

# Financing and Funding Options for Sustainable Urban Mobility

PROSPECT Webinar: Business models, funding and financing transport

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#### **SUMP 2.0**

### Topic Guide on Funding and Financing









### Available online:

https://www.eltis.org/sites/default/files/funding\_and\_finance\_of\_sump\_v2.pdf

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### **Financing Gap**

### Financing the mobility transition

- To achieve the 2030 climate and energy targets, EU COM expects annual investment gaps of 35 bn EUR for urban transport (SWD(2020) 98 final)
- > Mobility transition may save money in the mid- to long term, *but* requires upfront investments

### **Financing Gap**



### Different kinds of financing needs

### Preparation

Construction and procurement

Operation & maintenance

feasibility studies, public participation



high amounts over a shortto medium time period



continuous flow of relatively smaller amounts







### Funding and Financing mechanisms are available, but ....

... cities and regions struggle finding adequate instruments
... application processes are time consuming and require expert knowledge
... not all instruments are applicable in all member states (lacking legal power)

... many instruments require political support - also against strong opposition

... a combination of several mechanisms and instruments is needed to cover different projects and project stages.

→ Requires a financing strategy with clear investment related targets and indicators in the urban mobility strategy

**Financing Gap** 





### **Funding vs. Financing**



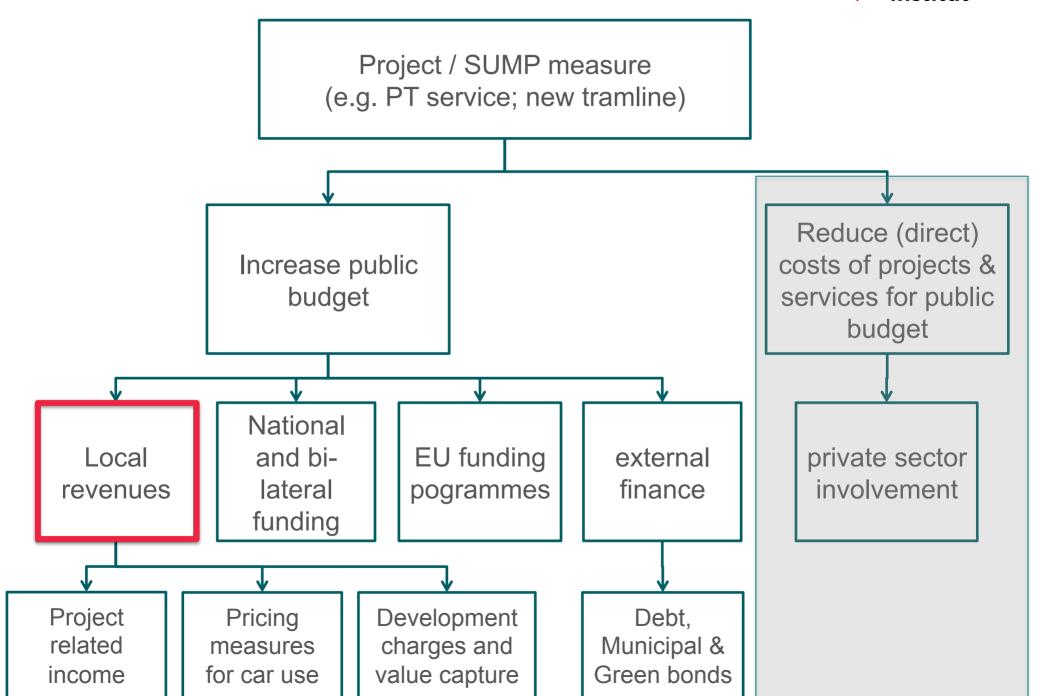
Funding	Financing	
Amount of money provided by an institution to e.g. a city for a specific purpose, often under specific programmes.	Process of raising money for a specific purpose using debt or equity instruments.	
Funding is often free of charge and not reimbursable	Providers of financing expect re-payment of the money provided and an interest	
Sources of funding are national and regional governments or EU institutions, i.e. most often public budgets	· · · · · · · · · · · · · · · · · · ·	

