



MINUTES
BOARD OF DIRECTORS' MEETING BY CONFERENCE CALL
INTERNATIONAL CADMIUM ASSOCIATION
Monday, September 22, 2014 – 1600 Hours (4:00 PM) Brussels Time

1. INTRODUCTION BY THE CHAIRMAN, AGENDA & STATEMENT OF COMPLIANCE

CALL TO ORDER

The conference call meeting of the Board of Directors of the International Cadmium Association was called to order by its Chairman, Rolf Rodermund of Glencore, at 4:05 PM (1605 Hours Brussels Time). Those participating in the Board of Directors conference call included the following:

DIRECTOR

Maxime Cossette
Rolf Rodermund
Albert Hardies
Howard Winbow
Ann Vos
Patrick de Metz
Eric Nottez
Colin Thirlaway
Paul Kolisnyk
Chihiro Fujisawa

STAFF

Mik Gilles
Noömi Lombaert
Stephen Wilkinson

APOLOGY

Frank Van Assche

MEMBER COMPANY

5N Plus
Glencore for IZA
INMETCO, Inc.
James M Brown Ltd.
Nyrstar B.V. for IZA
SAFT S.A.
SNAM
Stanley Black & Decker
Teck Resources for IZA
Sanyo Electric Co. Ltd (Proxy)

ORGANIZATION

International Cadmium Association
International Cadmium Association
International Zinc Association

ORGANIZATION

International Zinc Association

The Chairman announced at the start of the conference call meeting that his contract will stop with Glencore at the end of 2014 for personal reasons. Therefore he wants to resign now already from ICdA as Chairman in order to make the transfer of the chairmanship more easily. Rolf Rodermund explained as well that Glencore will stop IZA membership but will keep the ICdA membership with

an application for Group B ICdA membership. Rolf Rodermund mentioned also that we have not longer Laurent Smits as one of the Vice-chairmans since Floridienne Chimie has been taken over by Aurea and is no longer an ICdA member.

MEETING AGENDA AND STATEMENT OF COMPLIANCE

General Manager Mik Gilles noted that ten of the association's eleven Directors were either present or were represented by Proxy and thus a quorum was established for the transaction of business. The complete slide presentation of all materials presented during the conference call is attached to these Minutes as Annex I. The agenda for the conference call is shown as Slide 2 in Annex I. Mik Gilles reviewed the proposed agenda for the Board of Directors' meeting and asked if there were any additions or corrections to the agenda as presented in Slide 2. **No changes were made to the proposed agenda.**

Mik Gilles then read and reviewed the Statement of Compliance for the conduction of the association's meetings under Belgian law. This Statement of Compliance is shown on Slide 3 of Annex I. **All Board members accepted to comply.** For the convenience of ICdA Members, a Glossary of Acronyms and Abbreviations contained in these Minutes is also attached as Annex II.

2. ADMINISTRATION

APPROVAL OF THE MINUTES OF THE JULY 25, 2013 BOARD MEETING

Mik Gilles asked for approval of the July 25, 2013 Board of Directors' meeting Minutes as issued. With no further comments forthcoming, **the Minutes of the July 25, 2013 Board of Directors meeting were approved as issued to the membership.**

OFFICERS AND DIRECTORS REPORT & MEMBERSHIP REPORT

Mik Gilles reviewed recent changes in the Directors of the International Cadmium Association. He noted that Mitsunori Takao (Sanyo Electric Co. Ltd) had resigned and that Chihiro Fujisawa had been nominated to replace him. Also Benedict Janssens (IZA(Nyrstar)) had resigned and is replaced by Ann Vos. **Upon motion duly made by Rolf Rodermund and seconded by Paul Kolisnyk, these changes in the ICdA Board of Directors were unanimously approved by the Board of Directors.**

Referring to the introduction of Rolf Rodermund announcing his resignation as Chairman, there is also the resignation of Laurent Smits (vice-chairman) due to bankruptcy of Floridienne Chimie. Currently there are those 2 vacancies (chairman and 1 vice-chairman). Given no direct consensus on the replacement for these vacancies, it is agreed to give the board members the possibility to reflect on these vacancies. Candidates for any of both functions need to be given at the latest by Monday October 6th to Mik Gilles. Mik Gilles will send out an email with call for candidates together with the latest version of the Articles of Association which describe the duties and powers of both functions. The election of the new chairman and vice-chairman will take place in another Board meeting by conference call or just before the start of the General Assembly on October 23rd in London. To be confirmed.

The Officers and Directors of the International Cadmium Association for 2013 are summarized in Slide 5 of Annex I attached.

Mik Gilles also reviewed the membership of the International Cadmium Association as of September 2014. Floridienne Chimie is leaving ICdA. Assets are taken over by Aurea but Aurea informed ICdA they do not want to become member of ICdA. An overview of potential new members was given. Mik noted that EuroDieuze – Sarp.Industries (Ni-Cd Battery recycler) had applied for membership in

2012 and had been approved by the Board of Directors. EuroDieuze has now confirmed not to enter the ICdA membership in 2015. Arts Energy (Ni-Cd Battery manufacturer), former in SAFT group, has asked to join ICdA. Glencore (Cd refiner) has resigned from IZA and will as such no longer be covered by the IZA membership as from 2015. Glencore has asked to join ICdA (will be a “group B” member). Umicore (Soldering materials) showed no interest because of low Cd volumes. Silezia (Cd compounds manufacturer) announced to be satisfied with membership of the Reach Consortium. Mik noted that the present membership of the International Cadmium Association now stands at sixteen members (leaving member: Floridienne Chimie and incoming member: Arts Energy and Glencore). The Membership Report is shown in Slide 6-7 of Annex I attached.

Upon motion duly made and seconded, these changes in the ICdA Membership and new membership applications were unanimously approved by the Board of Directors.

WASHINGTON OFFICE CLOSURE

Mik Gilles noted that the contract with Hugh Morrow is cancelled as from June 30, 2014. This contract was related to an Annual US office cost of €60.000. Depending on his availabilities, we can assign on a contract basis specific tasks to Hugh. A budget is being proposed for 2015 and 2016. Hugh will assist in next GA in October and a fare-well dinner will be organized for him to honor Hugh Morrow for his years of devotion to the Cadmium society.

It was emphasized by the board members to ensure still coverage in ICdA on the North American and International regulatory affairs. Mik noted we have updates via NAMC and Bergeson & Campbell. Mik asked also the members to inform us as well on important issues, if any.

FINAL APPROVAL TEXT ICdA CODE OF CONDUCT

The task for drafting a “Code of Conduct” was assigned by the GA on October 2013. There was a draft text proposed and circulated for comments. Those comments from the members were integrated and re-circulated. An agreement was reached on a final draft. It was remarked by the board that some typos still need to be corrected.

Upon motion duly made Howard Winbow, seconded by Paul Kolisnyk and carried by the Board of Directors, the final draft was approved with reservation of typos.

3. FINANCE

FINANCIAL REPORT: Review of final P&L-2013, forecast P&L-2014, budget 2015-2016

Mik Gilles reviewed the audited final accounts of the association for the calendar year 2013 which are shown in Slide 10 of Annex I attached. The total expenses for ICdA for 2013 were 223,810 Euros compared to a budget of 207,890 Euros. Higher expenses (Slide 10) were attributed to legal support associated with the ICdA lawsuit against the European Commission with regard to EU Directive 494/2011. Total income for 2013 was 202,021 Euros compared to expected income of 191,188 Euros. Audited results for 2013 indicate that the association’s overall balance brought forward on January 1, 2013 of 78,541 Euros was decreased by 21,789 Euros during 2013, resulting in a balance brought forward into 2013 of 56,752 Euros.

Upon motion duly made, seconded and carried by the Board of Directors, the audited financial accounts for 2013 were approved as presented.

