

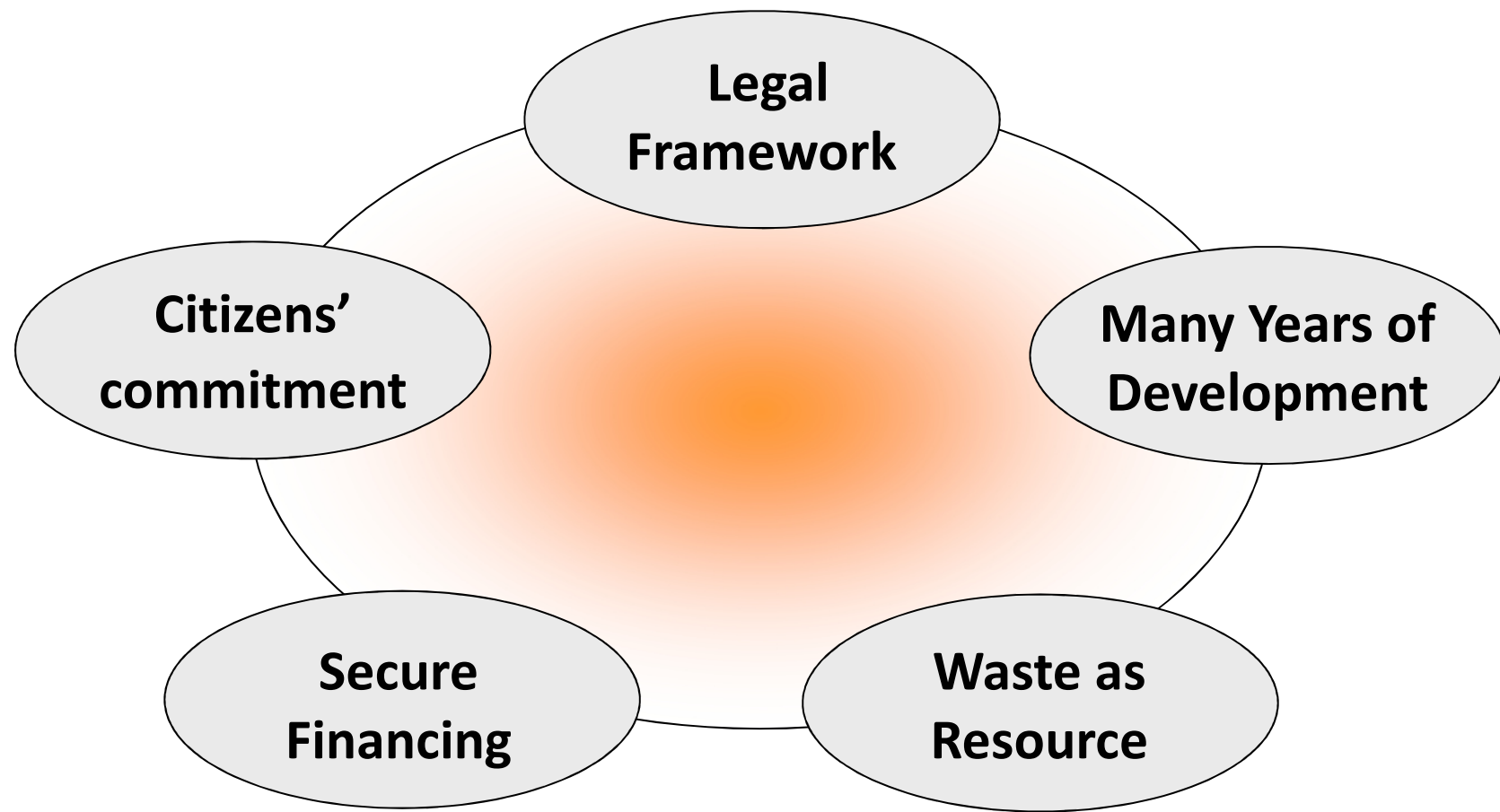
Requirements and Success Factors of modern and sustainable Waste Management

