

INERTWASTE

Inert waste recycling solutions: how to scale up ?

Examples in Paris Region

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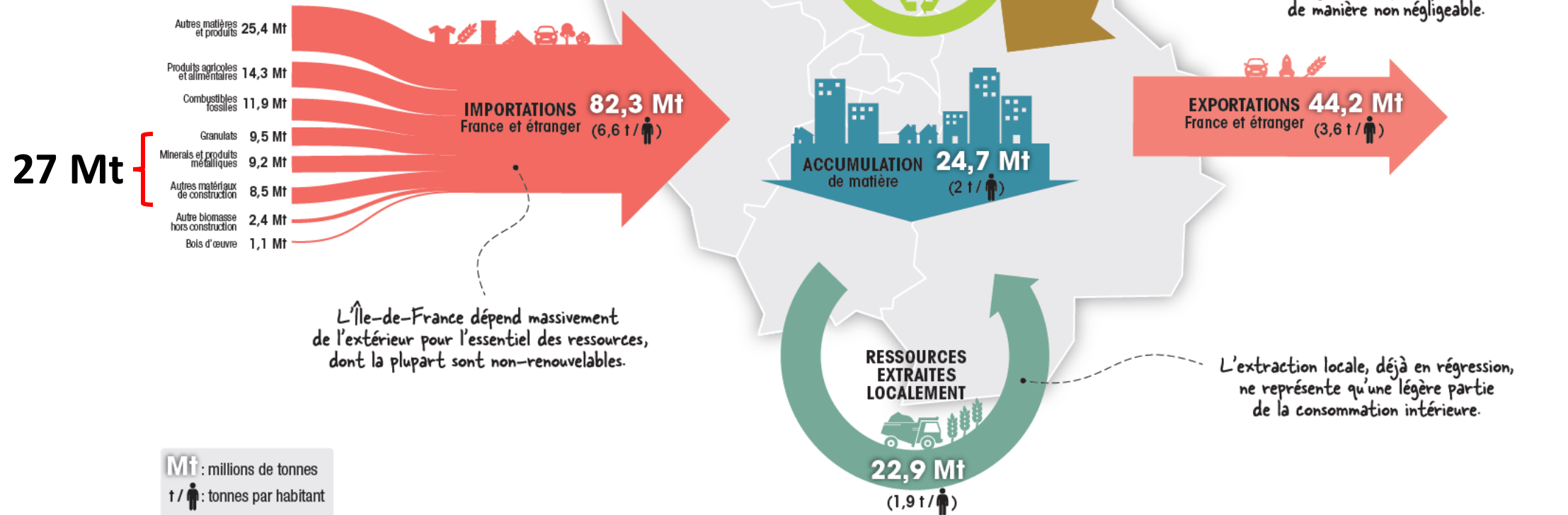
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BILAN DE FLUX DE MATIÈRES*

HORS FLUX INDIRECTS - ÎLE-DE-FRANCE, 2021



* Les flux d'équilibrage ne sont pas indiqués dans l'infographie.