Mik Gilles also reviewed the 2014 budget and projected 2014 income and expenses based on financials for the first half of the year. These comparisons are shown in Slide 11 of Annex I attached. Total expenses for the year are expected to be somewhat lower than originally budgeted due to the

closure of the Washington office resulting in less staff expenses. It was asked by the members to detail the headquarters staff expenses. The final 2014 income and expenses are now expected to closely balance, leaving the association's 2014 end-of-year surplus carried forward at approximately the same level as the amount carried forward at the close of 2013. The budget for 2015 was presented. Under 'program and special case studies' a budget is foreseen for another ICdA conference in 2016. Regarding membership fee ICdA 2015 a slight increase (3%) is budgeted. Last GA 2013, ICdA members were in favor for an annual slight increase.

The 2015 budget was approved by the Board of Directors but requiring detailed information regarding the headquarters staff expenses.

ADJOURNMENT

Due to huge time delay the meeting with the Board of Directors had to be closed at 6:10 PM Brussels having not discussed the activities of the association (see agenda Slide 2 in Annex I).

Due to one urgent issue (occupational exposure limit (OEL) for Cd and EN 689) the call was continued with only some left members up to 6:30 PM.

Occupational exposure limit (OEL) for Cd and EN 689

This topic on 'Occupational exposure limit (OEL) for Cd and EN 689' is brought up by the Chairman of ICdA Health & Safety committee.

An indicative (iOEL) of 4 µg/m³ resp fraction was set by SCOEL (Scientific Committee on occupational exposure limits) for Cadmium and its compounds (SCOEL SUMDOC 136, 2009). On October 1st and 2nd DG employment will have a meeting for discussion on new substances to be included in the iOEL list. The fact is if we don't act, Cd will automatically go into this list as iOEL. This is a light regulatory process in which the parliament and the Council are not involved.

Related to the above we have to look at the advantages and disadvantages of it.

In summary:

Advantage: iOEL is set at EU level and therefore member states will impose this level as binding or indicative

Disadvantages:

- iOEL cannot be used to demonstrate adequate control of risk
- currently the ongoing revision of EN 689 will make it in future very challenging to show compliance with occupational exposure limit value. Today we are according to ICdA guidance on the good way but our rules are less demanding.

The urgent question today is if we should not push for a binding OEL for Cd? Therefore we might consider it necessary to ask DG employment in the coming week for a binding OEL (socio-economic based). This socio economic based binding OEL will be higher than a health based limit (iOEL). The advantages of a binding OEL are:

- Easier to show compliance with
- Having a binding value can be used to secure an *exemption from authorisation* under 58(2) of REACH whereas an indicative OEL cannot.

In conclusion we might need to discuss the Cd case asap since DG Employment will review in their meetings of 1 and 2nd October the pending SUMDOCs and make a determination as to which substances should be pushed towards a binding OEL and which substances should be pushed towards and indicative OEL. A specific conference call in the next days will be devoted to discuss this further. Noömi Lombaert will communicate the date of this conf call.

NEXT MEETING DATES

The next General Assembly of Members of the International Cadmium Association is scheduled for Thursday, October 23, 2014 in London, United Kingdom at Hamilton Place nr 4.

As last year we will take the format of a one day meeting, with in the morning a Technical Workshop and in the afternoon a formal, short General meeting with adoption (or not) of the resolutions proposed.

Respectfully Submitted,

Approved,

Noömi Lombaert
Secretary, Pro-Tempore

Rolf Rodermund
Chairman



ANNEX I

Slides presented during the Board meeting: See attached PDF document

ANNEX II

GLOSSARY OF ACRONYMS AND ABBREVIATIONS

ACGIH	American Conference of Governmental Industrial Hygienists
AD	Application Date or Effective Date under EU REACH Directive
AGS	Ausschuss für Gefahrstoffe (German Committee on Hazardous Substances)
ASTM	American Society for Testing and Materials International
ATSDR	Agency for Toxic Substances and Disease Registry (USA)
BAT	Best Available Technology
BI	Biological Indicator(s)
CARACAL	Competent Authorities for REACH and Classification, Labeling and Packaging
CdB	Cadmium in Blood
CDC	Center for Disease Control (USA)
CdU	Cadmium in Urine
CEH	Center for Environmental Health (California USA)
ChAMP	Chemicals Assessment and Management Program (USEPA)
COM	Council of Ministers (EU)
CMR	Carcinogenic, Muta-genetic and Reproductive Toxicant
CPSC	Consumer Product Safety Commission (USA)
CRT	Cathode Ray Tube
CSA	Chemical Safety Assessments
CSR	Chemical Safety Report
D	Democrat (USA Political Party)
DG	Directorate General of the European Commission
DEQ	Department of Environmental Quality
DNEL	Default No Effect Level
DOC	Dissolved Organic Carbon
DTIE	Division of Trade, Industry and Economics (of UNEP)
DU	Downstream User
E	Environment

EB	Executive Body (of the UNECE LRTAP Treaty)
EC	European Commission
ECHA	European Chemicals Agency
EEE	Electrical and Electronic Equipment
EFSA	European Food Safety Authority of the European Union
EINECS	European Inventory of Existing Chemical Substances
ELV	Emission Limit Value
EM	Eurometaux
EMEP	European Monitoring and Evaluation Programme of UNECE LRTAP
EPA	Environmental Protection Agency (United States)
EQS	Environmental Quality Standards in EU's Water Framework Directive
ERB	Exposure-Risk-Relationship (Germany)
EU	European Union
FAO	Food and Agricultural Organization (United Nations)
FJATA	Fashion Jewelry and Accessories Trade Association (USA)
GA	General Assembly of Members of the International Cadmium Association
GACT	Generally Available Control Technology
GC	Governing Council (of the United Nations Environment Program)
GES	Generic Exposure Scenario
GHS/CLP	Globally Harmonized System of Classification, Labeling and Packaging
HH	Human Health
HM	Heavy Metals
H&S	Health and Safety Committee of International Cadmium Association
IARC	International Agency for Research on Cancer
IBRC	International Battery Recycling Congress
ICCM	International Conference on Chemicals Management (of SAICM)
ICMM	International Council on Metals and Mining
ICdA	International Cadmium Association
IFCS	Intergovernmental Forum for Chemical Safety
IGO	Intergovernmental Organization
ILA	International Lead Association
INC	Intergovernmental Negotiating Committee of UNEP Mercury Program
i-OEL	Inhalable Occupational Exposure Limit (Based on Respirable Fraction)
IOMC	International Organization for Management of Chemicals
IPSRM	International Panel for Sustainable Resource Management (of UNEP)
IRIS	Integrated Risk Information System (USEPA)
ISO	International Standards Organization
IUCLID	International Uniform Chemical Information Database
IZA	International Zinc Association
IZA-E	International Zinc Association - Europe
JECFA	Joint Expert Committee on Food Additives (World Health Organization)
JMIA	Japan Mining Industry Association
KEMI	Swedish Chemicals Agency
LRTAP	Long Range Transboundary Air Pollution Treaty under UNECE

