



Zero-Emission Inner City Distribution



17 September 2013

TransMission Introduction

•High density multi drop distribution network

- **Parcels, Pallets, General Cargo - 1 Process**
- **Overnight pick-up & delivery**
- **Benelux - every day everywhere**
- **Inner city & High Street**
- **Business Areas and Home Deliveries**
- **Lots of Extra Services**

•Customers

- **SME Trade & Industry**
- **Large International companies**

•Figures

- **1.200 staff**
- **15.000 shipments/day**
- **450 vans & trucks**

•Structure – Family owned

- **11 Depots NL - shareholders**
- **2 Depots NL - owned**
- **4 Depots BE - partners**
- **1 Small Central HQ**

•Quality & Service = Contract

- **People with passion en affinity**
- **100% Transparant quality**
- **Flexible en creative**



TransMission Inner City Distribution

•Challenges

- Traffic Congestion
- Noise
- Pollution (CO₂ & NO_x)
- Safety
- “Quality of Inner Cities”



City of Utrecht

•The Solution

- One frustrated entrepreneur
- In lengthy “working”- group sessions
- In the right position
- At the right time



Environmental Zone





cargohopper[®]
stadsdistributie



Concept

- **Logistics center at edge of inner city**
 - **Receiving, cross docking, loading**
 - **On time delivery of shipments**
 - **Collections, returns and empty packaging**
 - **Open EDI to connect multiple supply chains**
 - **Warehousing for retailers**
 - **Neutral branding to attract all carriers**



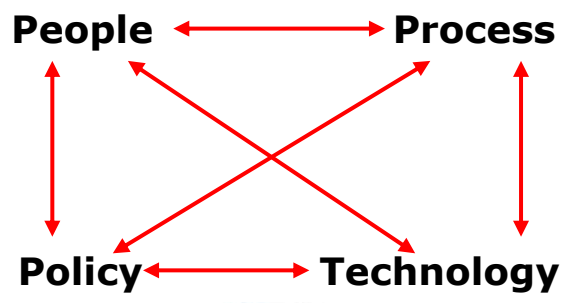
**Cross Chain Control Center
for Inner City Distribution**





Key Success Factors

- Location
- Volume – parcels & pallets
- Vehicles
- High level IT with low level detail
- Sponsor
- Project champion
- Perseverance
- Marketing



Integrated Approach Required



Location

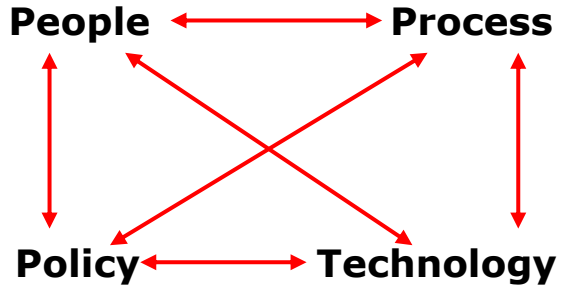
- Availability
- Suitable
- Costs
- Logistics not sexy
- Traffic
- Site redevelopment
- Planning Permission



Amsterdam environmental zone and ● Cargohopper Location



Local Government has task in land use/site planning





Volume

1. Food
2. Food services
3. Construction
4. Waste collection
5. Own account
6. Parcels/Pallets
7. Couriers

Heavy loads option:

- Fully electric truck
- 12 – 5 net
- 15 – 7 net
- 18 – 10 net
- Classical design
- Range limits!



Rome LEZ: Sufficient Potential Volume!



Food & food services, construction and waste are the biggest flows



Cargohopper II

- 75 kms range
- 2,500 kg net payload
- 50 kms/hr speed
- 10 Europallets
- 16 rolcontainers
- 21,5 Cbm
- Width 1,75m



Vehicles

- Range
- Loading Capacity
- Speed
- Specifications
- Availability
- Regulations
- Exemptions



Milan LEZ : via exempt blue and yellow roads close to inner city



Maximum range requires proximity to inner city

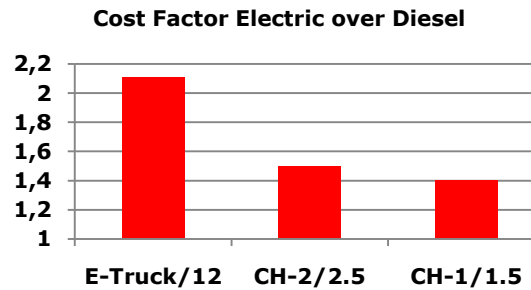


Cargohopper – Cost

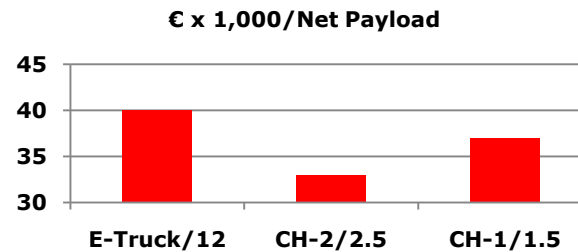
Option:

- Solar Power
- Integrated roof panels
- Loading whilst operating
- Range extension 15%
- Really zero-emission

- Electric more expensive than diesel



- But highest payload per € investment



Cargohopper most efficient





Cargohopper – Cost/Benefit Analysis

- **Benefits befall to Society**
 - **Clean - where it matters**
 - **Silent**
 - **Safe**
 - **Friendly**
 - **Huge improvement in living quality**
- **Extra investment costs need to be offset**
- **No operational subsidies**



Local Government Policy





Conclusions

- **Fulfill Key Success Factors**
 - **People, Process, Policy & Technology**
- **Cargohopper gives best net payload/€**
- **Solar power option to go the extra mile**
- **No abstract policy, white paper or vague future**



**100% Zero-emission
Inner City Distribution
Is possible – today!**





Thank you

Questions?

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