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Federal Department of the Environment,
Transport, Energy and Communications DETEC

Federal Office for the Environment FOEN
Division Waste and Resources Division

E-waste Management in Switzerland: a success story

12th December 2013



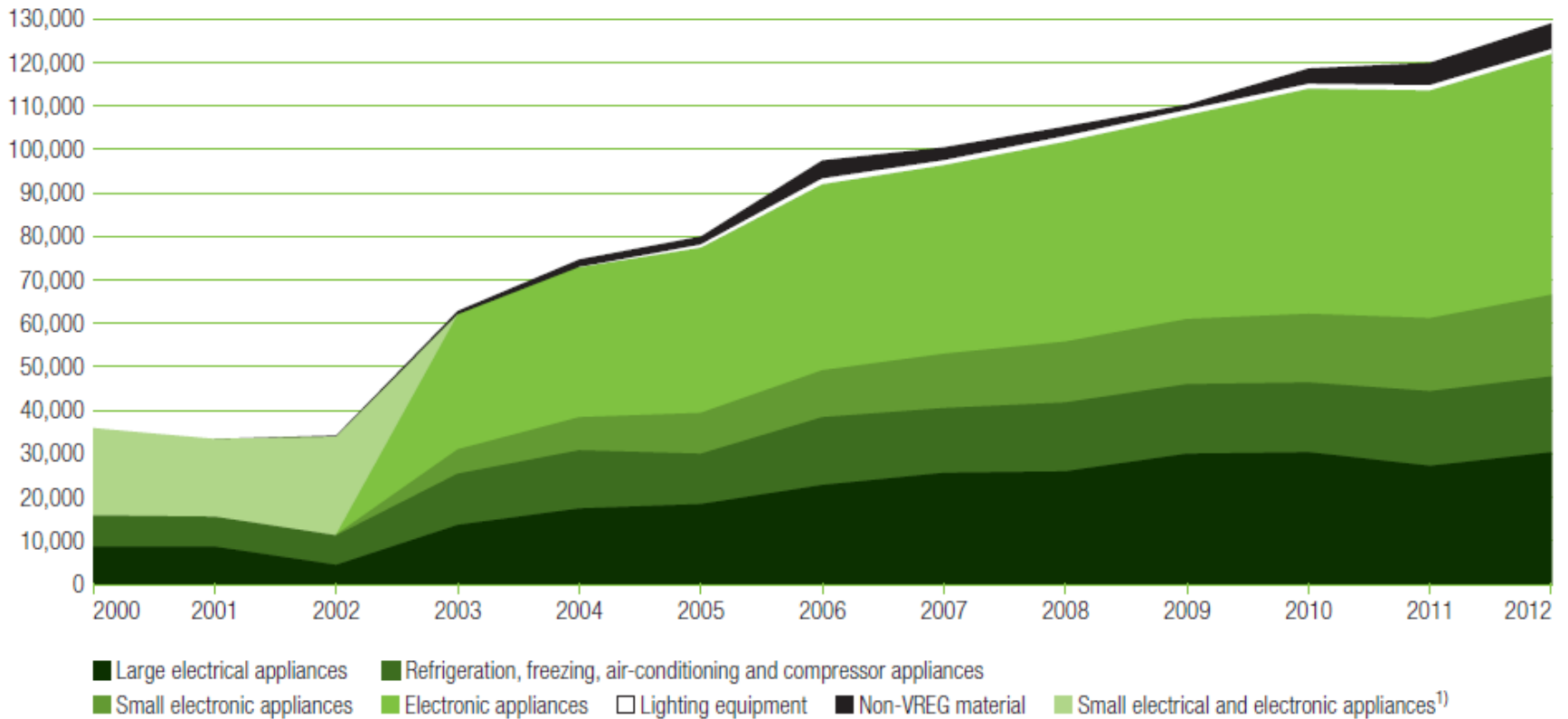
Agenda

- Situation in 2013
- ORDEE (Swiss legislation on e-waste)
- Swiss financing system and recycling System
- Challenges in E-Waste management in Switzerland