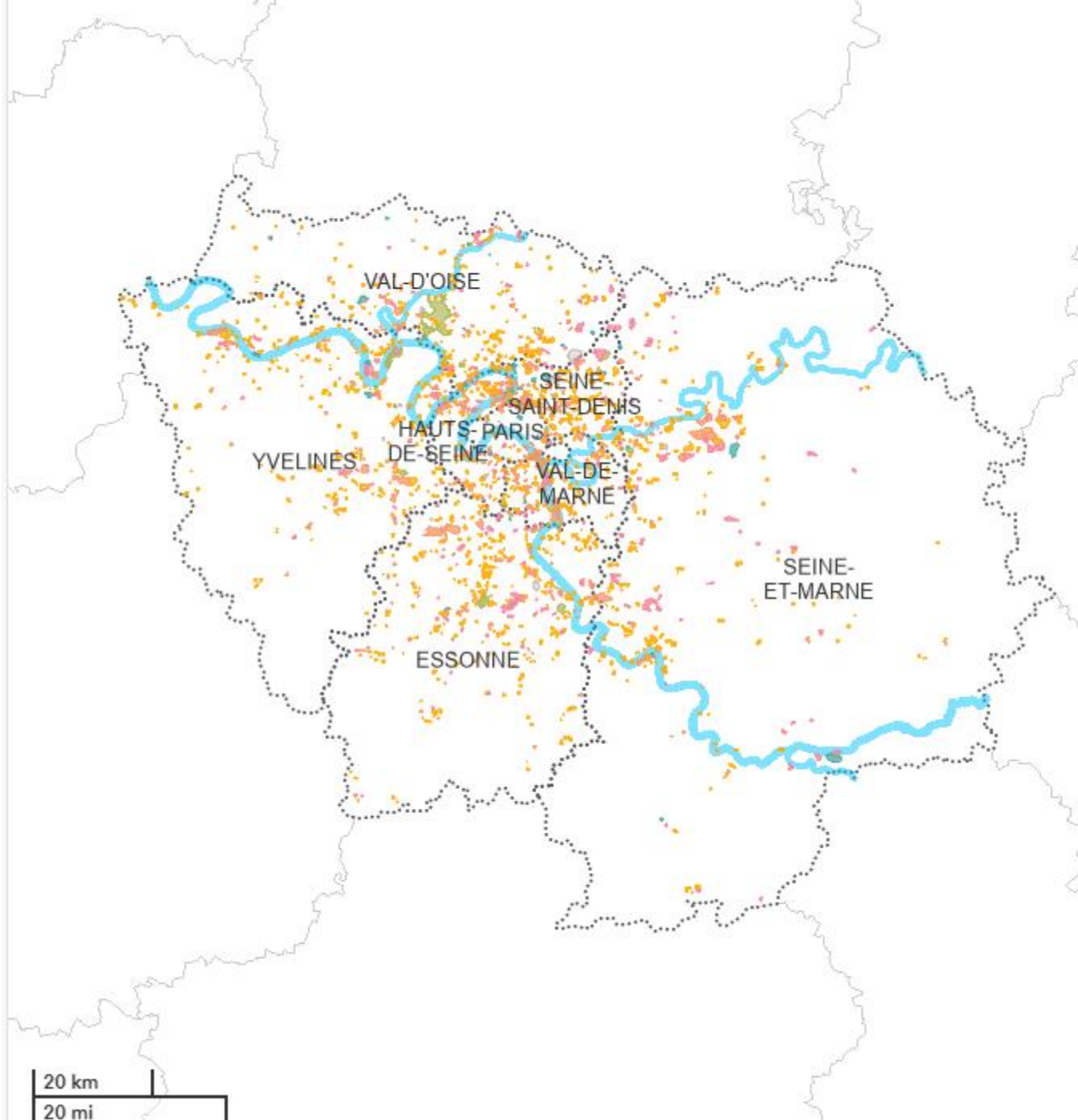
Sand and aggregates: annual needs and local availability



