

# Climate protection through circular economy: a challenge for cities worldwide



## **STADTREINIGUNG HAMBURG**

Connective cities dialogue on climate protection  
through circular waste management in Hamburg

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*CEO Stadtreinigung Hamburg*

# Welcome to Hamburg and Stadtreinigung (SRH)



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## Agenda

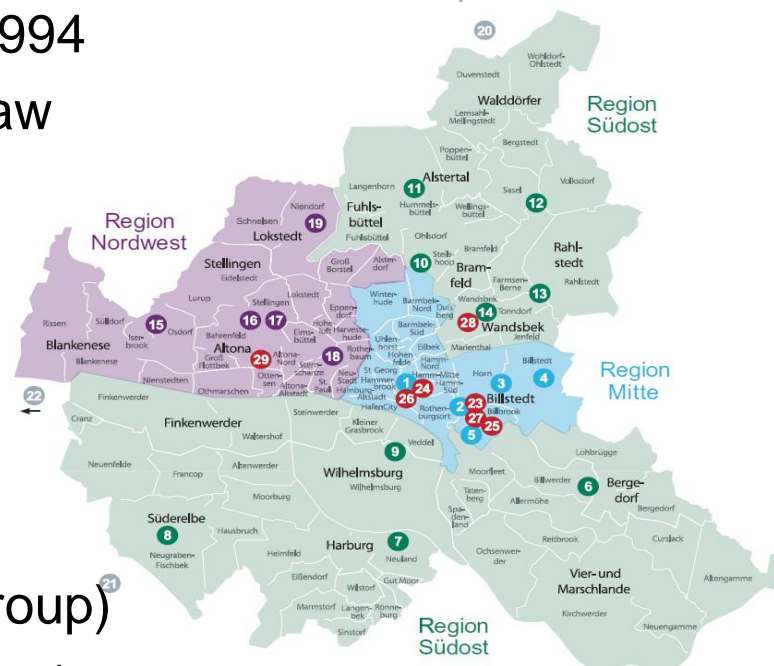
1. SRH: What is our business?
2. Climate and Resource Protection
3. Examples: Forward-Thinking Hamburg and SRH
4. Challenges of Circular Economy worldwide
5. Outlook





# 1. SRH: What is our Business?

- Public company (owner FHH) since 1994
- Tasks: According to SRH act / state law
  - Waste management
  - Energy production and distribution
  - Cleaning (streets, sidewalks, parks ...)
  - Winter service and public toilettes
- Financing: ~380 Mio. €/a from fees, refunds (FHH) and other charges
- Employees: ~ 3,000 (3,500 in SRH-group)
- Vehicles: ~830 (*own truck service stations*)
- 30 company sites (incl. subsidiaries)



**Freie und Hansestadt Hamburg**  
755 km² with 1.8 Mio. inhabitants in 930,000 households



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# 1. SRH: What is our Business?