Michael Paulus, Central Service Division Berlin City Cleaning Service

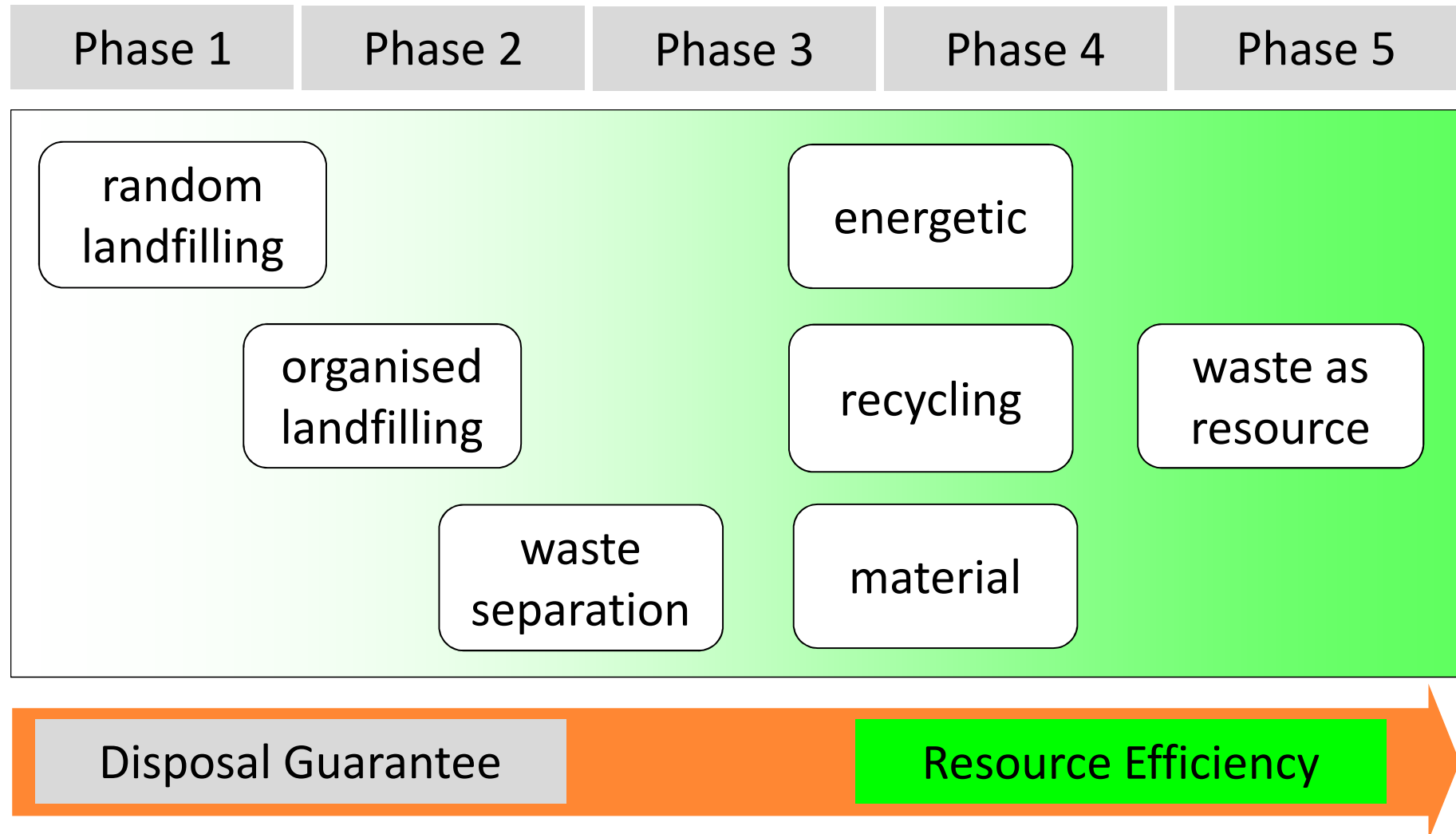
**Connective Cities Workshop
on Solid Waste Management
in Sub-Saharan African Cities
in Daressalam**



