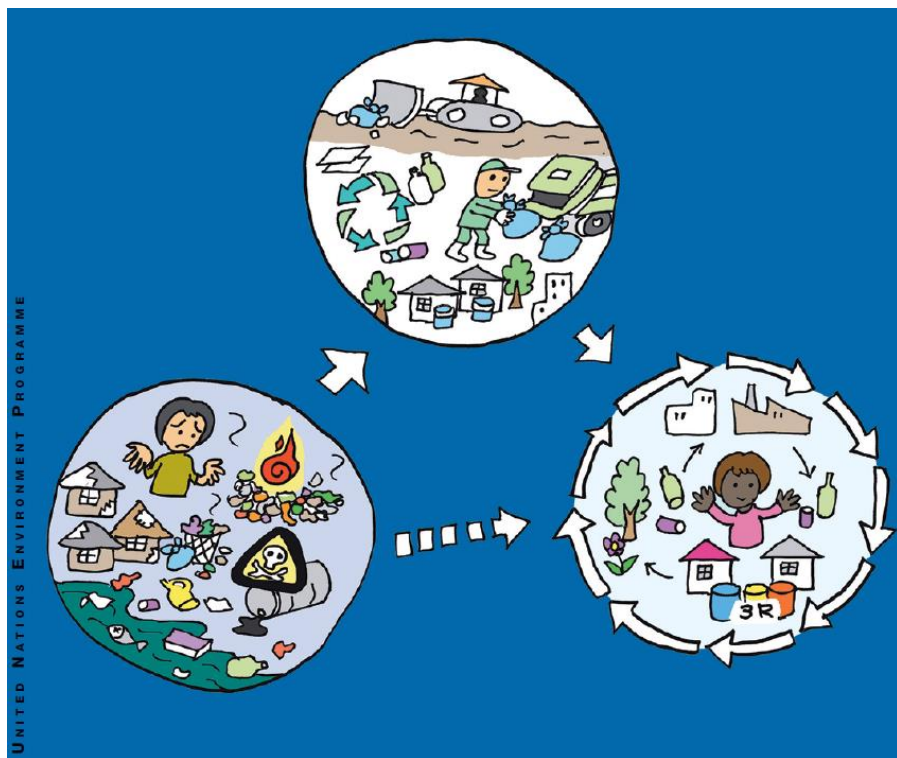




Wa Va Chain

Waste Valorisation market place

Secondary Raw Materials Market Creation : Waste stock Exchange



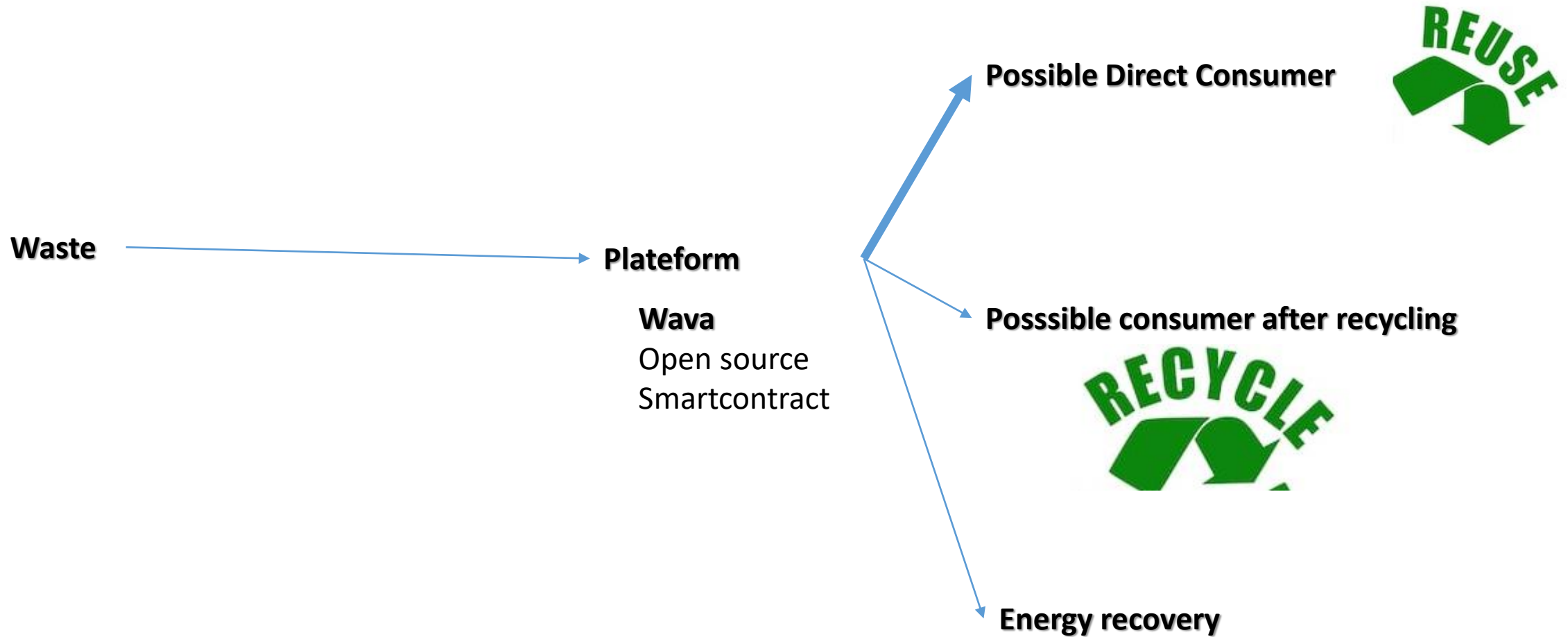
Identification of stream material with better usage