MAK	Maximale Arbeitsplatzkonzentrationen = Maximum Workplace Concentration
MG	Microglobulin
MS	Member States (of the European Union)
MSW	Municipal Solid Waste
NAMC	North American Metals Council
NCEA	National Center for Environmental Assessment (of U.S. EPA)
NCOM	Nordic Council of Ministers
NESHAPS	National Emission Standards for Hazardous Air Pollutants (USEPA)
NGO	Non-Governmental Organization
NOEL	No Observable Effect Level
NTP	National Toxicology Program (USA)
OCdBio	Occupational Cadmium Biological Indicators Program
OECD	Organization for Economic Cooperation and Development
OJ	<i>Official Journal</i> of the European Commission
OPPT	Office of Pollution Prevention and Toxic Substances (USEPA)
OSPAR	Oslo-Paris Convention
PBT	Persistent, Bioaccumulative and Toxic
PHS	Priority Hazardous Substances under EU's Water Framework Directive
P&L	Profits and Losses
PNEC	Predicted No-Effect Concentration
PRBA	Portable Rechargeable Battery Association (USA)
PRTR	Pollutant Release and Transfer Registry
PTMI	Provisional Tolerable Monthly Intake (WHO JECFA)
PTWI	Provisional Tolerable Weekly Intake (WHO JECFA)
PVC	Polyvinylchloride
R	Republican (USA Political Party)
RA	Risk Assessment
RBRC	Rechargeable Battery Recycling Corporation (North America)
RBT	Retinol Binding Protein
REACH	Registration, Evaluation & Authorization of Chemicals (EU)
RIP	REACH Implementation Projects
ROI	Registration of Intention (EU)
RPA	RPA Ltd. (formerly Risk Policy Analysts), Consultant for EU
RRS	Risk Reduction Strategy (European Commission)
SAICM	Strategic Approach to International Chemicals Management
SCOEL	Sub-Committee on Occupational Exposure Levels
SEE	South East Europe
SGCDpro	Society of Glass & Ceramic Decorated Products (USA)
SIEF	Substances Information Exchange Forum
SMM	Shanghai Metals Market (China), Co-Organizer of the Eighth International Cadmium Conference in Kunming, China (November 2011)
SSD	Sunset Date under EU REACH Directive
STOT RE1	Specific Target Organ Toxicity after Repeated Exposures (EU REACH Classification)
SUMDOC	Summary Document

SVHC	Substance of Very High Concern (EU)
TCNES	Technical Committee on New and Existing Chemicals
TFHM	Task Force on Heavy Metals (UNECE LRTAP Heavy Metals Protocol)
TRGS	Technical Rules for Hazardous Substances (Germany)
TSCA	Toxic Substances Control Act (United States)
TTIP	Transatlantic Trade and Investment Partnership (USA-EU)
UCL	Universite Catholique Louvain (Belgium)
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
vBvT	Very Bioaccumulative and Very Toxic
WBMS	World Bureau of Metal Statistics
WFD	Water Framework Directive
WGs	Working Groups
WGSR	Working Group on Strategies and Review (of UNECE LRTAP Treaty)
WHO	World Health Organization
WSSD	World Summit on Sustainable Development
WVM	Wirtschafts Vereinigung Metalle (German Association of Metals)

ICdA - Board meeting

September 22nd, 2014, 4 pm

For the meeting, link to

<https://www1.gotomeeting.com/join/631653633>

For audio:

dial +32 2 404 03 05, or national number

Pin code 9650 2315 #

Agenda

- **Introduction by the chairman, Agenda & statement of Compliance**
- **Administration**
 - Approval of the minutes - Board meeting July 25, 2013
 - Resignations and proposed new Board members
 - Assignment of new president and vice-president
 - Membership report
 - Washington office closure
 - Final approval text ICdA Code of Conduct
- **Finance**
 - Review of final P&L-2013, forecast P&L-2014, budget 2015-2016
 - Recharge membership fee increase
 - ICdA membership fee 2015
 - Group A fee and Group B fee
- **Activities**
 - Revised ICdA Guidance
 - Bio-monitoring : OCdBio
 - Workplace air monitoring: OCdAir
 - Air emission reporting
 - Regulatory affairs
 - Advocacy
- **Next Meeting Date**

STATEMENT OF COMPLIANCE

- The purpose of the meeting is to address, under the applicable confidentiality rules, issues concerning Cadmium and Cadmium compounds producers and importers and more particularly their obligations under the several regulations.
- The minutes kept during 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 (ICdA), 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.

Administration

- **Approval of the minutes - Board meeting July 25, 2013**
- **Resignation and proposed new Board members**

Confirmed

Patrick de Metz	SAFT S.A.	Vice-Chairman
Maxime Cossette	5NPlus	
Paul Kolisnyk	IZA (Teck)	
Albert Hardies	INMETCO	
Eric Nottez	SNAM	
Colin Thirlaway	Stanley-B&D	
Howard Winbow	James M Brown Ltd.	

Request for change of representing director

Mitsunori Takao	Sanyo Electric Co. Ltd	Replace by Chihiro Fujisawa
Benedict Janssens	IZA (Nyrstar)	Replace by Ann Vos

Vacancy

Laurent Smits	Floridienne Chimie	Bankruptcy of Floridienne Chimie
Rolf Rodermund	IZA (Glencore)	Chairman of the ICdA Board of Directors

- **Assignment of new chairman and vice-chairman**
 - Articles of association require 2 vice-chairmen!

Membership report

Current membership:

- | | |
|------------------------|--|
| 1. ACME Aerospace Inc. | - Ni-Cd Battery manufacturer |
| 2. Accurec | - Ni-Cd Battery recycler |
| 3. Black & Decker | - Article-user > Ni-Cd Battery user |
| 4. EnerSys / Gaz | - Ni-Cd Battery manufacturer |
| 5. Floridienne Chimie | - Cd compounds manufacturer |
| 6. Hoppecke | - Ni-Cd Battery manufacturer |
| 7. Inmetco | - Ni-Cd Battery recycler |
| 8. IZA | - Zinc Association representing Cd producers |
| 9. JMIA | - Japanese Association > Miners & smelters |
| 10. James M Brown | - Cd pigment manufacturer |
| 11. 5N Plus | - Cd-compounds for PhotoVoltaïc applications |
| 12. Rockwood pigments | - Cd pigment manufacturer |
| 13. SAFT Batteries | - Ni-Cd Battery manufacturer & recycler |
| 14. Sanyo | - Ni-Cd Battery manufacturer |
| 15. SNAM | - Ni-Cd Battery recycler |
| 16. First Solar | - CdTe Solar Cell manufacturer |

Membership report

Changes in membership:

Members leaving

- **Floridienne Chimie** (Cd compounds manufacturer)

Floridienne Chimie went bankruptcy. Assets taken over by Aurea. Aurea informed us they do not want to become member of ICdA

Potential new members

- **EuroDieuze – Sarp.Industries** (Ni-Cd Battery recycler)

ICdA membership is postponed due to financial reasons

- **Arts Energy** (Ni-Cd Battery manufacturer)

Former in SAFT group. Has confirmed to join ICdA

- **Glencore** (Cd refiner)

Glencore has resigned from IZA and is as such no longer covered by the IZA membership.

Glencore has confirmed to join ICdA as a “group B” member

- **Umicore** (Soldering materials)

No interest because of low Cd volumes

- **Silezia** (Cd compounds manufacturer)

Is satisfied with membership of the Reach Consortium

- **Others: Doduco** (CdO), **Recylex** (CdTe), **Heraeus** (alloy)

No reply received. Small and decreasing volumes. Interest to contribute to bio-monitoring?

Administration

Washington office closure

- The contract with Hugh Morrow is cancelled as from June 30, 2014
- Annual US office cost: €60.000
- Depending his availabilities, we can assign on a contract basis specific tasks to Hugh. A budget is be proposed for 2015 and 2016.
- Hugh will assist in next GA in October.

Final approval text ICdA Code of Conduct

- Task for drafting a “Code of Conduct” assigned by GA on October 2013.
- Draft text proposed and circulated for comments.
- Comments from members integrated and recirculated.
- Agreement reached on final draft.