*In the past*





# 1. SRH: What is our Business?

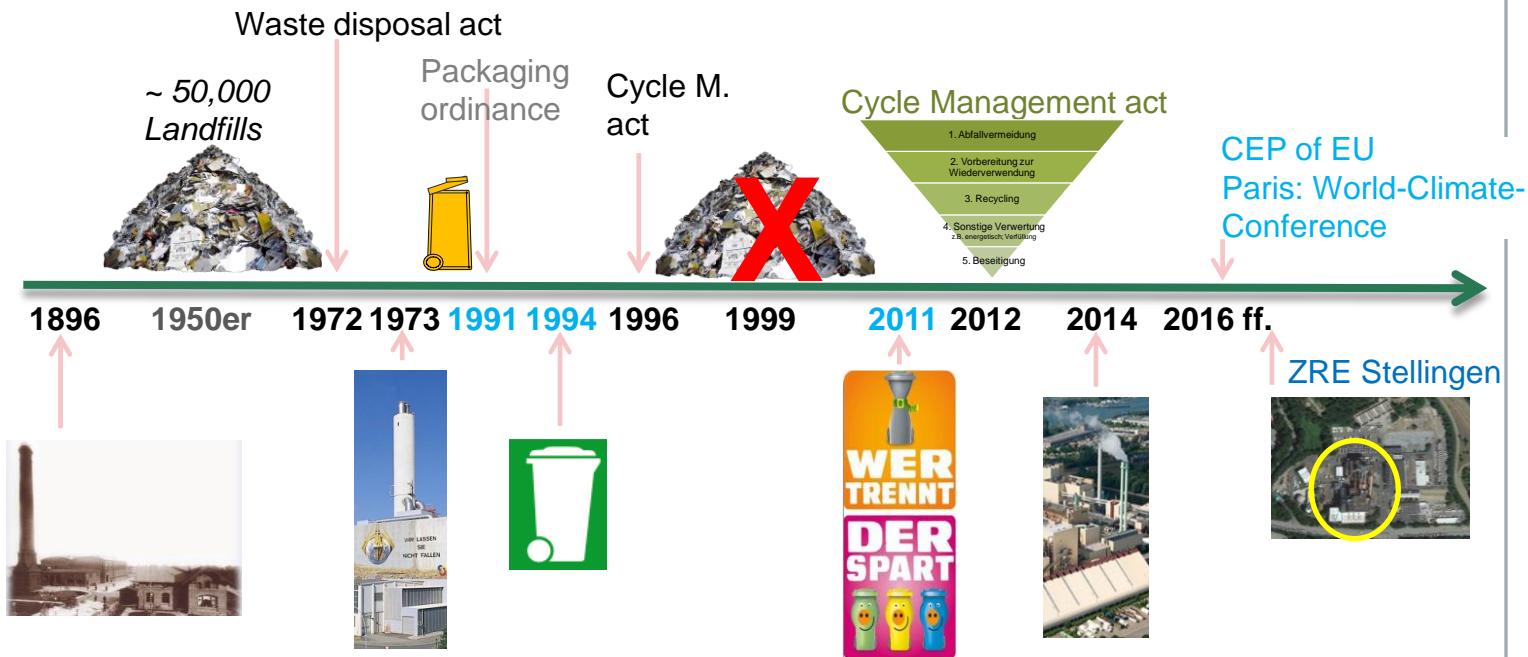


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Today



## 2. Climate and Resource Protection



CEP = circular economy package  
2011: campaign of separate collection

## 2. Climate and Resource Protection



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### Climate and resource protection is our business:

- EU and German legislation  
(*EU-Waste Framework, German Cycle Management Act, 5-step – waste - hierarchy, recycling quotas, time frame for separate waste collection*)
- SRH act (state legislation for SRH tasks → SRG)
- Vision report of Hamburg Senat for SRH
- SRH sustainability report / annual report
- Strategy paper for SRH - Group

➤ **Climate and resource protection is our business!**



# 3. Examples: Forward-Thinking Hamburg and SRH



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## Examples Hamburg: Innovative and forward-thinking waste management

- Long-term guarantee of safe disposal and contribution to energy transition in Hamburg
  - Waste treatment (thermal / biological) in large plants with climate-friendly energy production and use of residual materials



*Waste treatment  
plants  
Borsigstraße  
and  
Rugenberger  
Damm*



*Biogas- und Kompostwerk  
Bützberg: Dry fermentation  
and composting plant with  
triple – strategy (gas prod.,  
storage-grid, compost)*



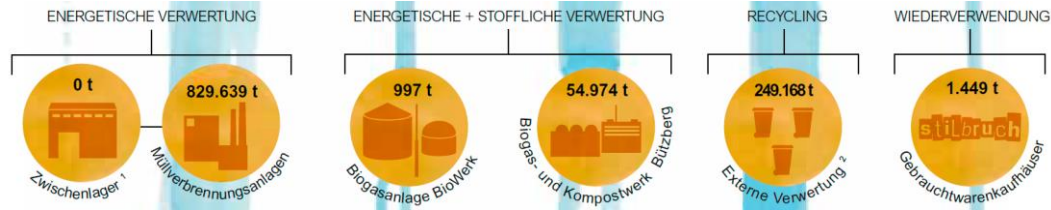
*Demolition of  
MVA Stelling Moor for  
new “ZRE”*



# 3. Examples: Forward-Thinking Hamburg and SRH



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- Electricity for ~ 85,000 Households (2-person)
- Heat for ~ 141,000 Households
- Saving of CO<sub>2</sub> (energy production and recycling)  
➔ ~ 710,000 t/a

# 3. Examples: Forward-Thinking Hamburg / SRH



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## Examples Hamburg : Innovative and forward-thinking waste management