Annual needs for sand and aggregates for the construction sector: **~ 15 Mt**



Maximum annual quantity of local extraction: **~ 7 Mt**

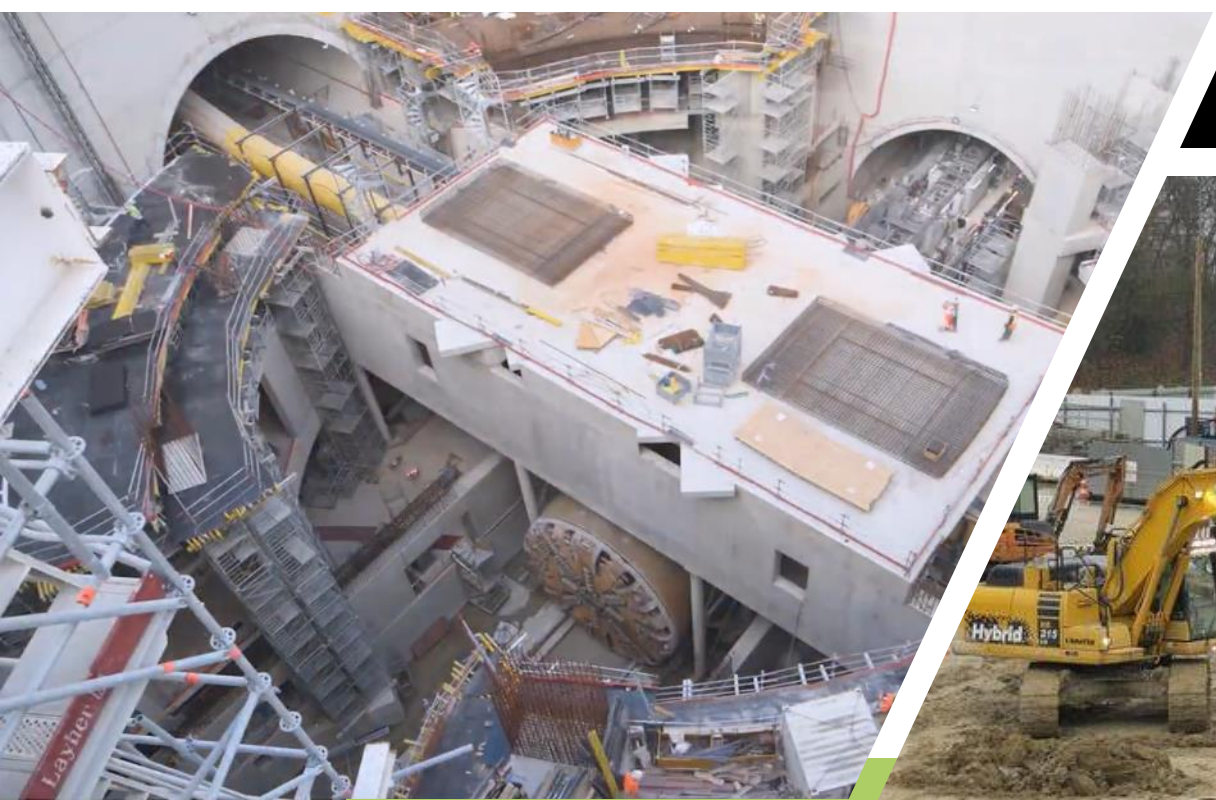
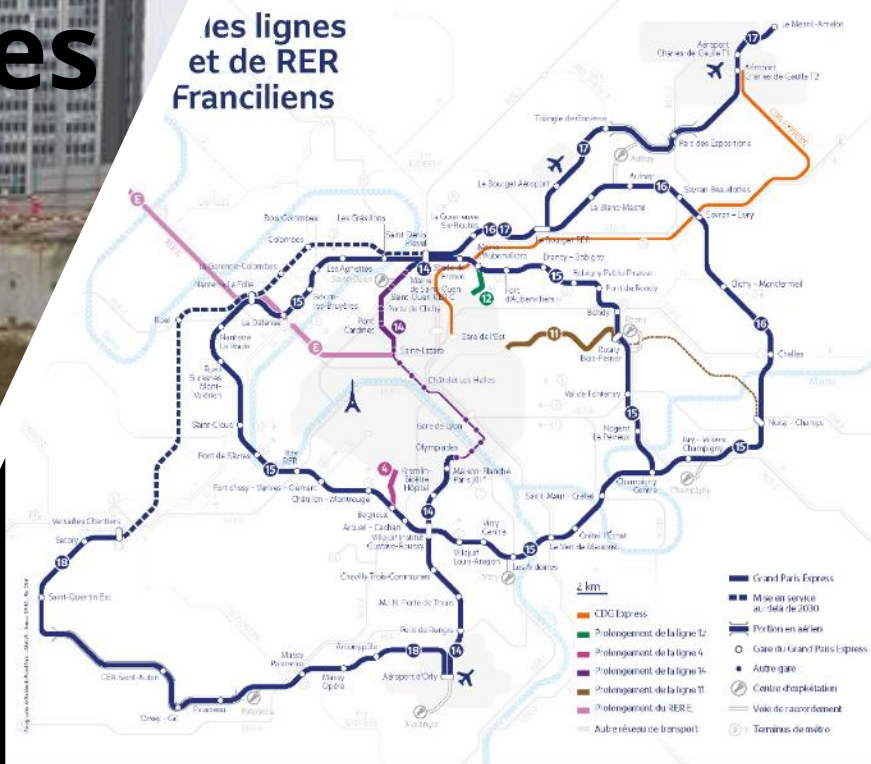