Required: final approval of Code by Board

Finance

- Review of final P&L-2013 and forecast P&L-2014
- Recharge membership fee increase
- ICdA membership fee 2015
- Group A fee and Group B fee

Review Final 2012–Accounts (un-audited)

	2011 Approved	2012 Approved	2013 Budget	2013 Rev. *
Staffing				
Staff & scientific support	134.949	144.023	138.203	139.335
Legal support	8.939	13.861	7.576	28.208
Adm-accounting-secr.	8.333	10.036	8.575	7.550
Total Staff	152.221	167.920	154.354	175.093
Operations				
Office-rent-operational-memberships	25.524	25.334	25.841	28.370
Meetings-travel	38.668	13.096	15.545	20.347
Total operation Cost	64.192	38.430	41.386	48.717
Special projects				
Cd conference	25.525	0	0	0
Legal case	40.000	27.850	12.150	0
Total special projects	65.525	27.850	12.150	0
Total Expenses	281.939	234.200	207.890	223.810
Income				
Membership fees	180.163	189.047	191.188	188.046
other income	39.407	532	0	13.975
Total income	219.569	189.579	191.188	202.021
Balance	-62.369	-44.621	-16.702	-21.789
Surplus/(Loss) brought forward	185.531	123.162	78.541	78.541
Surplus/(Loss) carried forward	123.162	78.541	61.839	56.752



Review P&L 2014 – forecast vs. budget

	2012 Rev. *	2013 Budget	2013 Rev. *	2014 Budget	2014 P&L Forecast 8+4	2015 Plan	2016 Plan
STAFFING							
Headquarters	79.183	78.870	86.191	98.500	80.097	85.000	100.000
Sr Cons.(North America)	54.840	53.333	53.144	35.354	23.700	6.000	10.000
Scientific Support - Health	10.000	4.000	0	4.200	0	4.000	4.000
Scientific Support - Environment	0	2.000	0	2.100	0	3.000	3.000
Legal support	13.861	7.576	28.208	9.091	12.762	10.000	10.000
Secretarial	2.500	2.575	2.500	2.652	2.500	2.700	2.800
Administration/Accounting	7.536	6.000	5.050	6.365	4.000	6.000	6.000
Total Staff Costs	167.920	154.354	175.093	158.262	123.059	116.700	135.800
OPERATIONS							
Rent/Rates/Office services (incl elect.)	12.156	12.000	12.119	12.000	11.762	12.000	12.000
Office Relocation/Refurbishment	0	0	0	0	0	0	0
Telecommunications	3.548	3.000	3.551	3.000	2.525	3.000	3.000
Postage & Exoress Services	445	839	422	839	285	500	500
IT support	1.179	1.000	680	1.000	748	1.000	1.000
Stationary and office supplies	1.766	1.629	4.942	1.829	1.391	1.500	1.500
Banking Costs	1.154	2.000	1.253	2.000	1.178	2.000	2.000
Meetings	5.172	5.000	7.681	5.500	4.465	5.700	5.900
Travel & Susbsitence	7.924	10.545	12.666	12.545	4.627	12.000	12.000
Membership	4.547	4.373	5.071	4.373	5.202	8.200	8.200
Publication	452	750	244	750	0	750	750
Taxes / Contingency	87	250	90	250	-27	250	250
Total Operation Costs	38.427	41.386	48.717	44.086	32.156	46.900	47.100
PROGRAMS & SPECIAL STUDIES	27.850	12.150	0	3.000	0		10.000
TOTAL EXPENSES	234.197	207.890	223.810	205.348	155.215	163.600	192.900
INCOME							
Membership fees	189.047	191.188	188.046	202.844	181.557	189.938	195.636
Interest income			490	1.000	-340	500	500
Exchange corrections	532		1.553	200	75	200	200
Other income (studies direct contribution)		0	11.933	0	0	0	0
TOTAL INCOME	189.579	191.188	202.021	204.044	181.293	190.638	196.336
BALANCE	-44.618	-16.702	-21.789	-1.304	26.078	27.038	3.436
SURPLUS/(LOSS) BROUGHT FORWARD	123.162	78.544	78.544	56.755	56.755	82.833	109.872
SURPLUS/(LOSS) CARRIED FORWARD	78.544	61.842	56.755	55.451	82.833	109.872	113.308

Remarks

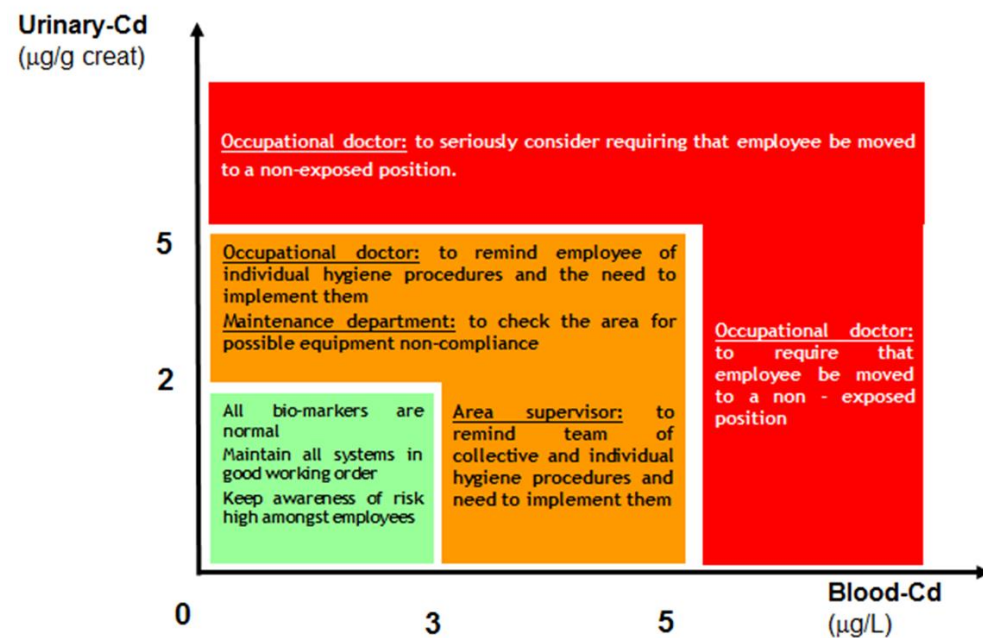
- Expenses positively balanced by income in 2014
 - Loss of Floridienne Chimie membership
 - + Important reduction of operational cost (USA office)
- Recharge membership
 - Important fee increase from €2.000 to €5.000 (reconsider?)
- ICdA membership fee 2015
 - Propose to maintain the 3% annual increase
 - Proposal: Group B fee deducted from Group A fee
 - Group A = IZA
 - Group B = Cd producers

Activities

- Revised ICdA Guidance
- Monitoring programs
 - Bio-monitoring : OCdBio
 - Workplace air monitoring: OCdAir
 - Air emission reporting
- Advocacy
- Regulatory affairs

ICdA guidance

- Management of the Risks Related to Chronic Occupational Exposure to Cadmium and its Compounds.
- The ICdA guidance was update.
- Useful support document for people in charge of the monitoring at the plants.



Monitoring programs

Goal: demonstrate health, safety and environmental performance of Cd industry

- ICdA 2017 - 2020 initiative
- Bio-monitoring program: OCdBio
 - Monitoring of Cd in blood and urine in Cd processing plants since 2008
 - High coverage: 24 plants in Europe, 3000 workers
- Air-monitoring at the workplace: OCdAir
 - Monitoring of air quality at the workplace started in 2013
 - Increasing relevance of air monitoring
- Cd emissions to air
 - Comparison with Cd emissions from other industries (0,1% of total Cd emissions)

a. ICdA 2017 - 2020 initiative

ICdA- 2017/2020 initiative (1)

- **Set-up:**
 - Not an individual but a **collective commitment** to achieve challenging targets in terms of **biomonitoring results** of workers potentially exposed to Cd
- **How:**
 - Revision and further **implementation of ICdA guidance** with the goal of further **reducing occupational exposure** of their employees
- **Goal:**
 - **95%** of European employees subject to medical surveillance and bio-monitoring as required by their occupational medical doctor, **<2 µg Cd/g creatinine at end of 2017.**
 - **98%** of European employees subject to medical surveillance and bio-monitoring as required by their occupational medical doctor, **<2 µg Cd/g creatinine at end of 2020.**

ICdA – 2017/2020 initiative (2)