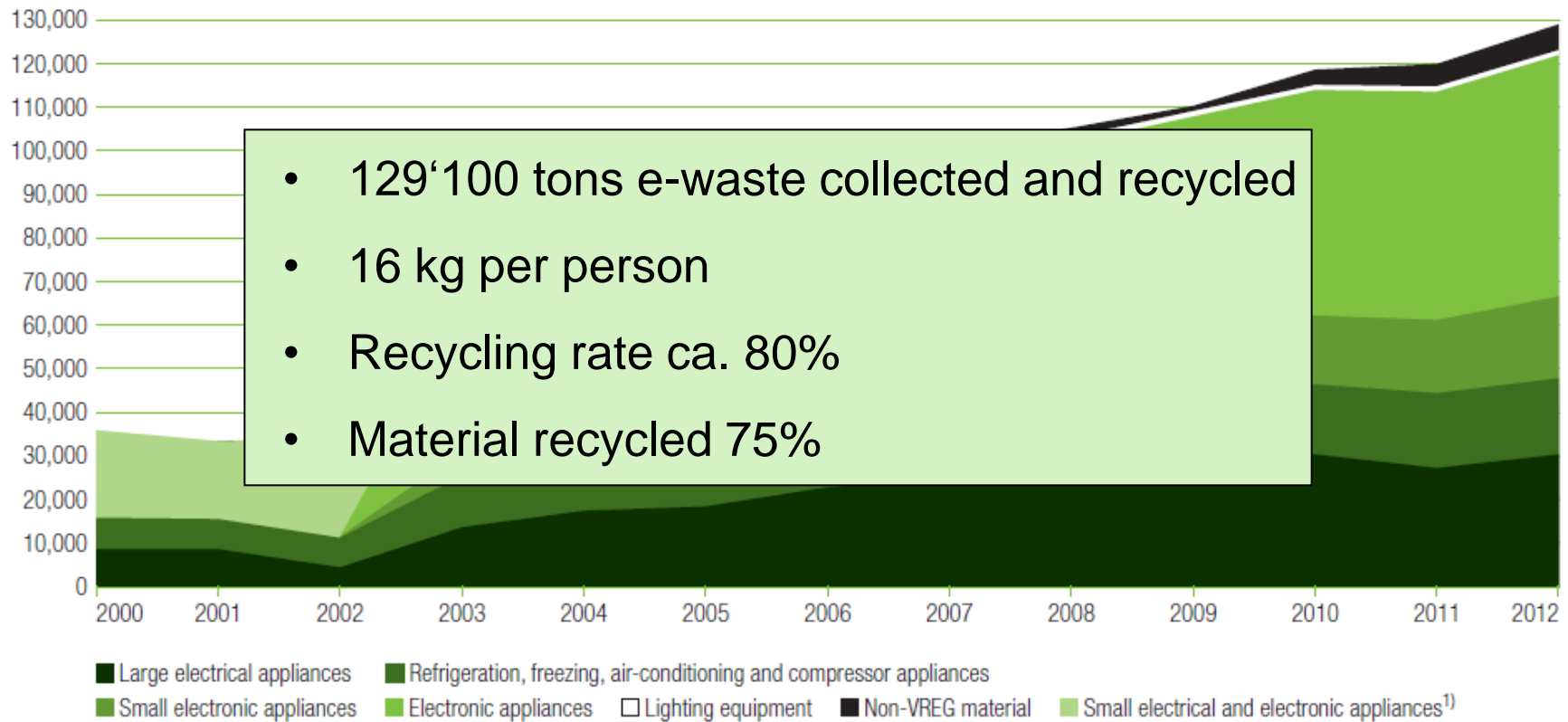
Growth of processed equipment quantities in Switzerland [t]