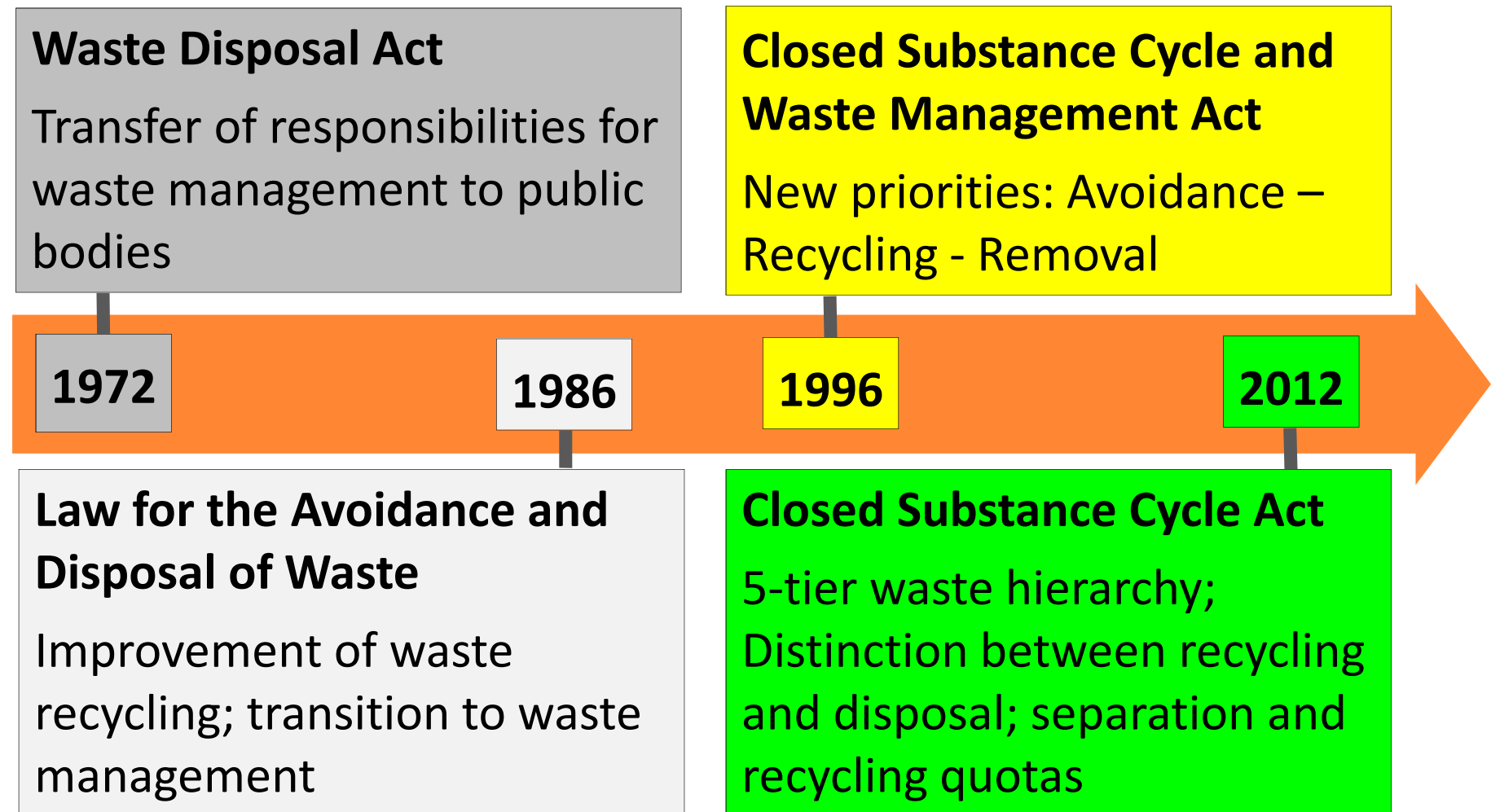
Key success factors of modern waste management



