECH** - Yaoyuan Xin, Executive Director, SMM, China

**WELCOME AND CONFERENCE OVERVIEW** - Mark Edwards, Director, Environment, Teck Resources Ltd., Vancouver, British Columbia, CANADA and Chairman, International Cadmium Association.

**KEYNOTE PRESENTATIONS FOR CADMIUM 2011** - Session Chairs: Dr. Christian Canoo, General Manager, International Cadmium Association, Brussels, BELGIUM and Patrick de Metz, Corporate Environmental and Governmental Affairs Director, SAFT SA, Paris, FRANCE.

#### Cadmium Markets and Applications

**Markets and Applications for Cadmium 2011** - Hugh Morrow, Senior Consultant, International Cadmium Association, Great Falls, Virginia, USA.

### Organization



### Media Partner



# 8th International Cadmium Conference

⊕ <http://events.smm.cn/2011cd/en>

Dedicated Website Maintained by the contractor  
'Shanghai Metals Markets' (SMM)

- ✓ Program
- ✓ Sponsoring
- ✓ Registration Forms
- ✓ Hotel Accommodations

# Why attend? (1)

- ❑ Unique opportunity to review and discuss the latest available information on cadmium's applications, market situation, and human health and environmental status.
- ❑ Allowance of interaction with numerous representatives from China, now the world's largest producer and consumer of cadmium and cadmium-containing products.



# Why attend? (2)

- ❑ Summary of the knowledge gained over the past 20 years on properly and proactively managing any potential risk to human health or the environment arising from the production, manufacturing, use, and disposal or recycling of cadmium, cadmium compounds and cadmium-containing products.
- ❑ The 8<sup>th</sup> International Cadmium Conference in Kunming is expected to lead the way to the development of a sustainable future for the cadmium industry while ensuring protection of cadmium-exposed workers, the general population, and the environment.



We look forward to welcoming you to the  
8<sup>th</sup> ICdA conference in November 2011

**See you at Kunming !**