¹⁾ Up to 2002 small electrical and electronic appliances was recorded jointly



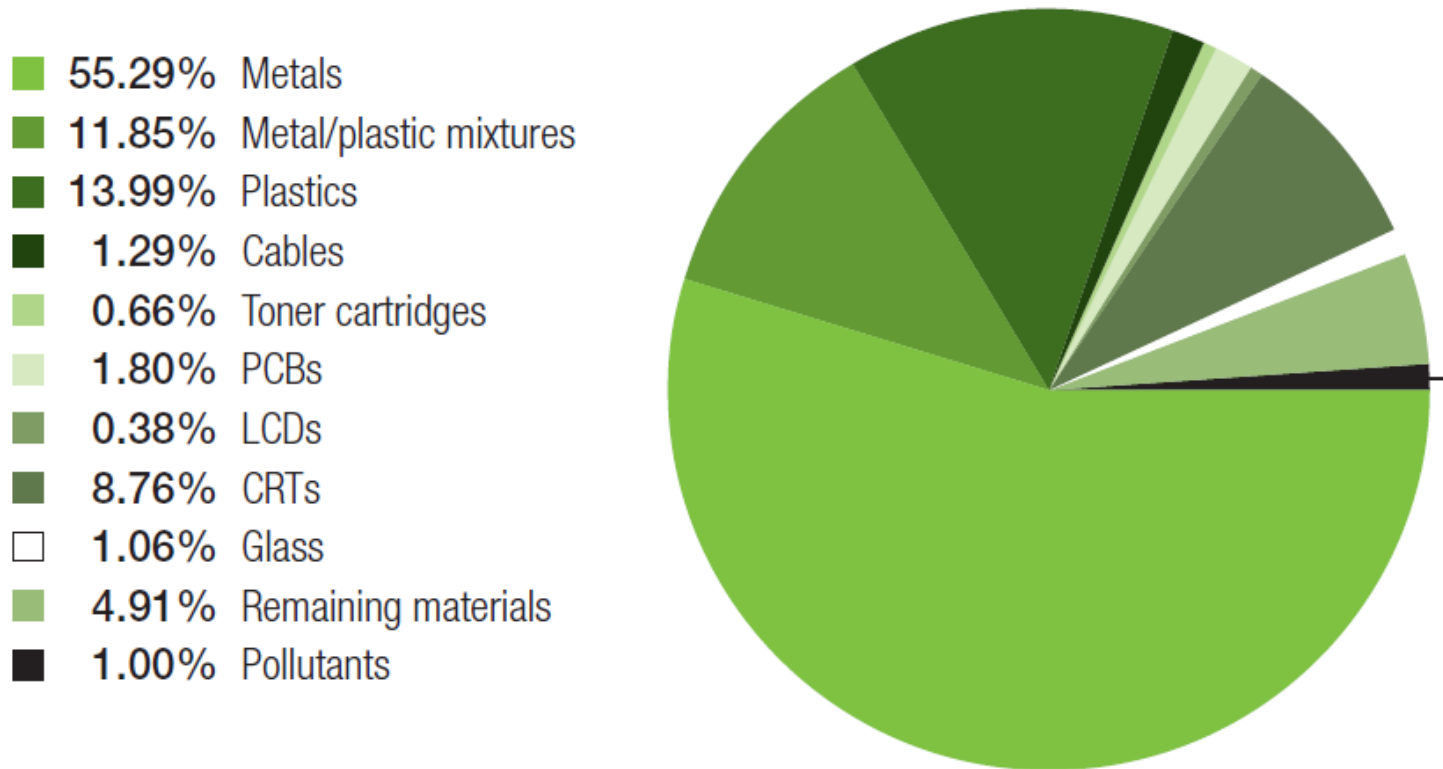
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Composition fractions in 2012





Ordinance on the Return, Taking Back and Disposal of Electrical and Electronic Equipment (ORDEE)

ORDEE is to ensure that waste electrical and electronic equipment:
a) do not enter into municipal waste;
b) are disposed of in an environmentally sound manner.

- Mandatory take back obligation for traders, importers and producers
- Mandatory return obligation
- Mandatory recycling obligation
- State of the art recycling



Swiss Legislation for WEEE

State of the art recycling and final disposal:

- Recycling / final disposal of WEEE must follow state of the art technology
- Hazardous components must be disposed of separately
- Organic chemical components not recycled must be burnt in adequate incineration plants
- Recycling insofar as economically viable

Implementation:

- Licensing and controls on Cantonal (state) level
- Control of transboundary movements on Swiss government level (Basel Convention)
- Exports of WEEE in Non-OECD-Countries are prohibited