From waste management to resource management



Today's waste law is based on many years of development



Waste is not a carrier of pollutants, is a source of energy and materials

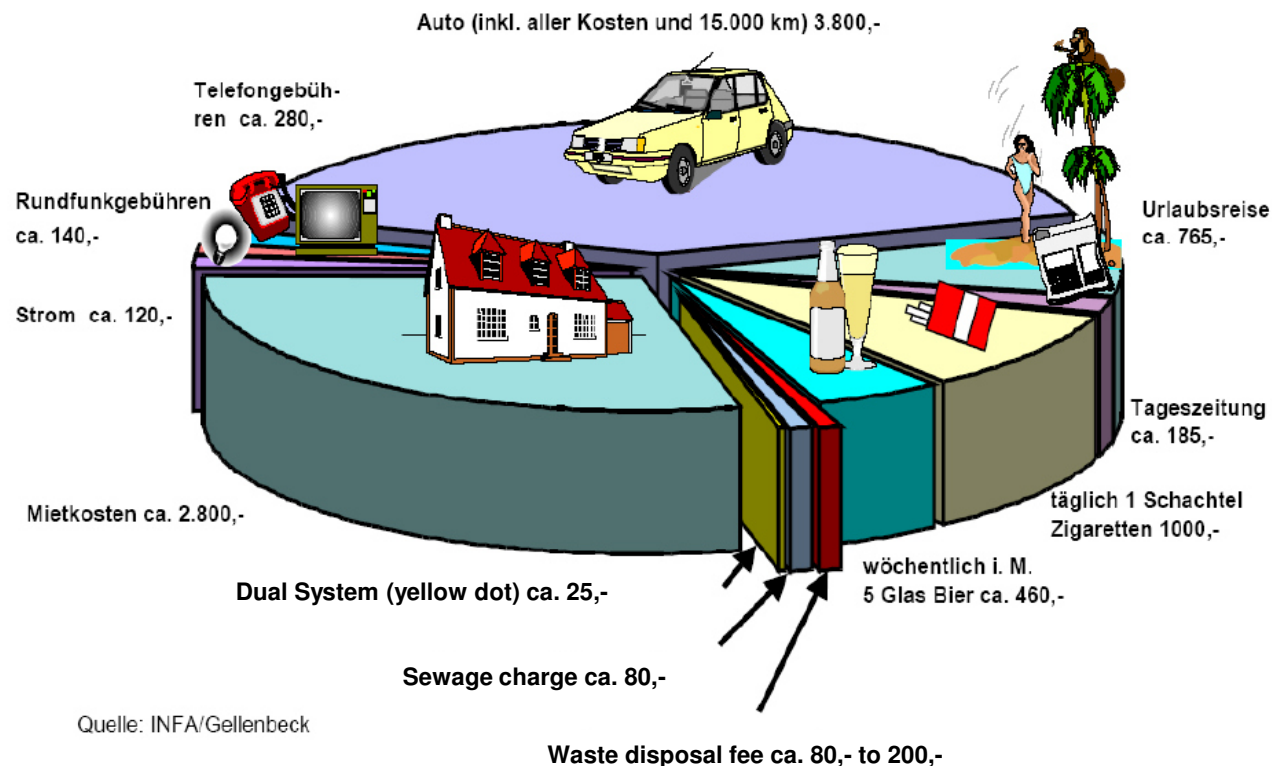


Waste management is not possible without secured funding

There are 3 models for the funding of waste management in the European Union

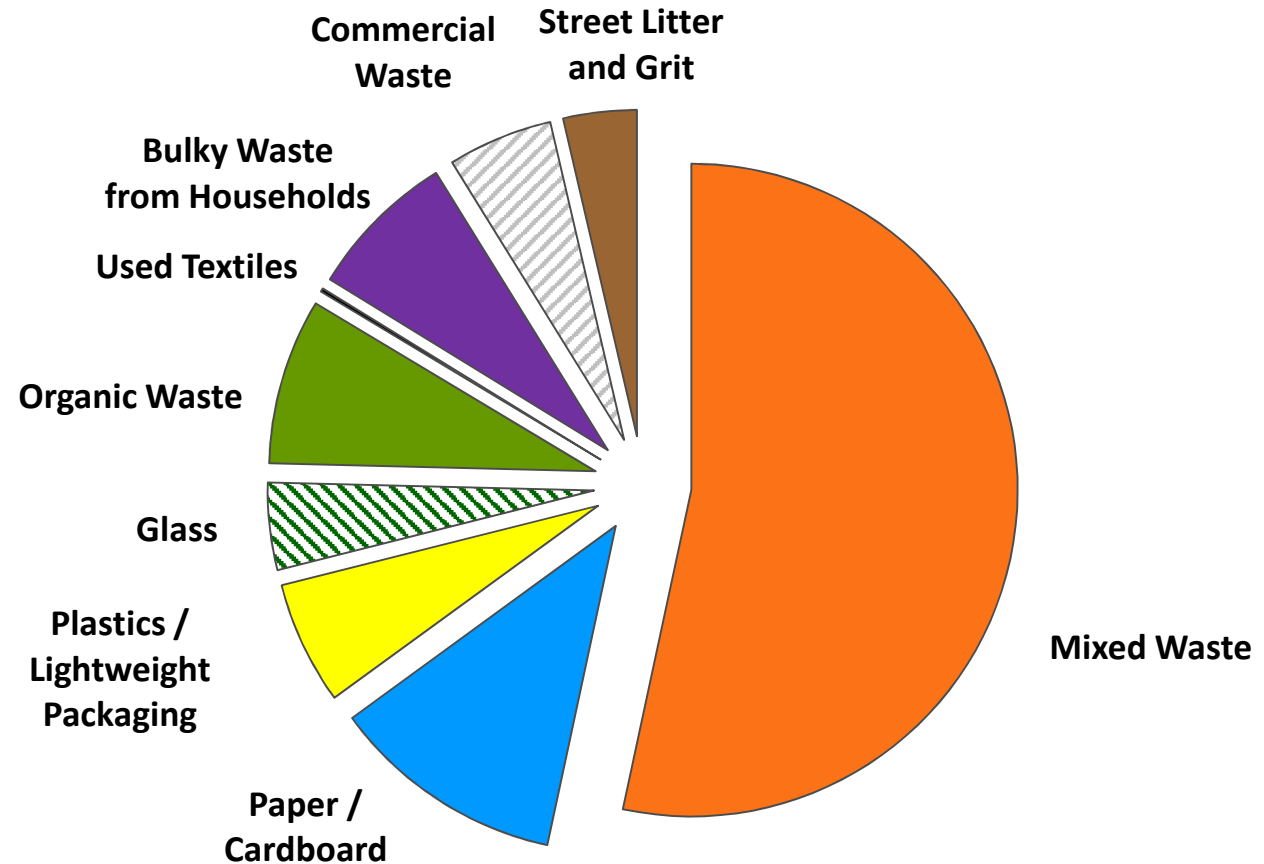
- Waste collection fees that the citizens have to pay for waste removal → Germany and Austria
- General taxes; the funding comes out of the municipal budget. The majority of countries in the EU levy taxes for waste disposal → e.g. cleaning tax (Madrid), infrastructure tax (Zurich)
- Separately levied taxes for waste disposal that are calculated specifically. Specific taxes; the premises or the apartment is „valued“ according to a calculation pattern → water usage (Barcelona), size of the apartment (Copenhagen, Milan)