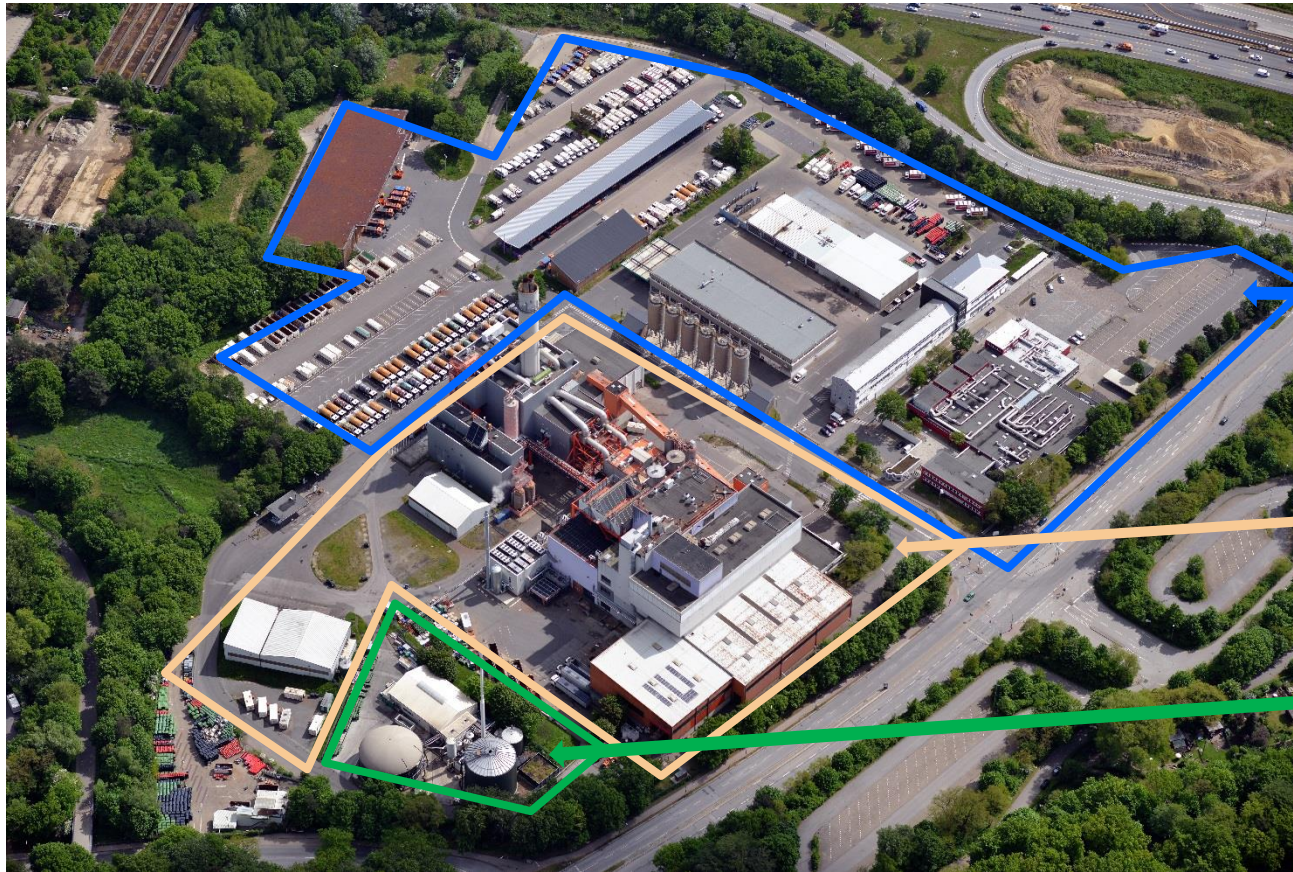
- Reuse:
  - 3 secondhand shops „Stilbruch“  
(furniture, books, cloths, e-devices, ... → bulky waste)
- Separate collection and recycling:
  - 4-bin system: **biowaste**, **paper**, **packaging and plastics**, residuals from household metals
  - Bring system for various fractions: e-waste, textiles, ...  
marketing structure for valuable materials  
(12 receipt stations, ~1,000 public sites with containers)



### 3. Examples: Forward-Thinking Hamburg and SRH



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RNW

Demolition  
MVA (ZRE)

Biowerk



### 3. Examples: Forward-Thinking Hamburg and SRH



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ZRE (Zentrum für Ressourcen und Energie)  
→ Centre of resources and energy

- Sorting plant, anaerobic digestion of MSW and biowaste
- 2 CHPP plants for biomass and RDF\*



\* CHPP = combined heat-power-plant  
RDF = refuse derived fuel



# 4. Challenges of Circular Economy worldwide



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- Worldwide very different standards in economical, ecological and social issues, infrastructure
- Different situations of safety
- Various legislation
- Waste prevention, valuable recycling (reuse) and energetic recovery

➔ *Focus on sustainability, climate & resource protection*





## 5. Outlook

- Need for more common political, industrial, technical and social standards
  - Sharing of know-how and support
  - Start of discussion: Quality vs. quota for recycling
  - Enhancement of material flows for recycling
  - Market development for recycling materials (*plastics*)
  - Research and development for improvement of waste management
- ➔ ***Expansion of Circular Economy worldwide***





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*Thank you  
very much  
for your  
attention*