**70,000 housing
constructions / year**
(in average)

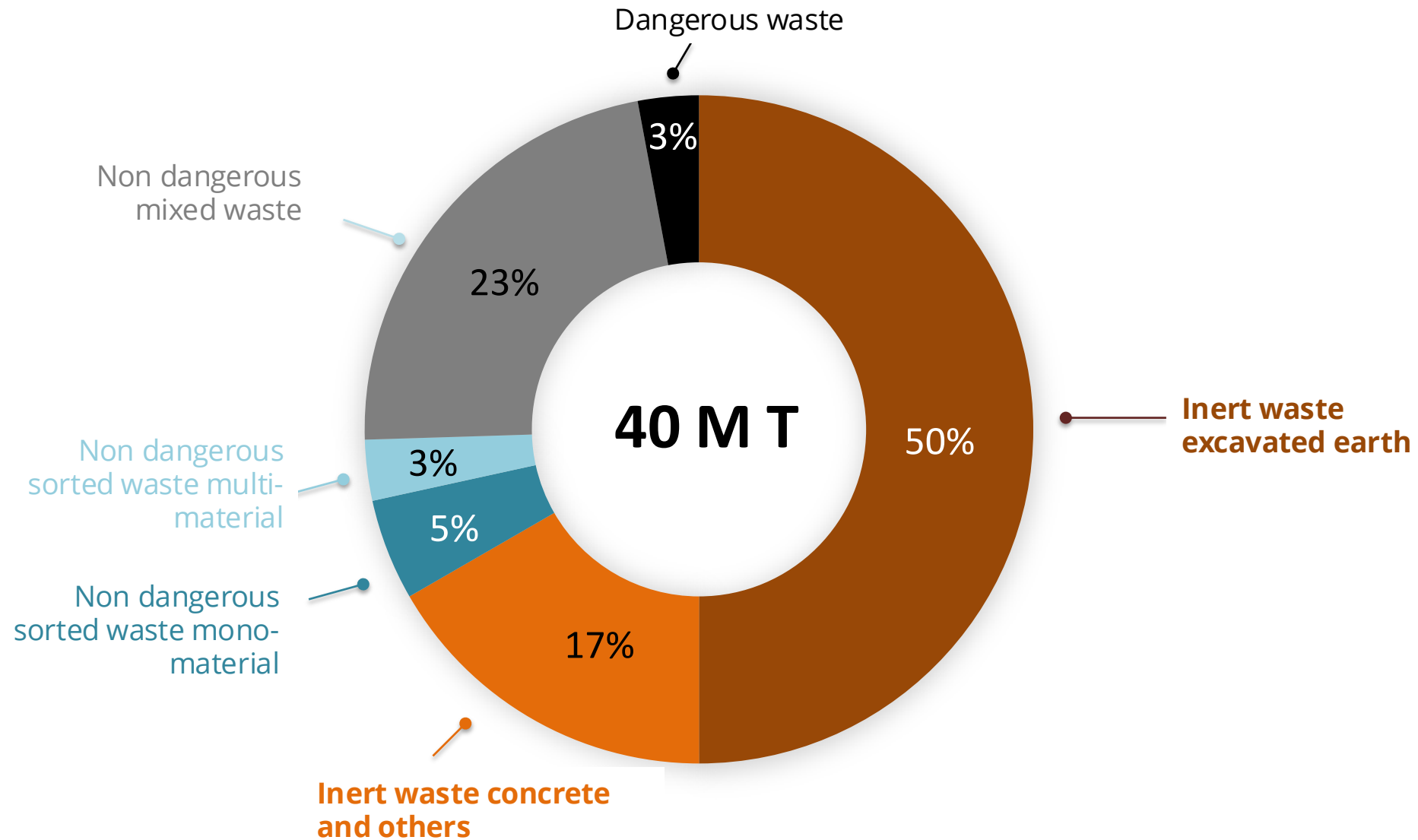
200 km of new metro lines



les lignes et de RER Franciliens

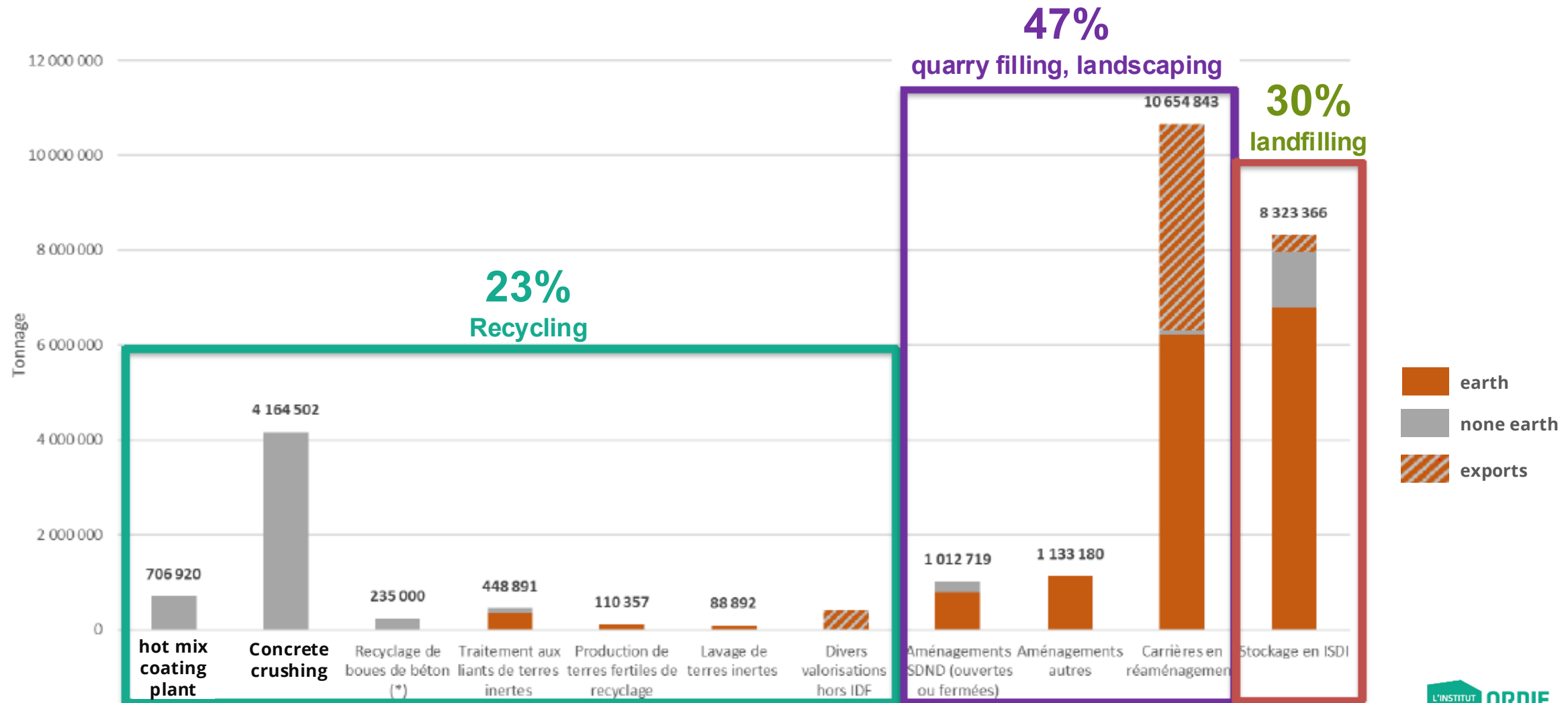


Waste production in *Île-de-France* in 2022