In industrial countries the cost of waste disposal is comparably low



Waste disposal fees in comparison to other costs per citizen and year in Germany in Euro

The amount and composition of Berlin's waste

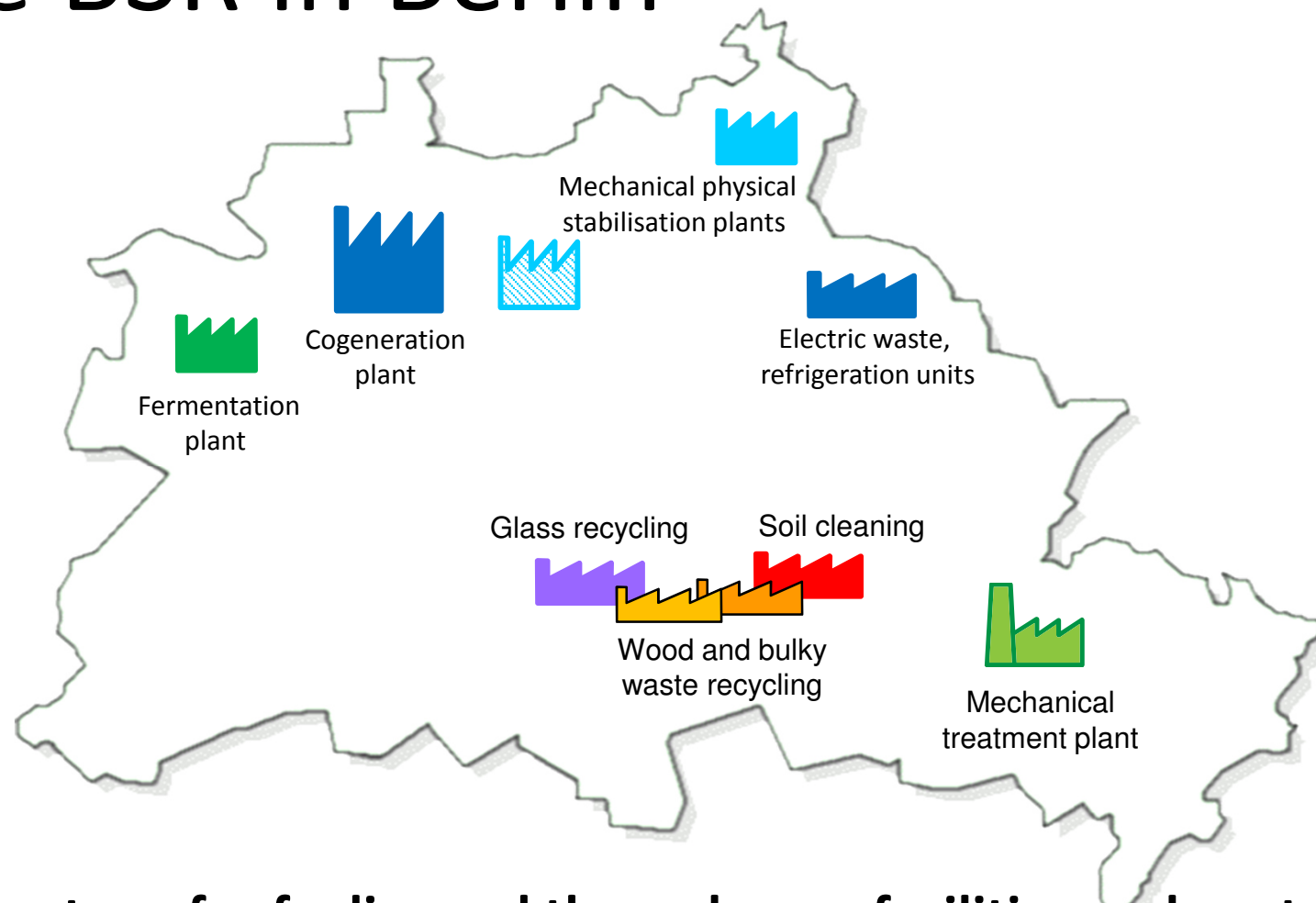


total amount: about 1.5m tons ;
separately collected recyclables: about 420,000 tons