- direct reuse
- recycling
- destruction

Decentralized Platform for Waste Reuse /Recycle Market connection

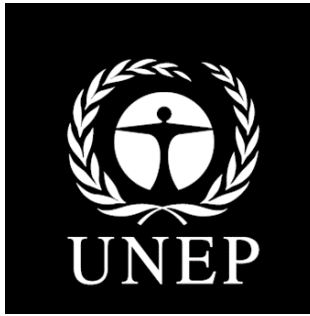
Let the market see and decide what is the best waste reuse /recycle / recover treatment and economic value





Industrial Waste Management

Chapter 19,20,21,12 Agenda 21



Different business : chemicals, food, metals,

- Different locations
- Different Scale
 - Industrial
 - Workshop



What is the waste market ?

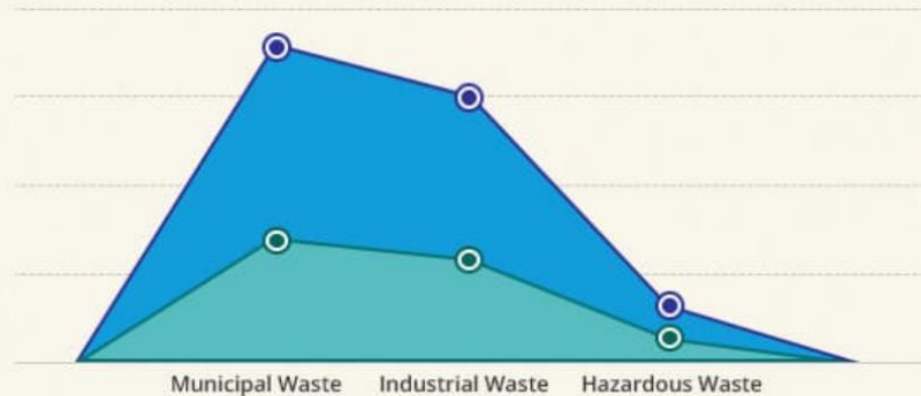
- 330 billion \$ 2017
- 530 billion \$ 2025