- Based on a triple commitment:
 1. Implementation of revised ICdA guidance 2013
 2. Regular exchange of best practice between ICdA members
 3. ICdA members report yearly results of exposure biomarkers monitoring to ICdA-trustee
(OCdBio program)

b. OCdBio

OCdBIO -Occupational Cadmium Bio-monitoring Observatory

Since 2008, Cd bio-monitoring data is collected in the Cd industry in order to convince ourselves and authorities on:

- the efficiency of our risk management program
- the compliance of the current exposure levels with the OELs
- It is interesting for ICdA members to compare their own data with aggregated data from the whole Cd using industry
- A follow-up is interesting only if:
 - There is a long-term involvement of the companies; currently 6 years follow-up!
 - A strong coverage of EU industrial sites (>90%) in for OCdBIO-6 (2013):
24 sites reporting CdU and 23 sites reporting CdB

Selected biomarkers of exposure

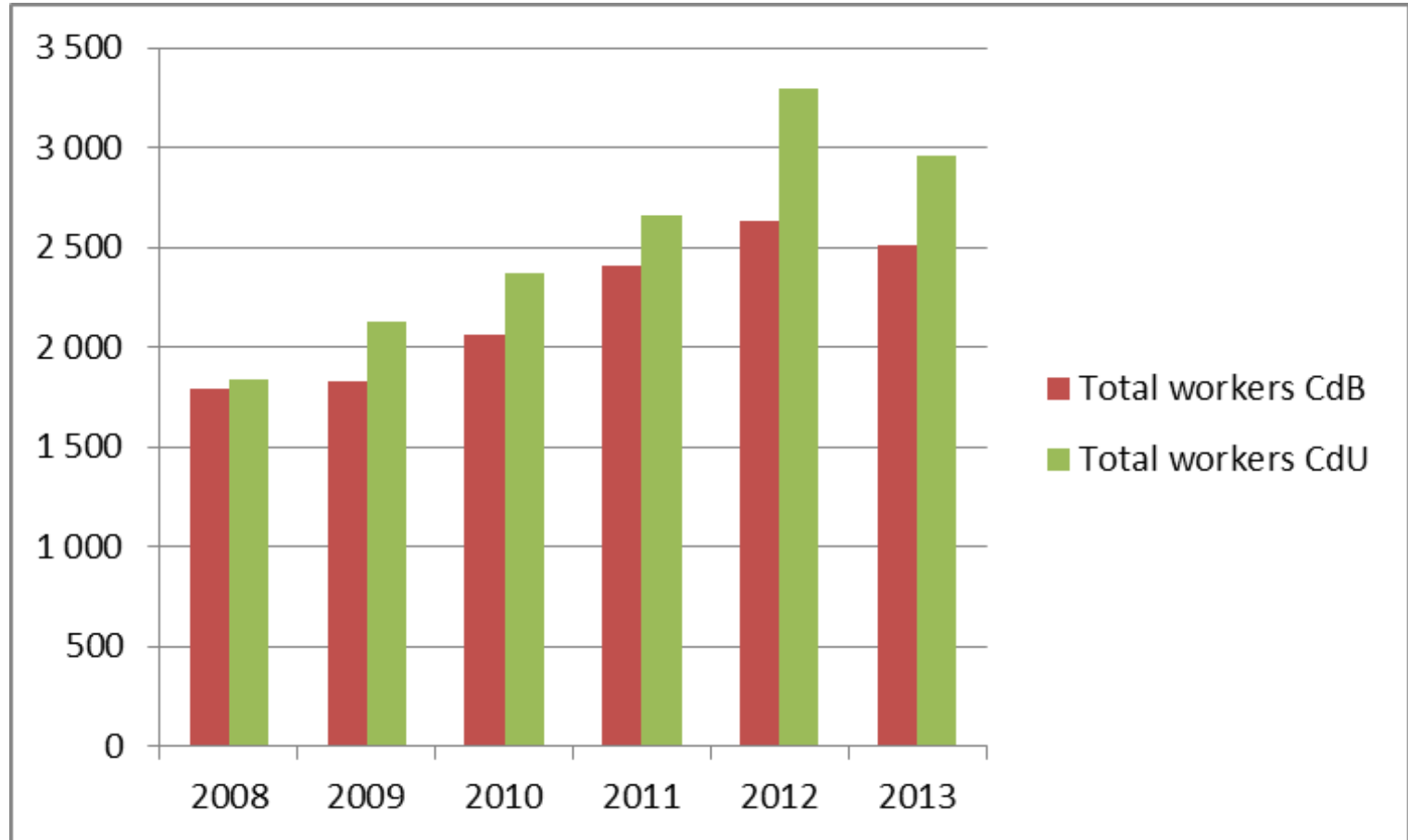
- **Cadmium in blood – CdB:**

- indicator of recent (and older) exposure
- Cadmium in blood ($\mu\text{g Cd/L}$)

- **Cadmium in urine – CdU:**

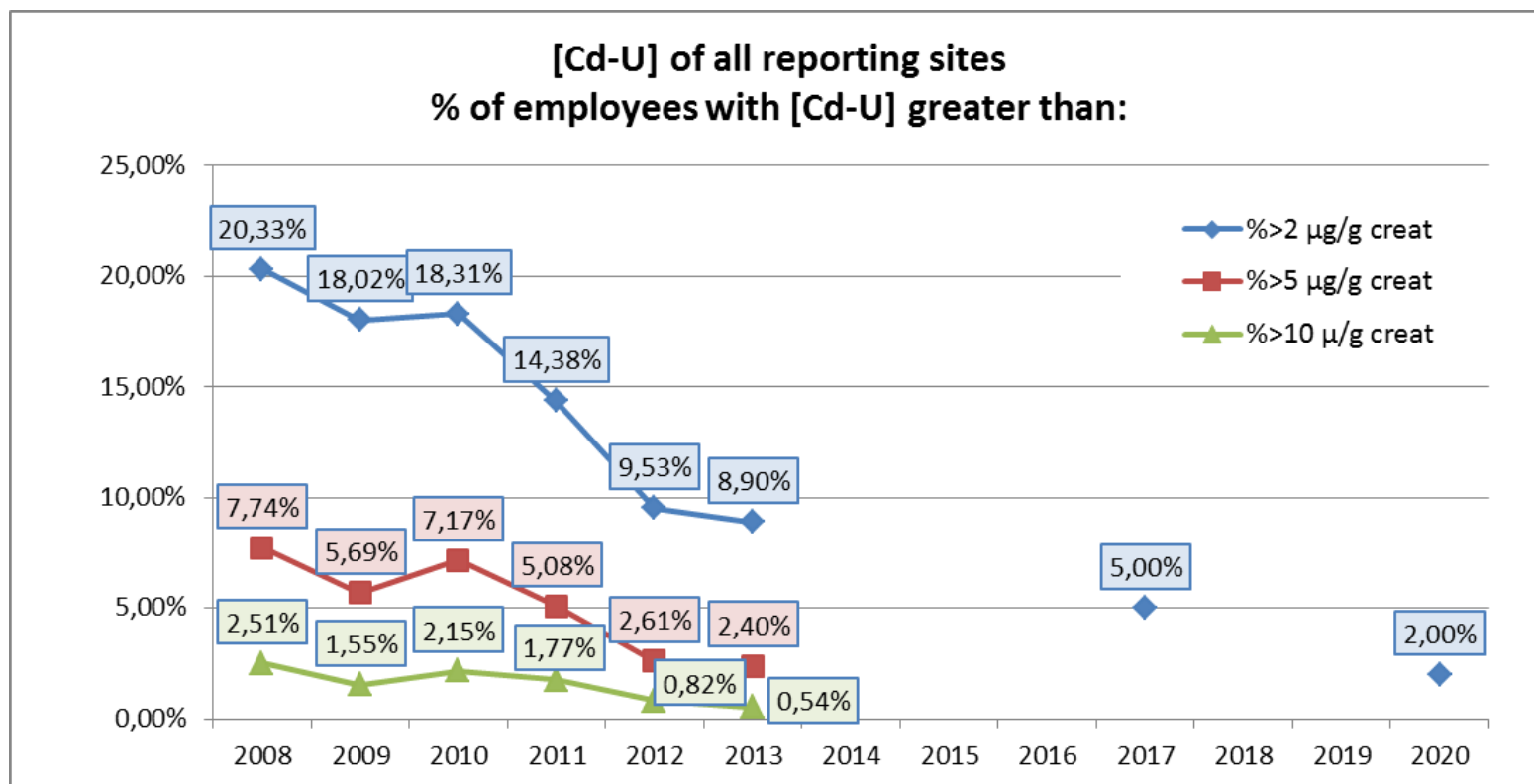
- biomarker of the amount of Cd stored in the body and in particular in the kidney cortex where the first signs of Cd toxicity develop
- Cadmium in urine ($\mu\text{gCd/g creatinine}$)