02/07/2020

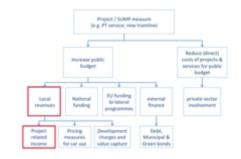
## **Wuppertal Overview** – Funding and Financing Options Institut Namely sustainable modes Namely sustainable modes Namely sustainable modes Inuating lateral funding Project / SUMP measure Reduce (direct) osts of projects & services for public Local Project Debt, Pricing Development related charges and Municipal & measures value capture Green bonds income for car use

### **Overview** – Funding and Financing Options





# Local Revenue Streams Project generated income





### Project generated income

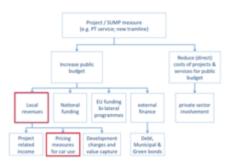
- Commonly used
- > Fares, tickets sales
- Lease of advertising space in vehicle and at stations

#### BUT

- Trade-off between attracting passengers, social concerns and cost coverage
- Revenues do not cover cost (up to ca. 70%)
- Income generated only after start of service
- Uncertainty related to expected income

#### **Local Revenue Streams**

### Pricing measures / demand management



### **Parking Management**

- Widespread in the EU
  - Most cities have legal competences to introduce parking managem schemes
  - Fee for the private use of public space
  - moderate implementation costs

### **Road Pricing / Congestion Charges**

- Only few examples in the EU
  - Cities often lack legal power to introduce road pricing
  - Political resistance
  - High upfront investments
  - Legal concerns: Automated number plate recognition and data protection
  - Examples: London, Durham, Stockholm, Gothenburg, Bologna, Milano, Znojmo, Valletta



P PUSH & PULL

Have

you

# Local Revenue Streams Employers Contributions

### **Employers Contributions**

- Charges on employers (not: employees) to subsidise public transport
- May be based on different objects:
  - Workplace parking places
  - Number of employees
  - % of salaries payed by the employer

### **Example: Workplace Parking Levy in Nottingham**

- Levy on workplace parkings (ca. €430/a per parking place)
- ➤ Applies to employers with > 10 commuter parking places
- employers can reclaim cost of the from their employees
- > ca. €10m p.a.; invested into the city's transport infrastructure, including 45 e-buses and extension of the tram network.





Source: ttps://secure.nottinghamcity.gov.uk/wpl/common/Employer handbook.pdf

# Local Revenue Streams Employers Contributions



### **Example: Dienstgeberabgabe in Vienna**

- Fixed levy on employees: 2€ per employee and week
- > exemptions for elderly employees, employees with mental and physical handicaps, part-time employees, employees of public authorities, etc.
- Income is ring-fenced for the extension of Vienna's Metro



Photo: Wiener Linien (Vienna

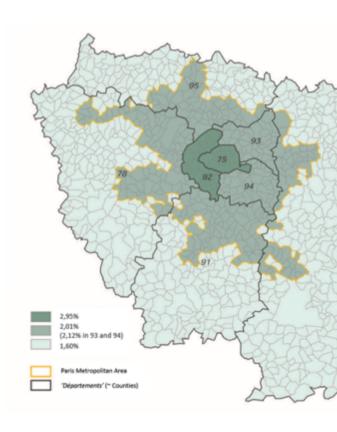


# Local Revenue Streams Employers Contributions



### **Example: Versement Transport in Île-de-France**

- > Tax is calculated as a percentage of the salaries
- Private and public employers
- Île-de-France Mobilités uses the tax to pay transport operators and for investment costs
- > The tax contributed, in 2017, to 42 % of the total operation costs and part of Île-de-France Mobilités investment costs





# Local Revenue Streams Land Value Capture and Development Contributions



#### **Rationale**

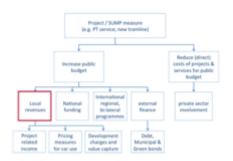
- Land developments require transport infrastructure and services
- New developments generate new burden on infrastructure
- > Provision of high quality transport services increases value of surrounding land
- → Make those who profit from development contribute a share of the cost