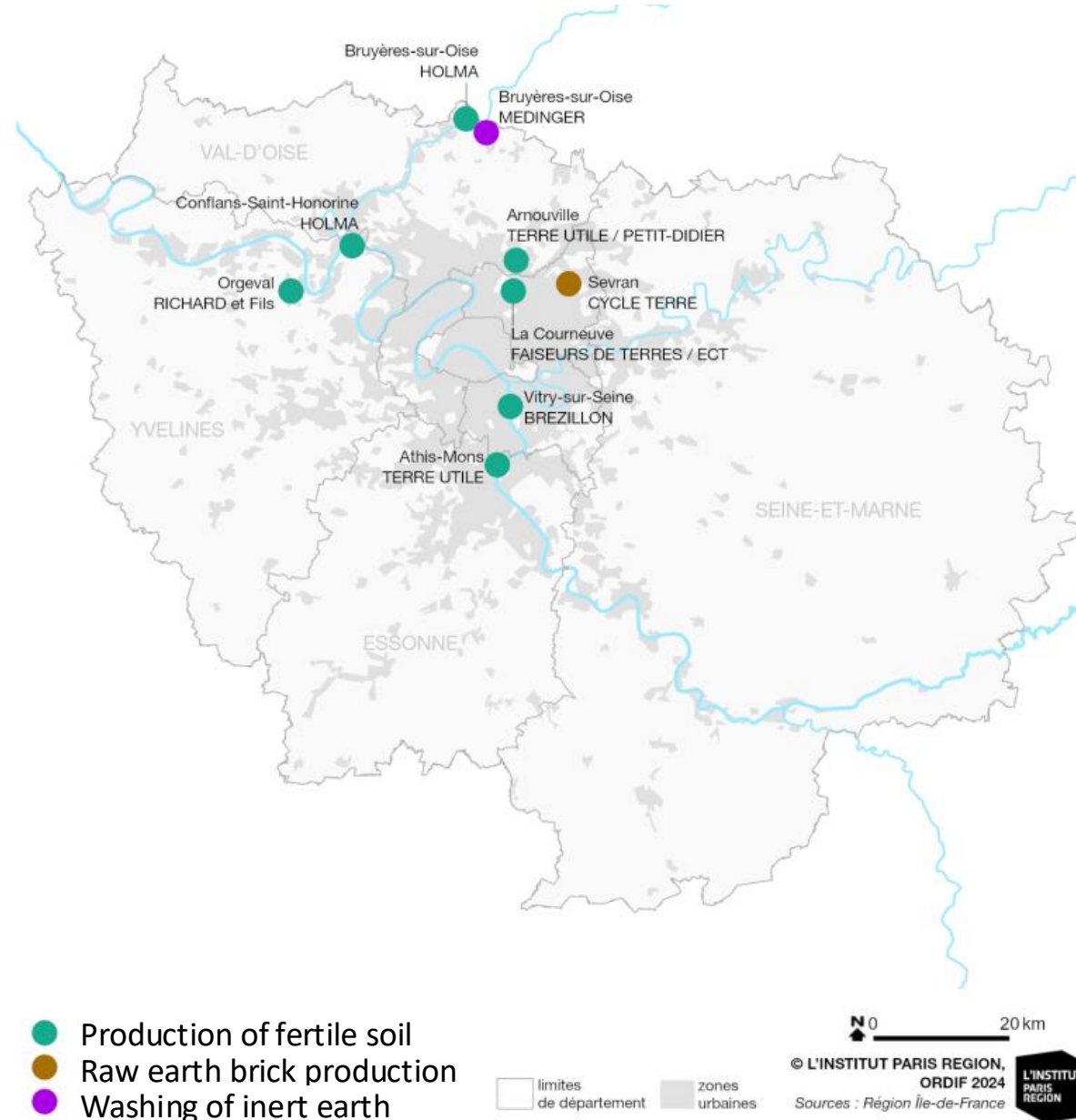


27 MT of inert waste

Destinations



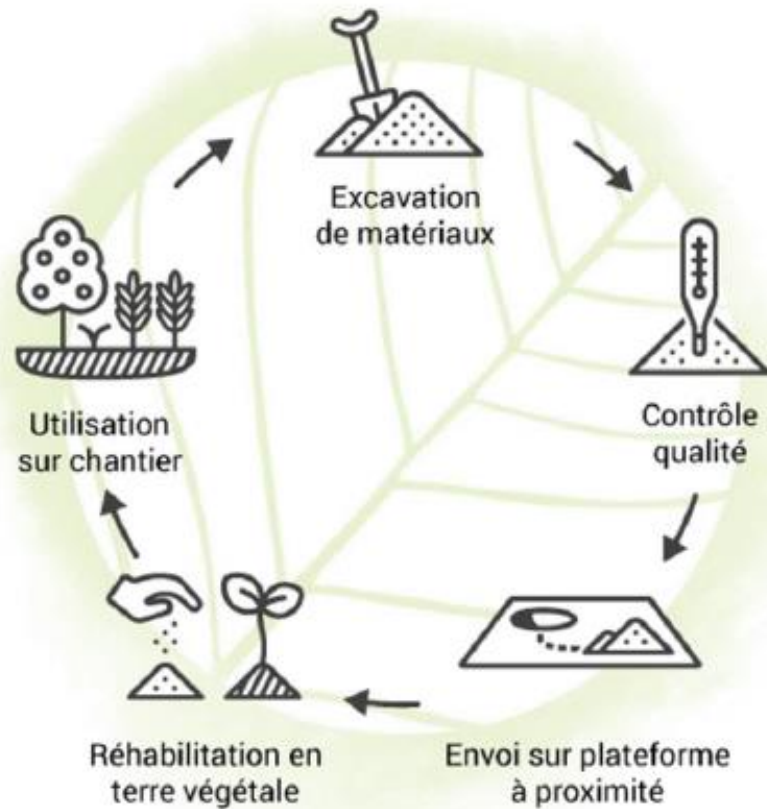
Emerging inert waste recycling sectors



TerreUtile: production of fertile soil from excavated inert earth and organic matter

Spraying of microbial activators

> 40 000 m³ sold in 2023



Production de lot Arnouville (Juin 2022)



Production de lot Arnouville (Octobre 2022)



Mise en place au nouveau collège de la Courneuve



Terre végétale recyclée du Stade Gerland à Lyon



Un produit validé techniquement



Urbafertil / ECT : Reuse of inert soil from construction and green waste compost



ECT SAFER IDF Chelles (77)

CYCLE TERRE : raw earth brick production

Use of clay-rich soil

Industrial demonstrator in Sevran (93)