Collecting waste and recyclables in Berlin

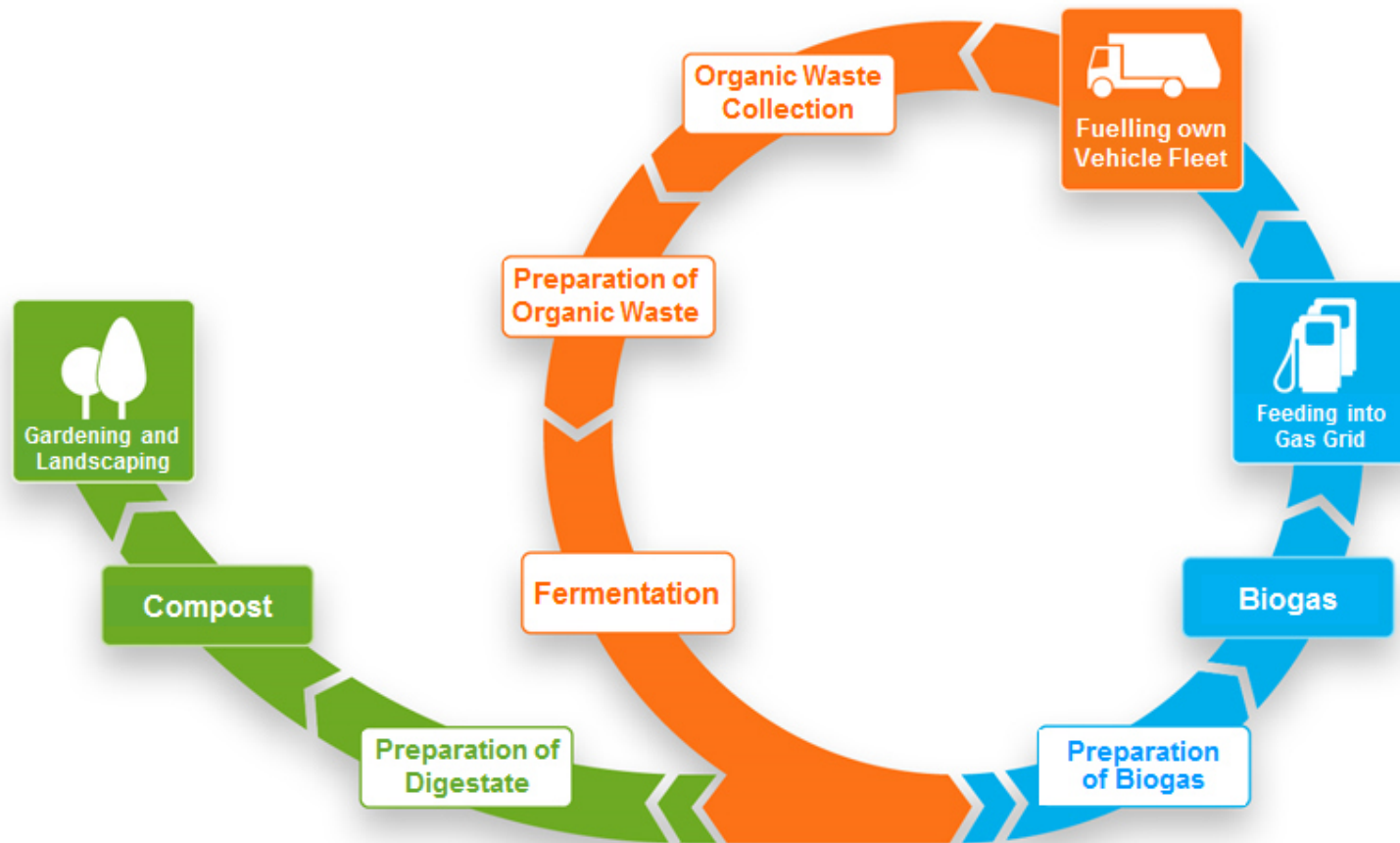
Residual waste	320,000 bins	820,000 t
Paper and cardboard	80,000 bins	180,000 t
Lightweight packaging	150,000 bins	95,000 t
Glass	100,000 bins / containers	65,000 t
Bulky waste	61,200 orders	11,000 t
Recycling center	2.2 Million customers	140,000 t