GLOBAL WASTE MANAGEMENT MARKET

BY WASTE TYPE

2017

2025



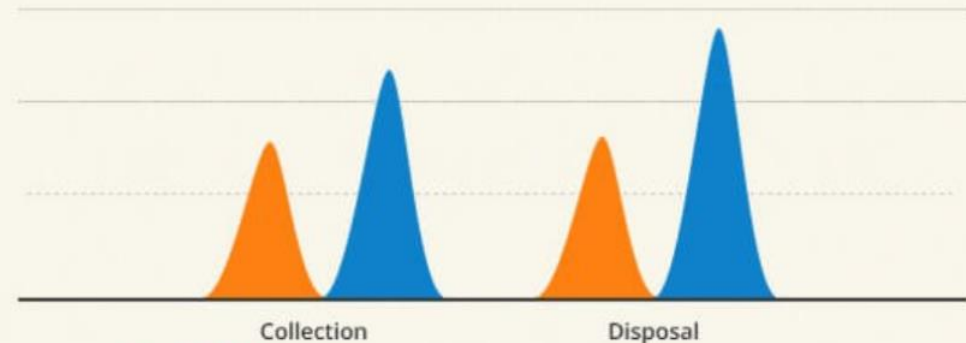
WaVa Target market

GLOBAL WASTE MANAGEMENT MARKET

BY SERVICE

2017

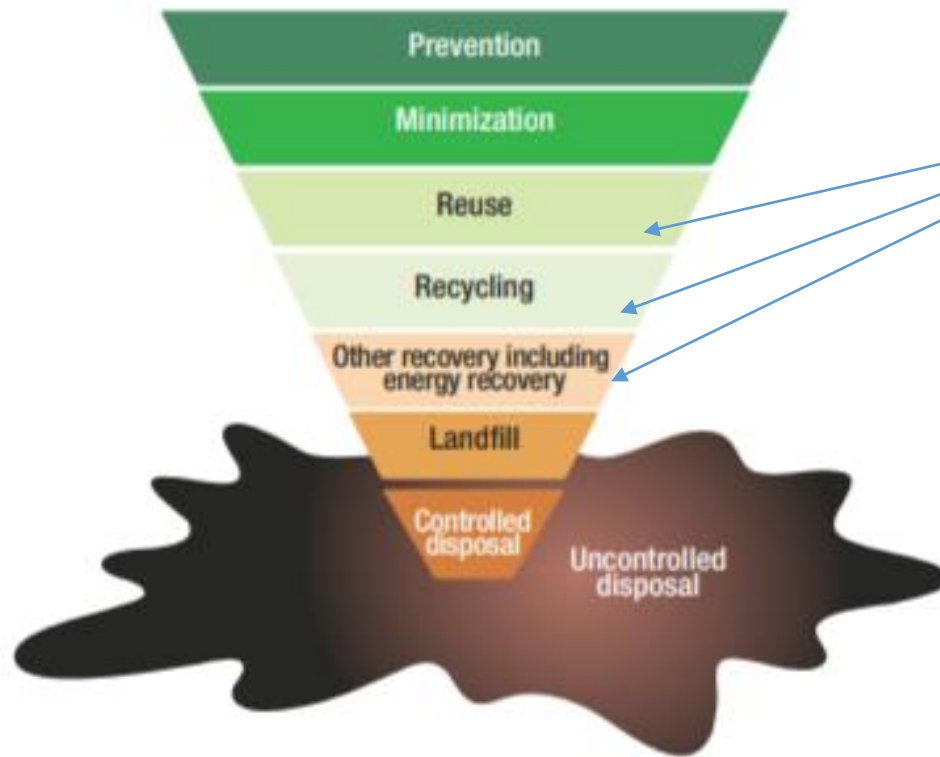
2025



Source UN report unep23092015

Waste Management Hierarchy :

WaVa



- WaVa would be present at Reuse and Recycling or energy recovery

Benefits for Industrials :

- Economically convenient :
 - Waste Cost becomes source of revenue
 - Save time for users (no individual Requests For Quotation)
 - Cheaper Raw Material Supply
 - Better Knowledge of the market
 - Possible reduction of cost transport and environmental impact
- Commitment to the environment and citizens :
 - Waste becomes second hand raw material
 - Reduction of reported waste in corporate reports
 - Better local and circular economy

Hazardous waste intensity
g/\$ sales

14.7

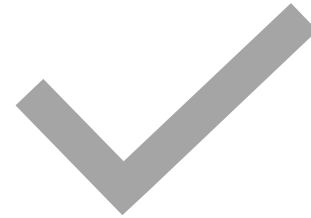


Centralized platform and the waste market: secondary raw material exchange



Centralized platform (Excess material Exchange)

- High fees for subscriptions
- Need to login to see the market
- Not open
- Centralized