### **Examples**

- **▶ Mobility Tax** (Barcelona): Surcharge on property tax
- > Stamp Duty Land Tax (England and Northern Ireland): Owner pays a when purchasing a property
- **Community Infrastructure Levies** (England and Wales): Land developers pay taxes that can be used for public services and infrastructure



#### **Local Revenue Streams**



### Ring-fencing local revenues for sustainable mobility

#### **Pros:**

- Additional source of income
- Increases acceptance of 'push-measures'

#### Cons:

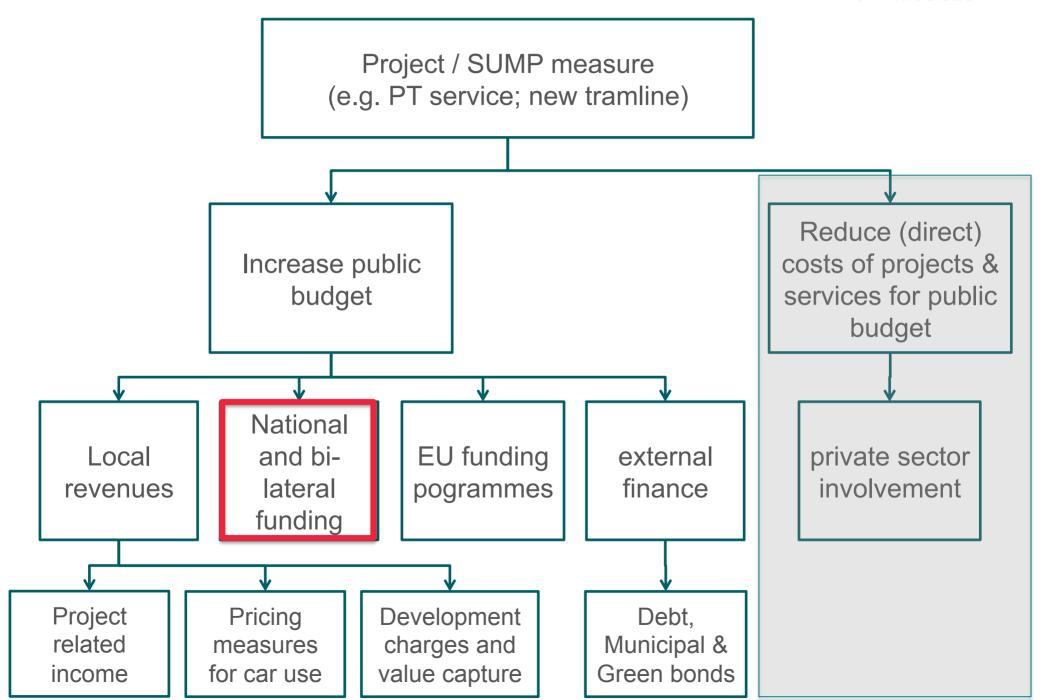
- May reduce contributions from general public budget
- ➤ Less reliable source of income: revenues hard to predict → impacts of crisis!
- > Successful push and pull approaches degrade their own source of income





### **Overview** – Funding and Financing Options





### National level funding programmes



### National level support programmes focus on:

- SUMP preparation and development
- Procurement of e-buses
- Corona recovery packages

# **Example: The German National Electric Bus Funding Programme**

- Government fund (Ministry for the Environment)
- ➤ 300 mio. to support public transport operators and municipalities with exceeding NOx limits
- > Covers 80% of additional investment costs for e-buses and charging infrastructure, compared to diesel buses



# **EU funding, bilateral programmes**Bilateral Programmes



### **Example: Cluj Napoca, Romania**

- Swiss-Romaian cooperation for the procurement of e-buses
- > Switzerland provided funding for the procurement of 11 e-buses (85% + 15% from city budget)