The treatment plant portfolio of the BSR in Berlin

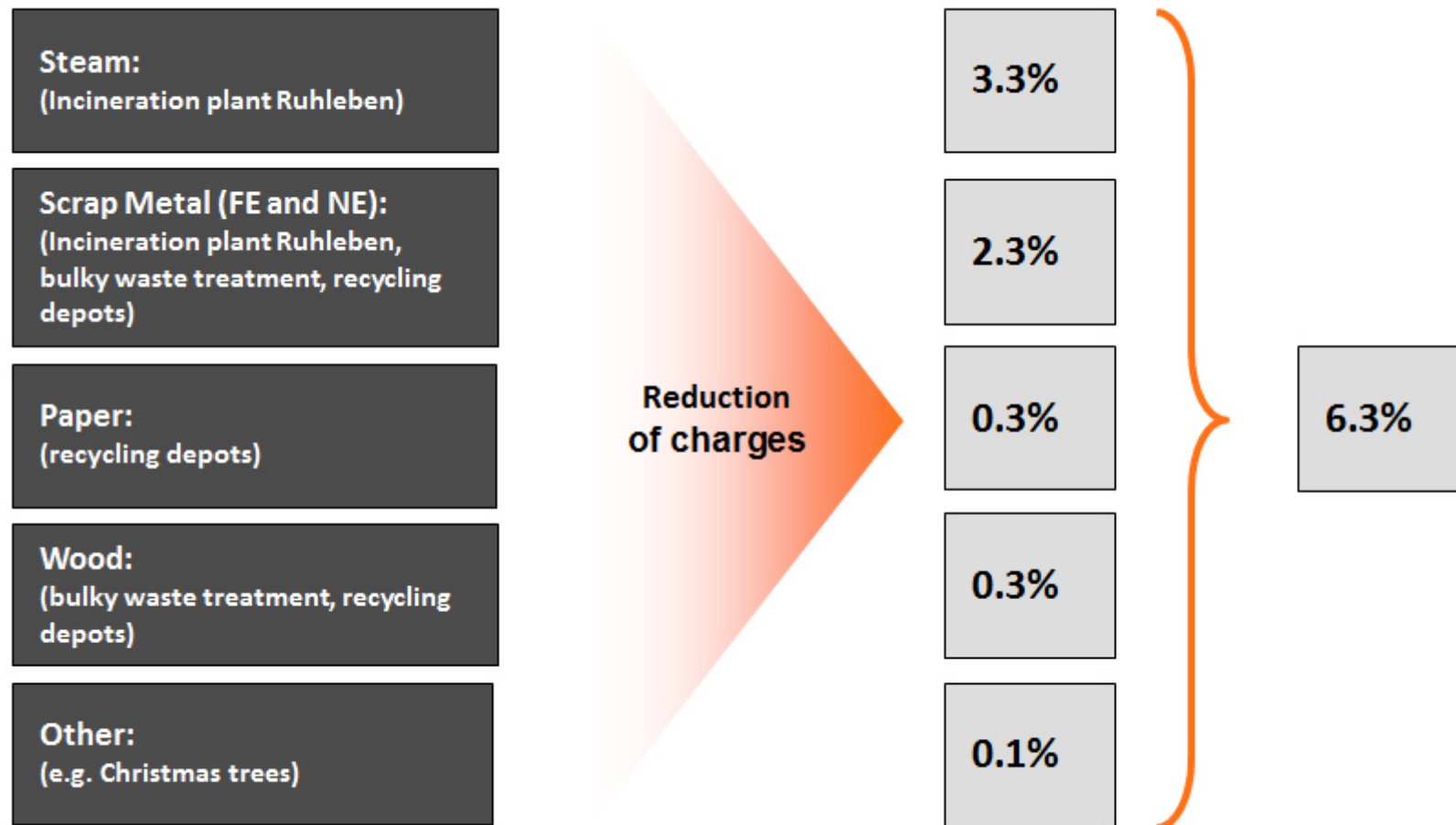


Guarantee of safe disposal through own facilities and contractually secured capacities