Number of reported workers



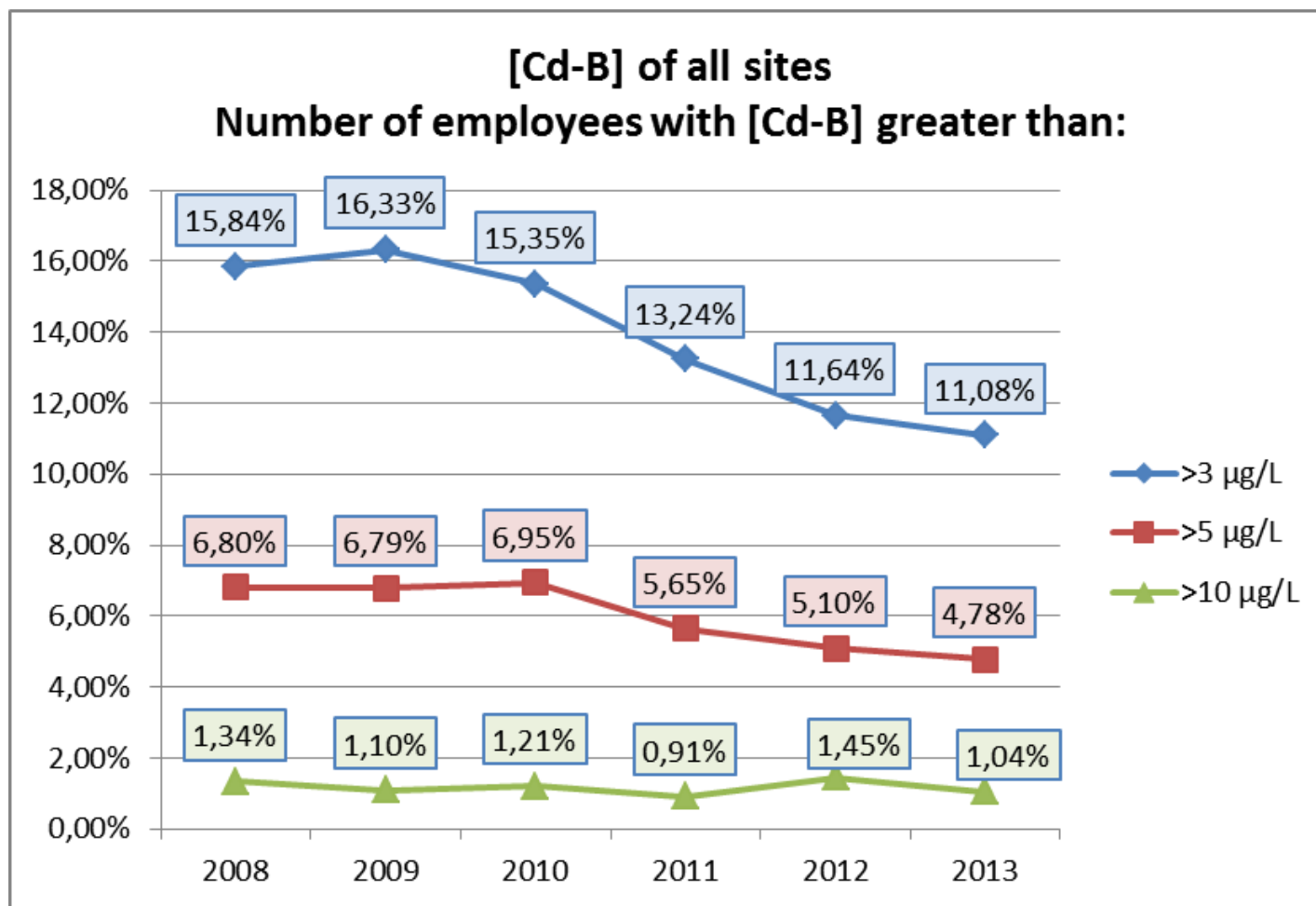
CdU distribution

- 2020 Outlook -



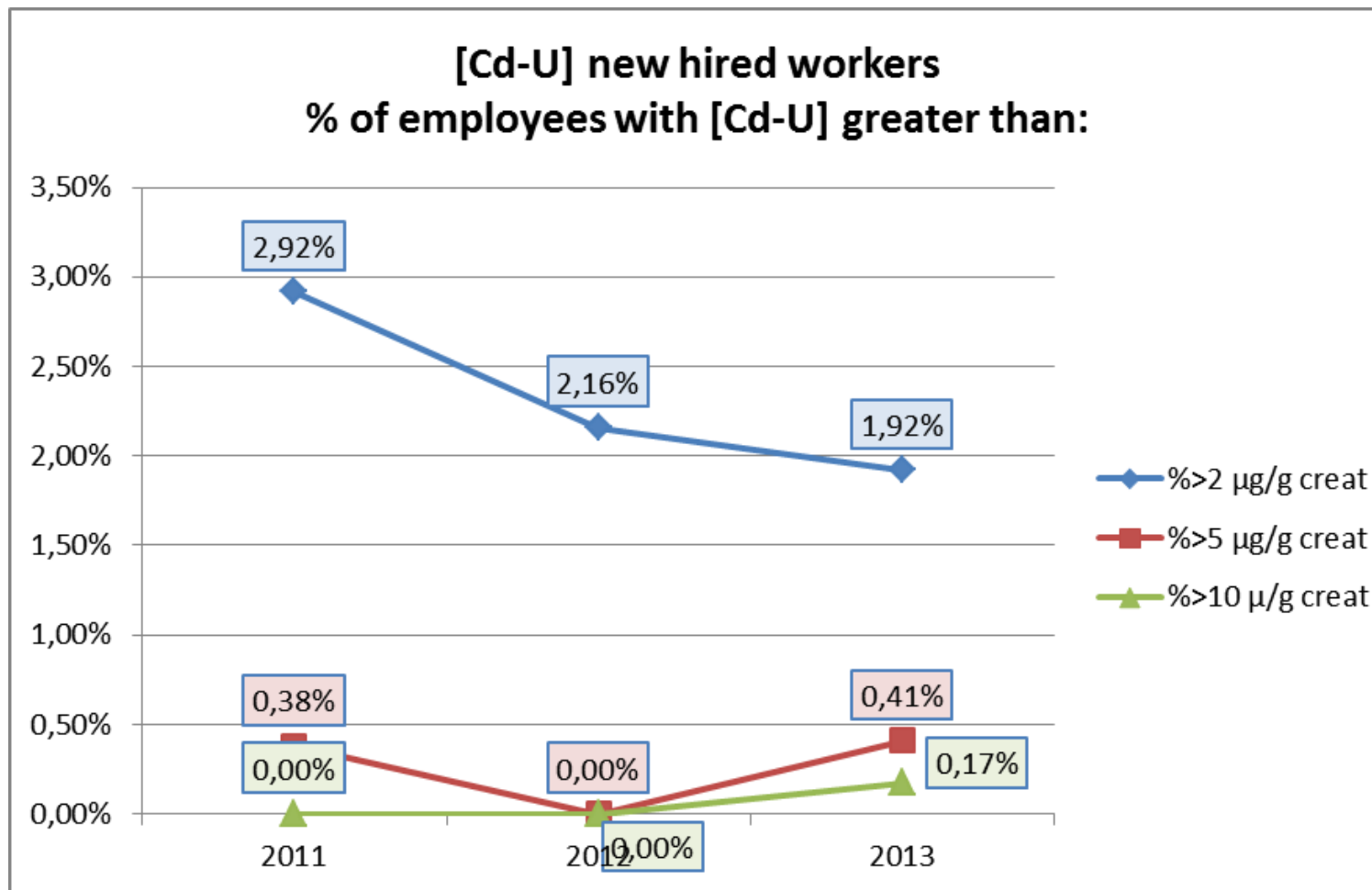
CdB distribution

- all sites in % -



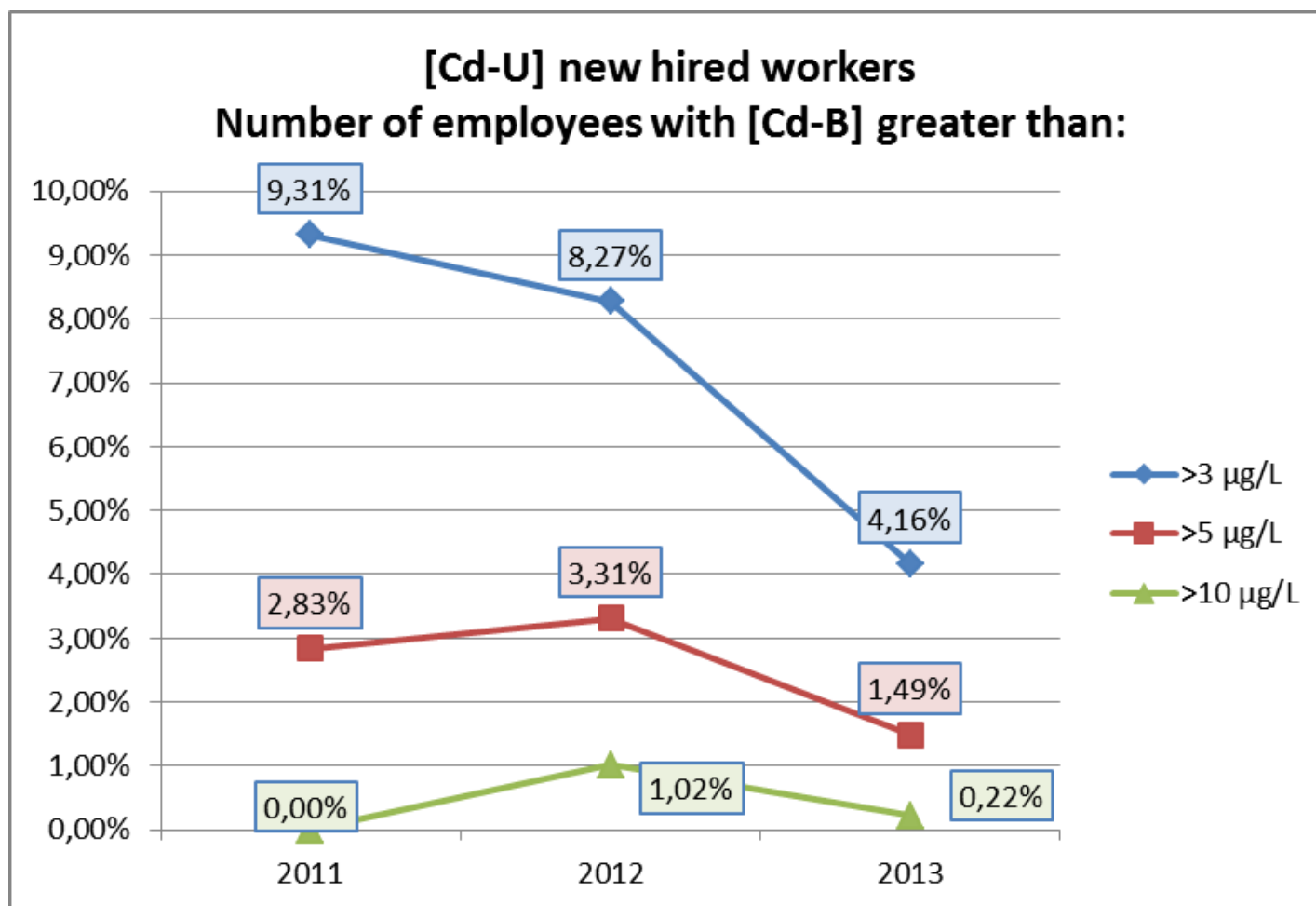
CdU distribution (workers hired after 2000)

- all sites in % -



CdB distribution (workers hired after 2000)

- all sites in % -



Past results – future progress

- **Past results**

- Increasing coverage of EU Cd industry, good today, still room for improvement
- Excellent performance on CdU reduction
- More moderate performance on CdB reduction

- **Future progress**

- Bring in ICdA, Consortium, SIEF and DUs into OCdBIO