Opportunity for a decentralized platform

- Low fees
- Open source and open data on blockchain
- Smartcontract

Waste market

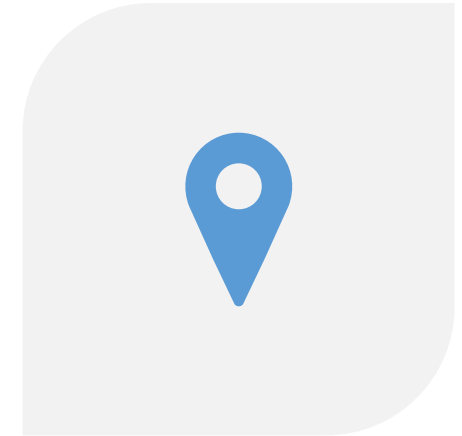
Data are the lifeblood of decision-making and the raw material for accountability. Without high-quality data providing the right information on the right things at the right time, designing, monitoring and evaluating effective policies becomes almost impossible



SHARE DATA

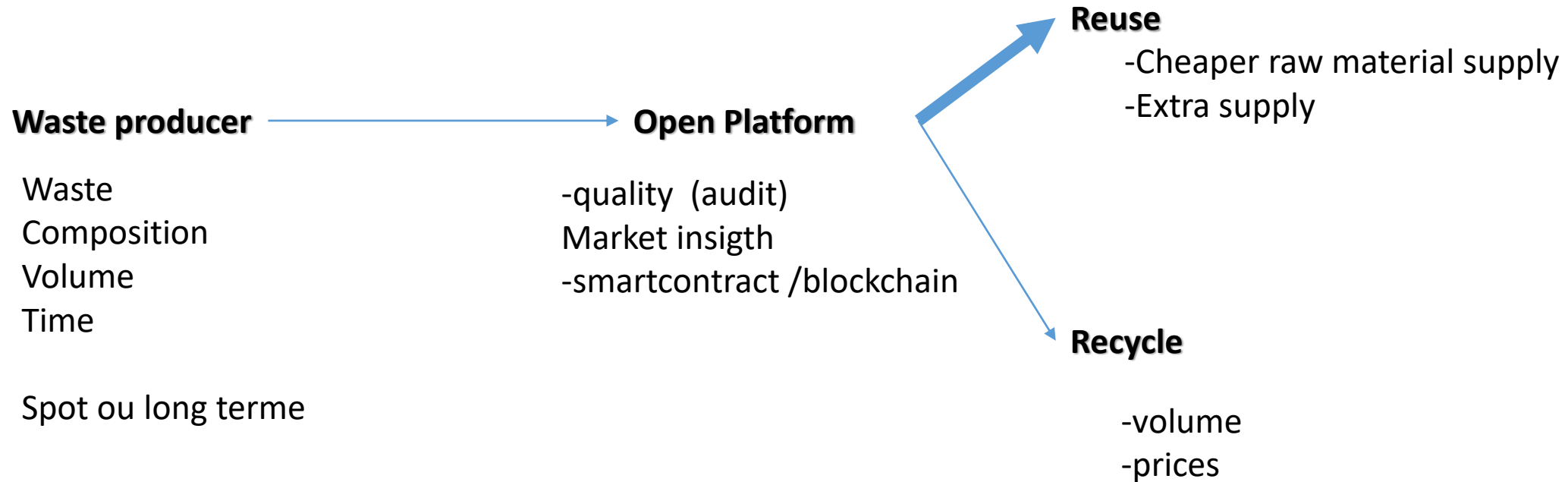


CONNECT PEOPLE AND BUSINESS
ONLY DECENTRALIZED AND OPEN PLATFORM WOULD
ALLOW SUCH UN VISION AND MARKET EFFICIENCY



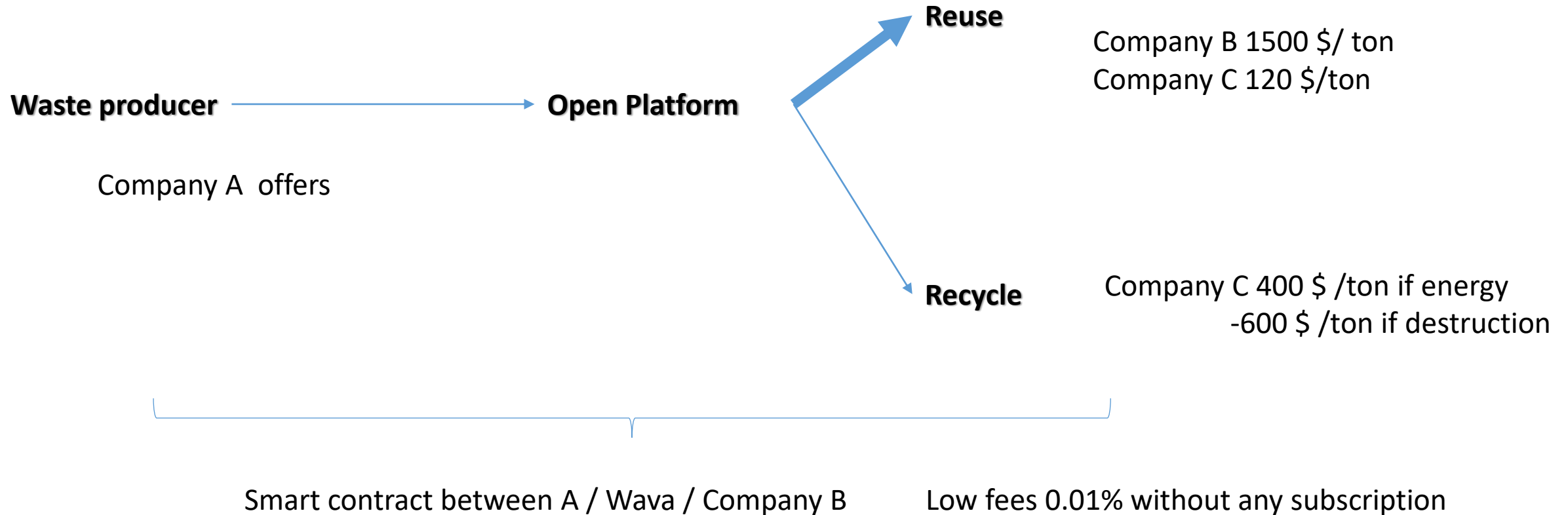
WASTE REPORT MARKET
[HTTPS://WWW.UNCLEARN.ORG/SITES/DEFAULT/FILES/IN
VENTORY/UNEP23092015.PDF](https://www.unclearn.org/sites/default/files/inventory/UNEP23092015.pdf)

Spot Market and Long term contracts



Smart contract and Fees

Bid / Ask Market



Why IOHK Cardano, UN and Wava?



IOHK WANTS TO CREATE A MORE CONNECTED AND
EQUITABLE WORLD THROUGH CARDANO BLOCKCHAIN



WAVA WANTS TO HELP TO CONNECT THE HUMANITY
TO IMPROVE REUSE AND RECYCLING IN ORDER TO
REDUCE THE IMPACT ON ENVIRONNEMENT



WAVA, UN , IOHK COULD BE STRATEGIC PARTNERS
THROUGHT CARDANO

Technical Challenges

- Open source platform for Matching orders
- Open decentralized blockchain orders of waste market (composition, price, volume, planning, location)
- API for data query
- 2 Smartcontracts :
- Accredited wallet for hazardous waste (Legal requirement)

Team

- Yannick Gendre
Chemical Engineer Health Safety Environment
- Yannick Ruivo
Chemical Engineer Quality



Early contacts for development with:
Platform and Smartcontract : Technical support from
(icare.ch)