Appliances covered by the ORDEE

Current ordinance

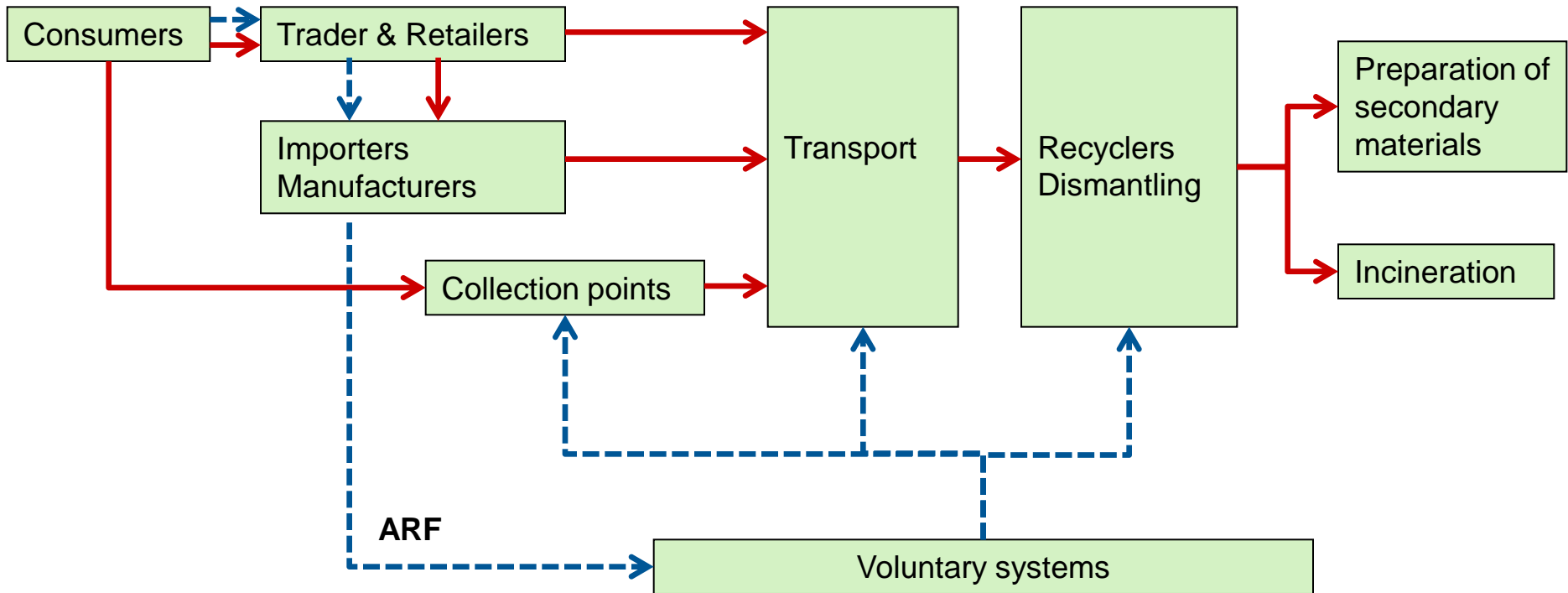
1. Household appliances
2. Office, information and communication technology equipment
3. Consumer electronics
4. Lighting fixtures
5. Lamps (without incandescent lamps)
6. Tools (except large-scale stationary industrial tools)
7. Sport and leisure appliances as well as toys

In future the following categories will be added

8. Medical devices
9. Monitoring and control instruments
10. Automatic dispensers
11. Photovoltaic module



Swiss financing and recycling System



ARF = Advanced Recycling Fee

---> ARF Money flow

—> Waste Flow



Financing of the collecting and recycling system

- Is organized on a voluntary basis by manufacturers and importers. The E-branch runs an advanced recycling fee (ARF) system
- SWICO, SENS and SLRS are private organisations and organize the collection and financing of the recycling (transport inclusiv)
- SWICO for IT, communication technology, Consumer electronics
- SENS for household appliances and tools
- SLRS for lamps
- ARF-income per year : around 70 Mio. CHF



- Cost of the recycling : 0.60 CHF/kg e-waste
- Collection : 16 kg per Person
- Cost of the recycling: 8.60 CHF per Person

(Figures 2012)



Challenges in E-Waste management in Switzerland

- Increase the resource efficiency of e-waste recycling
 - Diverse projects are on course to analyse the potential of recovering critical metals in e-waste
 - Electronic components in cars
 - Improved recovery of plastics
- Stabilize the financing system („free riders“ can jeopardize the voluntary financing systems!)





Thank you for your attention

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