Terzeo: washing of contaminated earth

Transformation of into construction materials

Reception of earth



Separation of fine particles



Treatment of contaminated fine particles



Sorting of different fractions

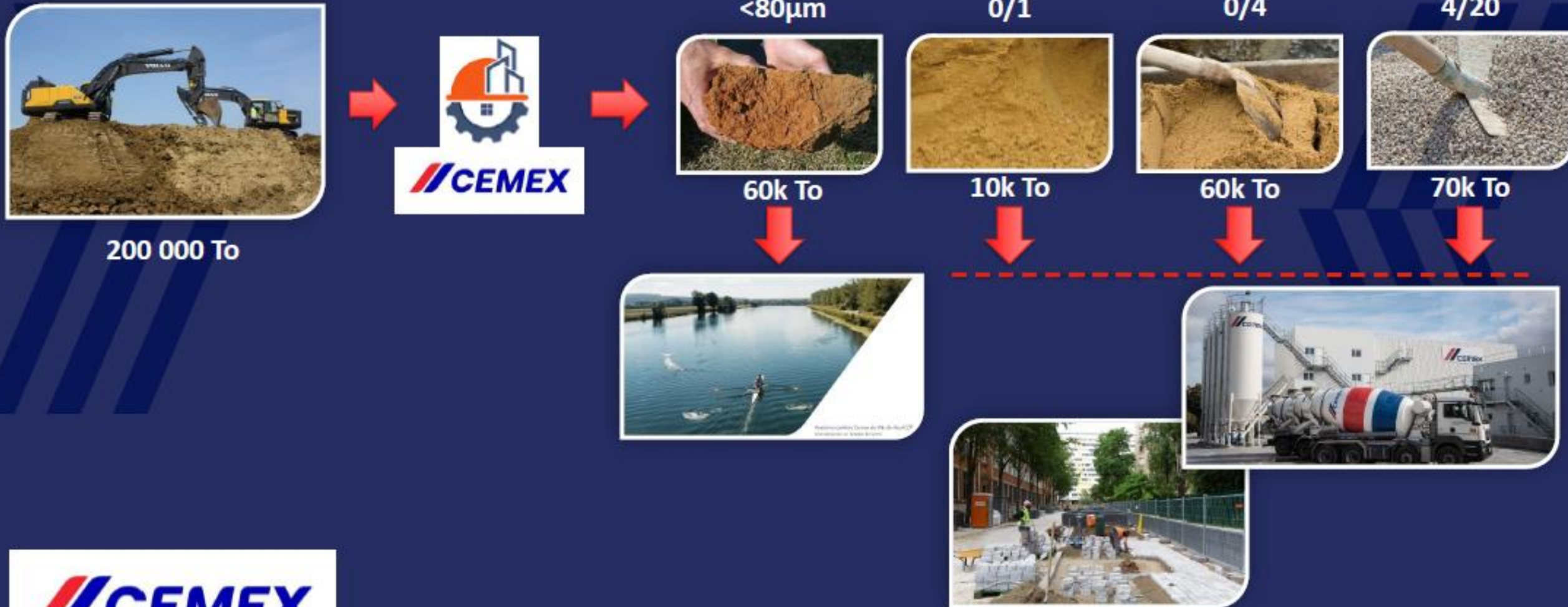


Landfilling



CEMEX: washing of inert earth

Transformation of into construction materials



Progress to be made in public sector regarding roadworks, utilities, and public spaces



Grave recycle mixte 0/31.5



- Use of recycled gravel for road sub-bases
- Use of fertile soil made from excavated inter earth
- Use of crushed concrete in the construction sector

► How to scale up ?

Driving change through local sustainability strategy

The example of Est-Ensemble



- 9 communes, 430 000 habitants

- Political ambitions translated into framework documents since 2017:

- Framework for Sustainable Land Planning (published in 2017)
- Circular economy strategy (2019 – 2021)
- Plan Climat – Air – Energie Territorial (2023 – 2029)
- Charter for the development of the circular economy in the planning and construction sector (2022)



Objectives : develop local supply channels and synergies between construction sites

Axis of actions (extract)

- Defining objectives in urban planning documents
- Technical and financial support for operators in urban projects
- Identifying land for a materials recycling centre
- Design of a digital tool to facilitate the exchange of materials

Driving change through local sustainability strategy

Circular Economy Charter : 42 social landlords, developers and promoters commit to a common methodology for integrating the circular economy into their operations



- Identify a place for temporary storage of materials, to facilitate re-use between projects
- Use construction concrete incorporating a minimum of 5% recycled aggregate
- Use materials derived from reuse and recycling, with specific targets: 1% minimum by mass (or by value) for new buildings; 2% to 5% minimum for renovations
- 15% minimum by surface area for public and private outdoor spaces



Signature of the Charter in 2022

Development
concession
contract

Architectural,
Urban, Landscape
and Environmental
Requirements

Public
procurement
specifications

Conclusion

Technical solutions are mature enough

Public sector is essential for scaling up

Need for strong, long-term local policies to develop circular economy with the relevant stakeholders.

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