Criteria Evaluation

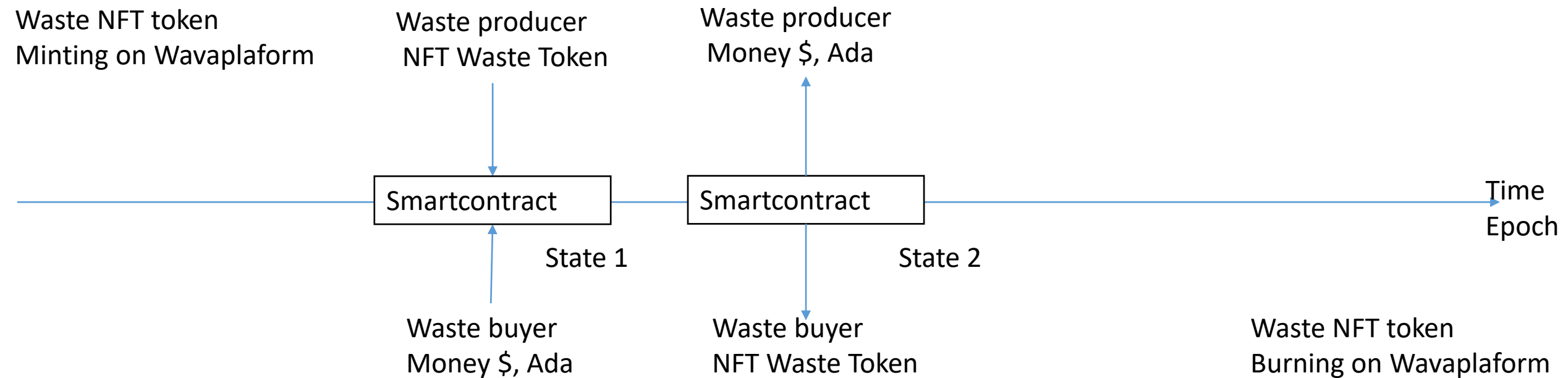
Social impact : Sustainable Development Goals	SDG Goal 12 Chemicals and Waste Chapter 19,20,21,12 Agenda 21
Scalability	Multi industry , Worldwide
Complement/expand IOHK Technologies	Smartcontract Non Fungible Token Accredited wallet
Technical Prowess	-Open platform, API, smartcontract, accredited wallet -Open platform using blockchain
Financing for the SDGs	Multistakeholder allocation of ressources Market best allocation of waste/material
UN Data Strategy	More and Better Data (open) Cheaper intermediation Aggregation