### Wuppertal **Overview** – Funding and Financing Options Institut Project / SUMP measure (e.g. PT service; new tramline) Reduce (direct) costs of projects & Increase public services for public budget budget **National EU** funding Local and biexternal private sector involvement lateral pogrammes finance revenues funding **Project** Debt, Pricing Development Municipal & related charges and measures

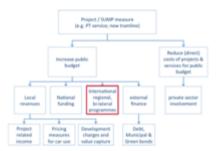
value capture

income

for car use

Green bonds

### **EU Funding & Support Instruments**



### Regional Policy: European Structural and Investment Funds (ESIF)

- > Implemented by Member States and their regions
- > Funds to support economically viable projects amongst others on 'sustainable transport networks and bottlenecks'.
- > The ESIF contains five separate funds, including
  - European Regional Development Fund ERDF and

Cohesion Fund

### **EU Funding & Support Instruments**



### **European Regional Development Fund ERDF and Cohesion Fund**

### 5 Policy Objectives 2021-2027

- **Smarter Europe** 
  - Incl. supporting public institutions to develop digital services and applications
- **Greener Europe** 
  - Incl. investments in energy efficiency
- **Connected Europe** 
  - Sustainable multimodal urban mobility, incl. tramways and metro lines
- **Social Europe**
- **Europe closer to citizens** 
  - Integrated Urban Development Strategies

### **EU Funding & Support Instruments**



### **Connecting Europe Facility (CEF)**

Fund for pan-European infrastructure investment in transport, energy and digital projects,

- Operates through grants, financial guarantees and project bonds.
- Potential linkages to urban mobility:
  - urban nodes (→ <u>strehgtening expected 2021-2027</u>),
  - multi-modal logistics,
  - new technologies & innovation

### **Examples:**

- Innovative and digital bike storage solutions in urban nodes for efficient passenger transfer and last-mile connections
- Building a charging infrastructure for electric vehicles in order to decarbonise public transport in Warsaw
- URBAN-E: e-Mobilty, Infrastructure and Innovative Intermodal Services in Ljubljana, Bratislava and Zagreb



### **EU Funding, bilateral programmes**

### **EU funding: Support Instruments**



#### **ELENA**

- joint initiative by the EIB and the European Commission under Horizon 2020
- provides grants for larger <u>project development</u> costs (> EUR 30 million with 4-year implementation period), e.g. feasibility studies, market assessment, procurement strategies
- > Public or private entities can apply for an up to 90% coverage of project-related expenses for technical assistance, internal staff, external expertise.

**JASPERS** (Joint Assistance to Support Projects in European Regions)

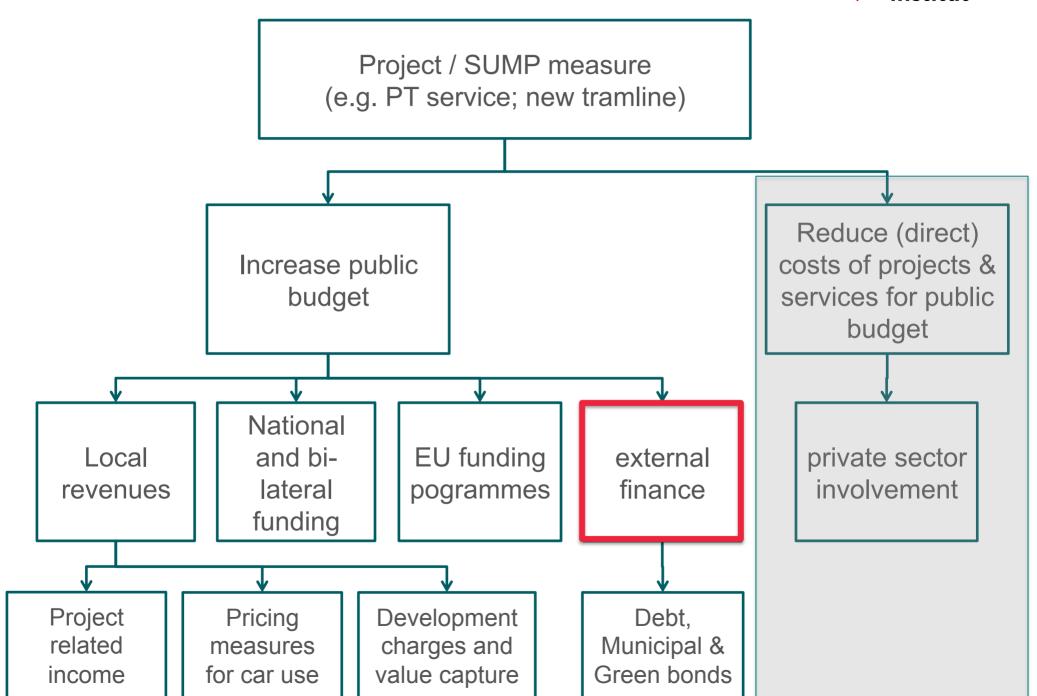
- European Commission, EIB and EBRD
- > offers support to public authorities and promoters in the <u>preparation and</u> <u>implementation of ESIF projects</u>.