- Continue to implement ICdA management programme with same dedication
- Continue to work on ICdA guidance three areas of improvement:
 - Plant cleanliness, including [Cd-air]
 - Collective and individual hygiene procedures
 - Medical surveillance
- Select tighter action levels over looser ones

c. OCdAIR

Occupational Cadmium Air-monitoring Observatory

Workplace air monitoring: practice

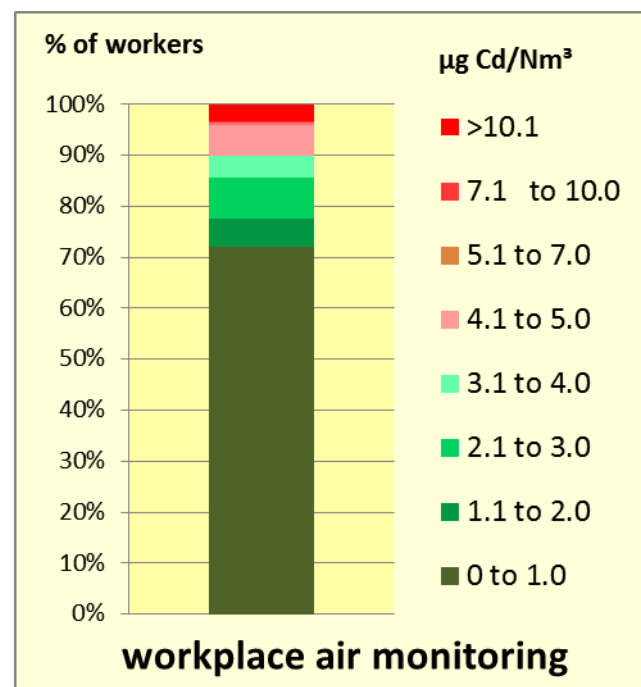
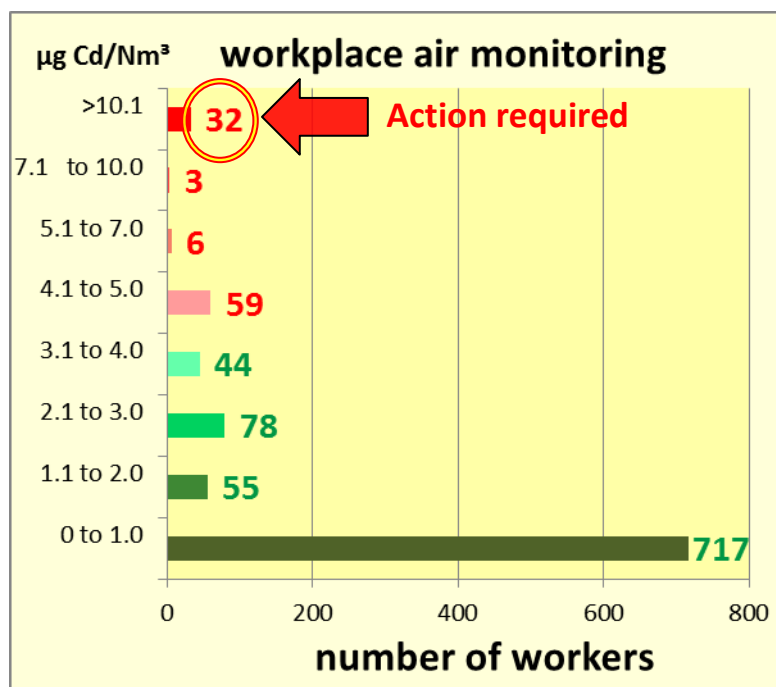
In order to show compliance with the DNEL(respirable) of **4µg/m³** and efficiency of our management system, we will have to be able to show results and improvements