Marlowe Code

Case 1 : Reuse

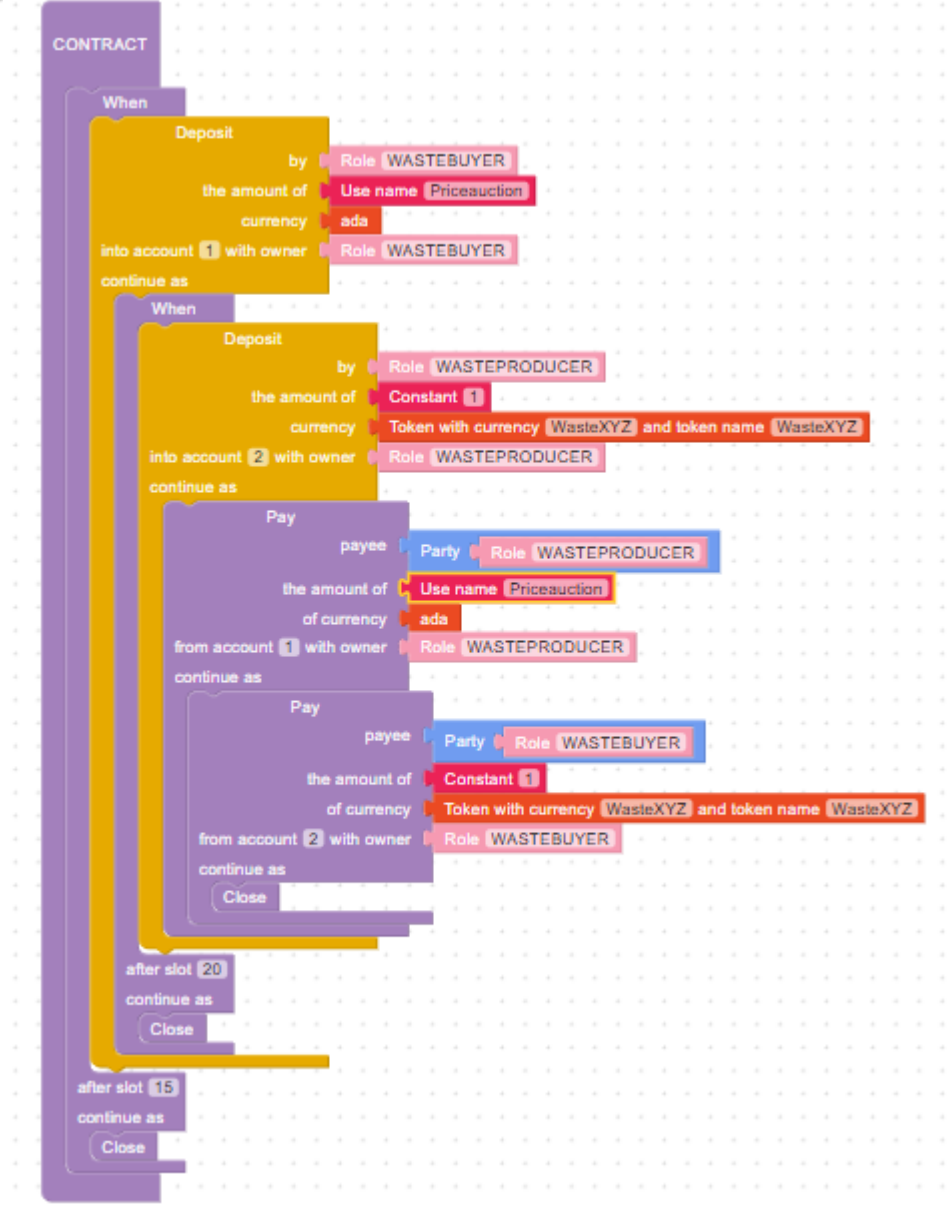
Smartcontract case : token swap

- After platform deal done, settlement of contract on chain



Case 1: Reuse Token Swap code

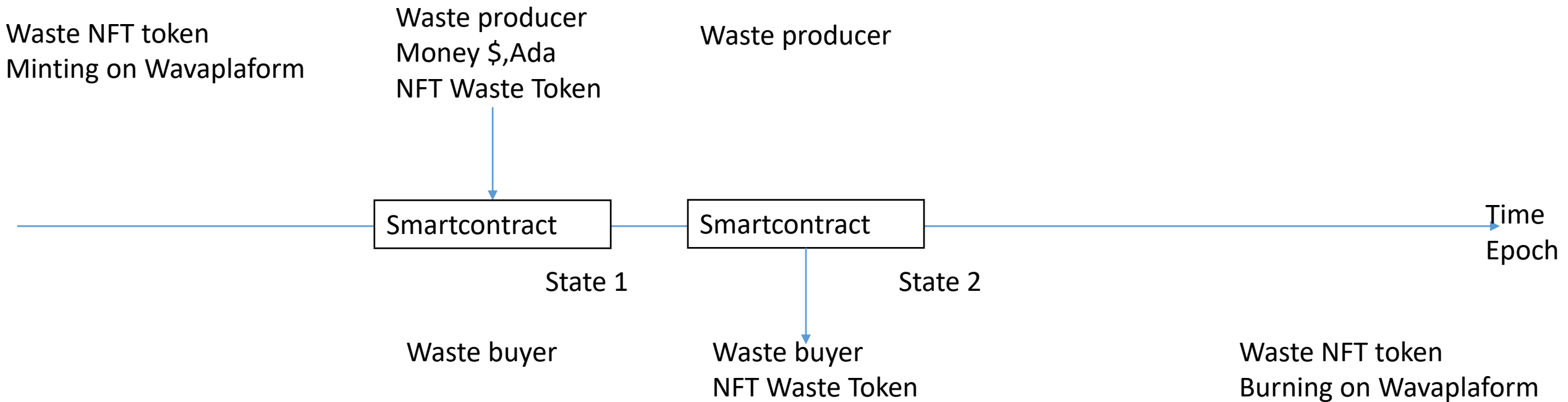
- WASTEPRODUCER
 - Send waste token, Receive ADA
- WASTERBUYER
 - Send ADA + Receive token



Case 2 : Recycle

Smartcontract case : token + money sent

- After platform deal done, settlement of contract on chain



Case 2: Recycle Token + money sent

- WASTEPRODUCER
 - Send ADA + waste token
- WASTERECEIVER
 - Receive ADA + waste token