**JESSICA** (Joint European Support for Sustainable Investment in City Areas)

- European Commission, EIB and Council of Europe Development Bank (CEB).
- > supports sustainable urban development through <u>financial engineering</u> mechanisms.

### **Overview** – Funding and Financing Options





### **Debt Mechanisms & External Finance**

### Bank Loans: EIB Financing



### **EIB Financing Instruments**

- **>** loans for mobility projects (<u>>50 Mio €</u>) in line with EU objectives
- > EIB covers 50% of project costs; other 50 % from other sources
- Projects must be financially viable (i.e. provide returns, limited risks)
- > the EIB prioritises urban public transport projects through the VA method. Particular priority is attributed to:
  - (i) increase in capacity of **public transport** networks
  - (ii) innovative projects such as [...] schemes **based on the** user/polluter pay principles.







# **Debt Mechanisms & External Finance**

### Bank Loans: EIB Financing

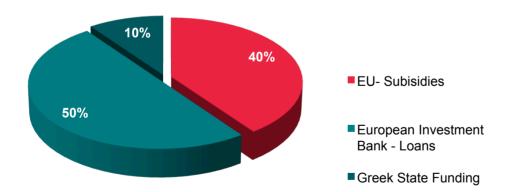


### **Blending of EIB loans:**

> Combination of EIB loans and other financing / funding instruments

### Case Example: Thessaloniki Metro Funding





Source: Samuel Salem, Transport Authority of Thessaloniki (TheTA): «Financing the construction of Thessaloniki's Metro», presentation at the 6th SUMP Conference, June 2019



# Debt Mechanisms & External Finance Bank Loans: EIB Financing

### **Supporting programme: Cleaner Transport Facility**

- ➤ EIB/EC Initiative, launched in Dec. 2016
- Supports investments in low-carbon vehicles and infrastructure
- > Combines lending, funds, guarantees, advisory services

### **European Energy Efficiency Fund**

- > Financing instruments for energy efficiency investments, including e-mobility, car sharing, etc.
- Targets municipal, local and regional authorities
- Provides financing for projects from 5-25 mEUR



## Cleaner Transport Facility: Supporting the deployment of cleaner transport



Source: https://www.eib.org/en/publications/cleaner-transport-facility



# Debt Mechanisms & External Finance City Bonds, Revenue Bonds, Green Bonds



### **City Bonds**

- debt instruments to unlock external investment capital for expenditures, including transport infrastructure projects and service operation.
- yield immediate capital, while repayments can be extended over a long time period of approx. 20-30 years.
- > Fixed interest rate, tradable, often institutional investors