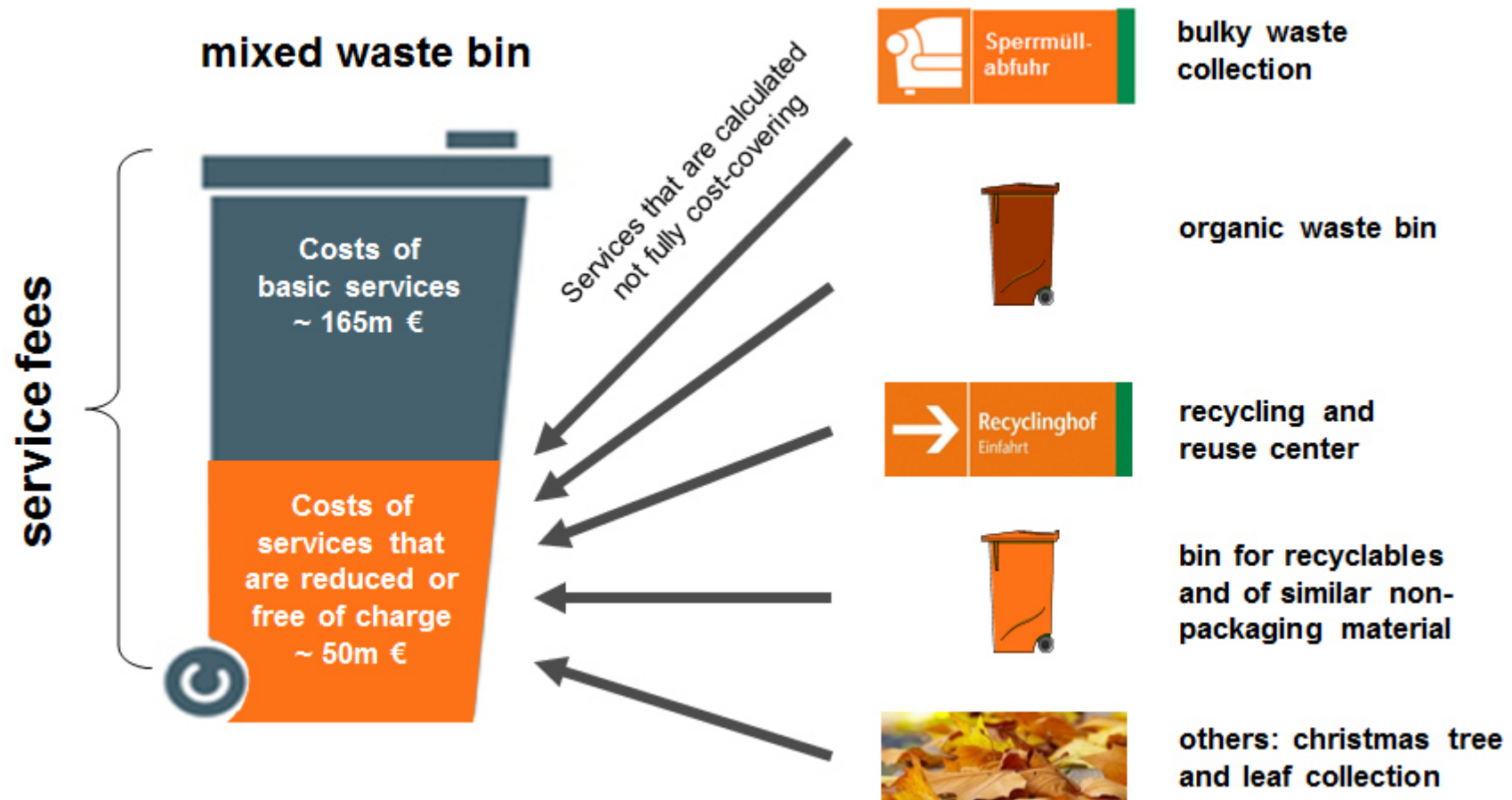
Thinking in cycles - Fermentation plant for organic waste



Profits from the sale of energy and recyclables reduce our fees



Service fees for mixed waste also cover the costs of other services



In 2013 a new recycling bin was introduced in Berlin

up to now	from 2013
 <ul style="list-style-type: none">▪ Metals▪ Electronic storage devices▪ Scrap Wood▪ Toys▪ Scrap textiles▪ Small electrical equipment▪ Plastics▪ Packaging waste	 <ul style="list-style-type: none">▪ Packaging waste▪ non-packaging of similar material according to UBA study<ul style="list-style-type: none">▪ Metals▪ Combined materials▪ Plastics