- We are on good track with our database 'OCdBio' that we need to further refine according to best practice and relevance
- We started in 2013 systematic measurements-campaign of Cd-air
 - « **Respirable fraction** » vs total/inhalable fraction
- Most of measurements are specific for respirable fraction, but in a few cases, when 'inhalable' measurements indicate all values below the DNEL, those values are recorded (worst case) as 'respirable'
- 12 EU plants participated in OCdAir-1

Workplace air monitoring: results

Range	Number of workers	Value calculated ($\mu\text{g}/\text{m}^3$) <u>respirable fraction</u>	SEG in this range
0 to 1.0	717	0,49	37
1.1 to 2.0	55	1,47	9
2.1 to 3.0	78	2,43	2
3.1 to 4.0	44	3,77	6
4.1 to 5.0	59	4,67	5
5.1 to 7.0	6	6,26	2
7.1 to 10.0	3	8,39	2
>10.1	32	14,53	4
Total number of workers	994		67

Workplace air monitoring: results



- 10% of workplace measurements are above 4µg Cd/m³
- 3,5% of workplace measurements are above 10µg/m³ !!!

We need better performance to support our advocacy!!!

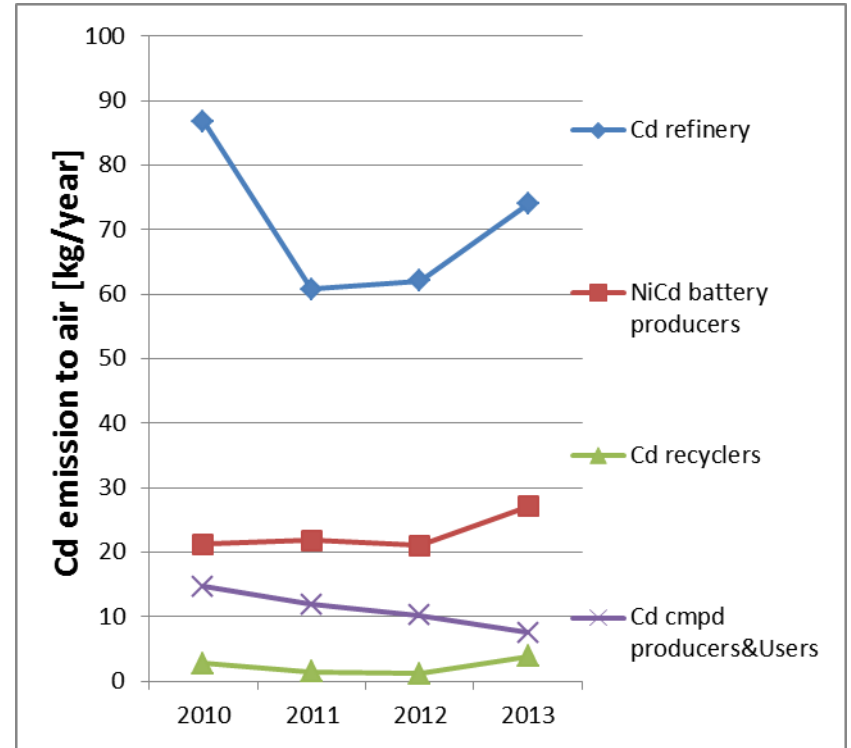
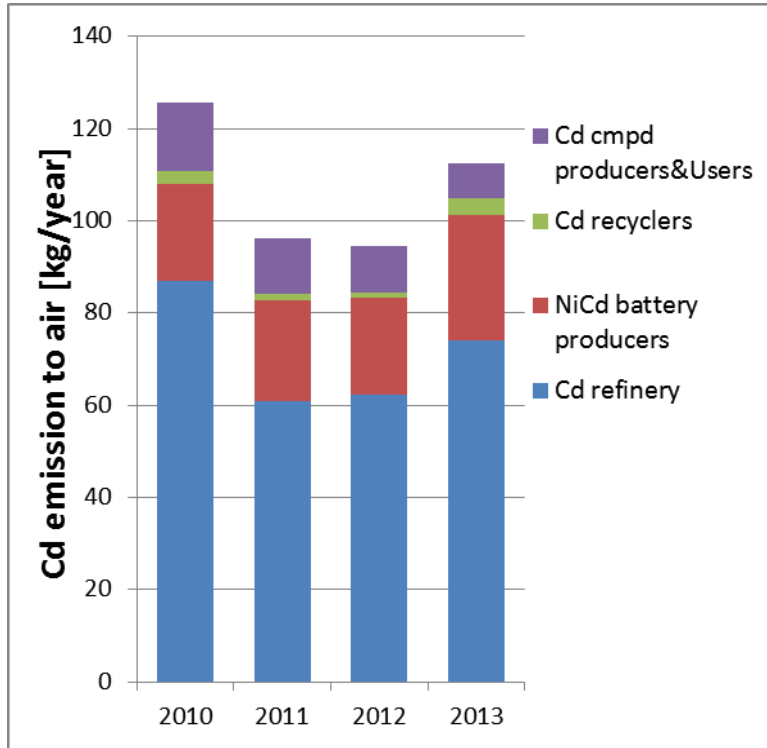
d. IAR

Inventory of Air Releases

IAR-Inventory of Air releases

	Kg emission to air				Nr of reporting plants			
	2010	2011	2012	2013	2010	2011	2012	2013
Zn refinery	53,6	63,0	23,6	20,3	4	4	4	4
Cd refinery	86,8	60,8	62,1	74,0	5	5	5	5
NiCd battery producers	21,2	21,9	21,1	27,1	6	6	6	7
Cd recyclers	2,8	1,5	1,2	3,8	3	3	3	3
Cd cmpd producers&Users	14,7	11,9	10,3	7,6	6	6	8	5
Cd ref.+bat.+rec.+cpds.+users	125,5	96,1	94,6	112,6	20	20	22	20
+Zn ref.	179,1	159,2	118,2	132,9	24	24	26	24

IAR-Inventory of Air releases



- More emission points measured
- Detection limit is reported (actual emission is lower)

Regulatory affairs

- **REACH developments:**
 - Authorization and priority ranking: Cd, CdO, CdS,...
 - Restriction: Cd-pigments in artist paints
 - Cadmium: threshold carcinogen?
- **EU-Water Framework Directive**
 - “Cessation” of Cd-emissions by 2020 ⇒ Zinc (Cd-) producers, Cd-users
 - Start of debate with commission
- **UNEP Public consultation: replacement of Lead and Cadmium**
 - Information submitted on techniques for emissions abatement and on the possibility of replacing cadmium with alternative substances.
 - Many references were made to the CADMIUM 2011 Kunming conference papers

Advocacy actions and strategies

Reach Scoring and Prioritization

ECHA Public consultation:

Cadmium and its compounds in Artist paints

Next ICdA Cadmium Conference

Interest?

Goal?

Who to attract?

Financing?

Timing?

Location?

Next meetings

- **General Assembly**
 - October 22nd 2014, London
- **H&S-EU meeting**
 - Proposal: spring 2015 (adjacent to Reach meetings)
- **H&S-North-America meeting**
 - To be decided
- **Next Board meeting:**
 - Proposal: summer 2015