#### **Revenue Bonds**

**>** Bonds where interest rates are paid from project revenues

#### **Green Bonds**

- Proceeds are ring-fenced for sustainable projects
- > Re-direct finance towards sustainability solutions
- (long-term)Investors see threats for conventional business models and opportunities of new, green solutions

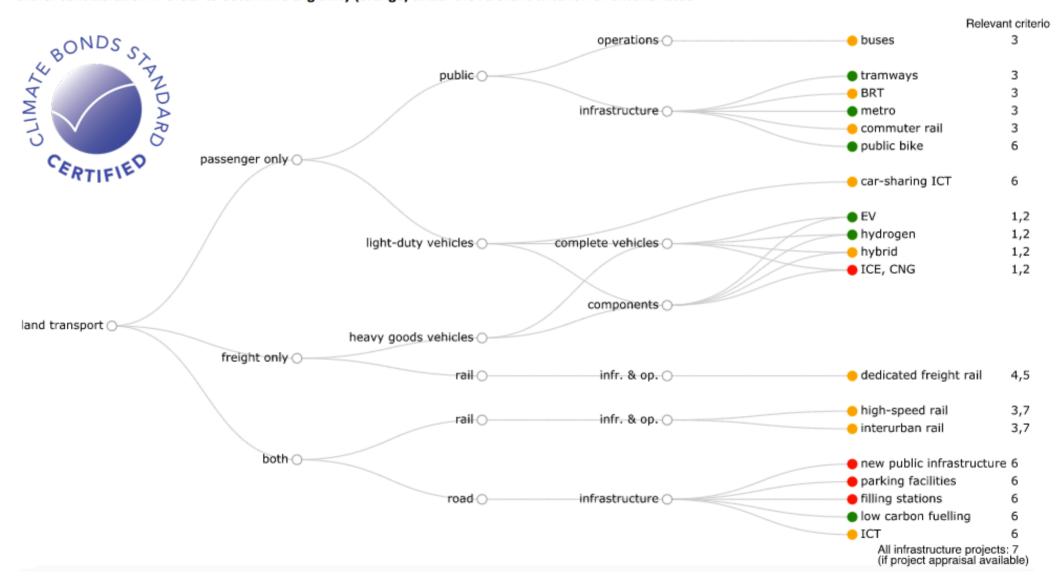


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# Debt Mechanisms & External Finance City Bonds, Revenue Bonds, Green Bonds



Figure 1: Summary of land transport products and projects that would automatically qualify under the standard (green), automatically not qualify (red), or need further consideration in order to determine eligibility (orange) under the relevant criterion or criteria listed



# Debt Mechanisms & External Finance City Bonds, Revenue Bonds, Green Bonds



### **Example: RATP Green Bonds Programme, 2017**

- > French state-owned public transport operator RATP (Régie Autonome des Transports Parisiens) launched a green bonds programme in 2017
- Proceeds will be invested into future projects or are used to refinance existing projects:
  - renewal of railway rolling stock,
  - upgrading of a metro line, and
  - purchase of electric locomotives for the maintenance of RER infrastructures.
- > RATP aimed at a € 500 million with a 10-years issue. The fond was three times oversubscribed.
- ➤ More Information: <a href="https://www.ratp.fr/en/en/la-ratp-et-les-green-bonds">https://www.ratp.fr/en/en/la-ratp-et-les-green-bonds</a>



	Plan development and preparation	Construction and procurement	Service provision, Operation and maintenance
private sector		Voluntary Capture	Concessions, Contracts
		PPP: BOT, BOOT	
		Cross-payments from ring fenced taxes & fees	Project related income: fares, advertisement, etc.
City/ region		(Green) City Bonds and debt instrum	
		Value capture	Road charges, parking fees
	General municipal budget		
national/ regional	National Funding & Support Programmes		Financial transfers for the provision of PT services
bilateral	bilateral programmes		
	H2020 / CiViTAS	ESIF / CEF	
EU	ELENA EIB / Commercial Banks Loans		oans

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