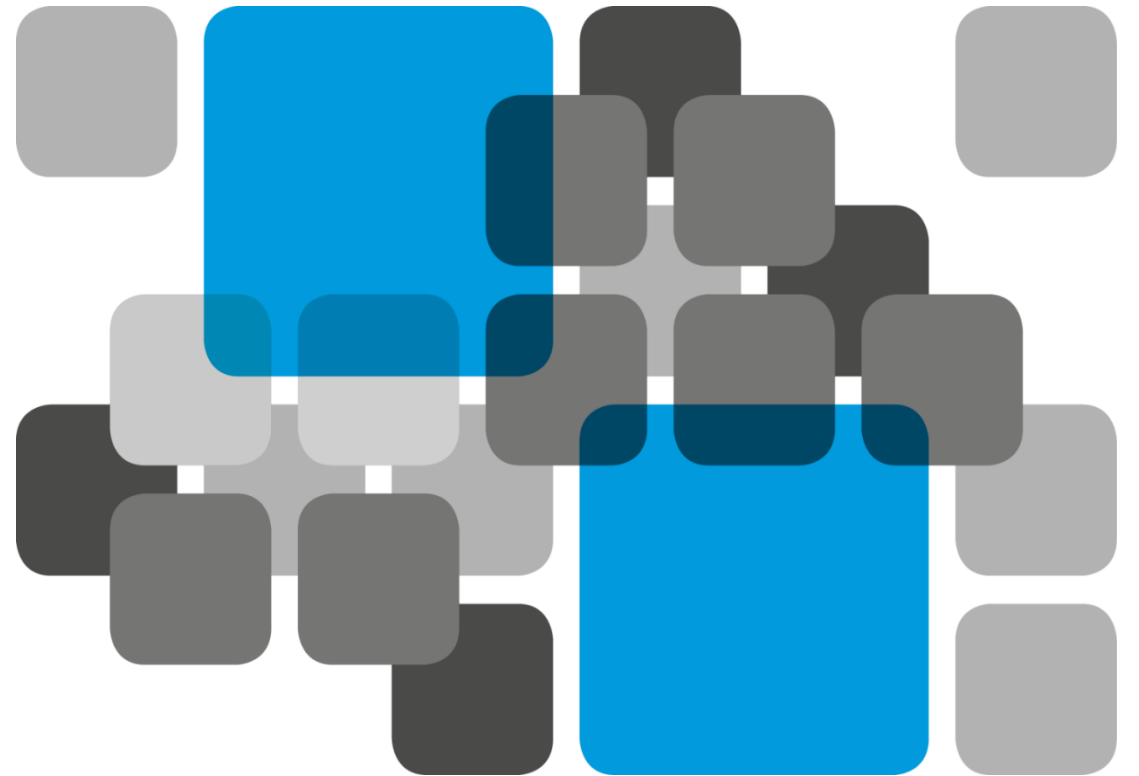




Next Generation EU – what does it mean for metals demand?

CRU Economics

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Agenda



Next Generation EU: overview



Impacts on metal demand

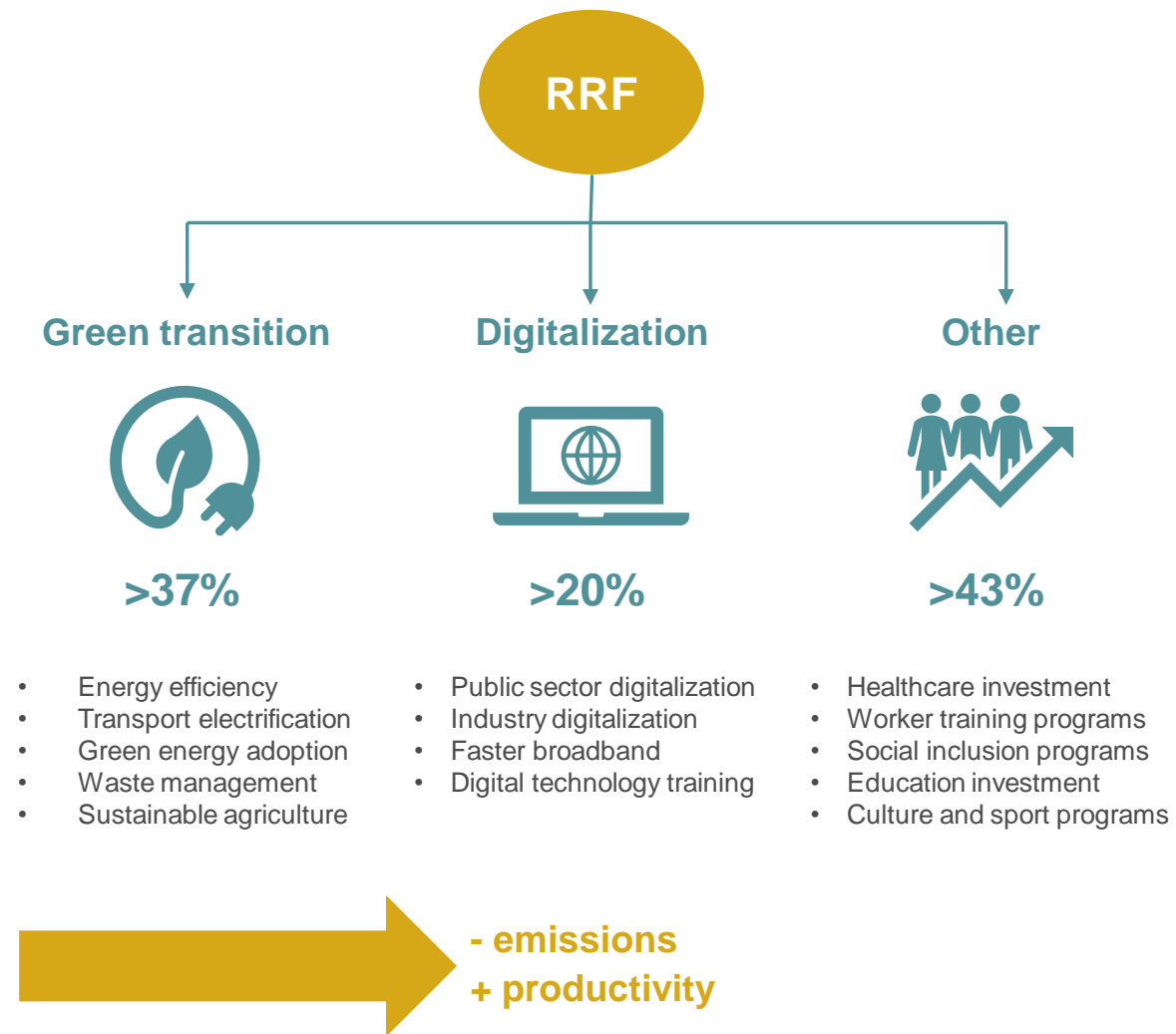
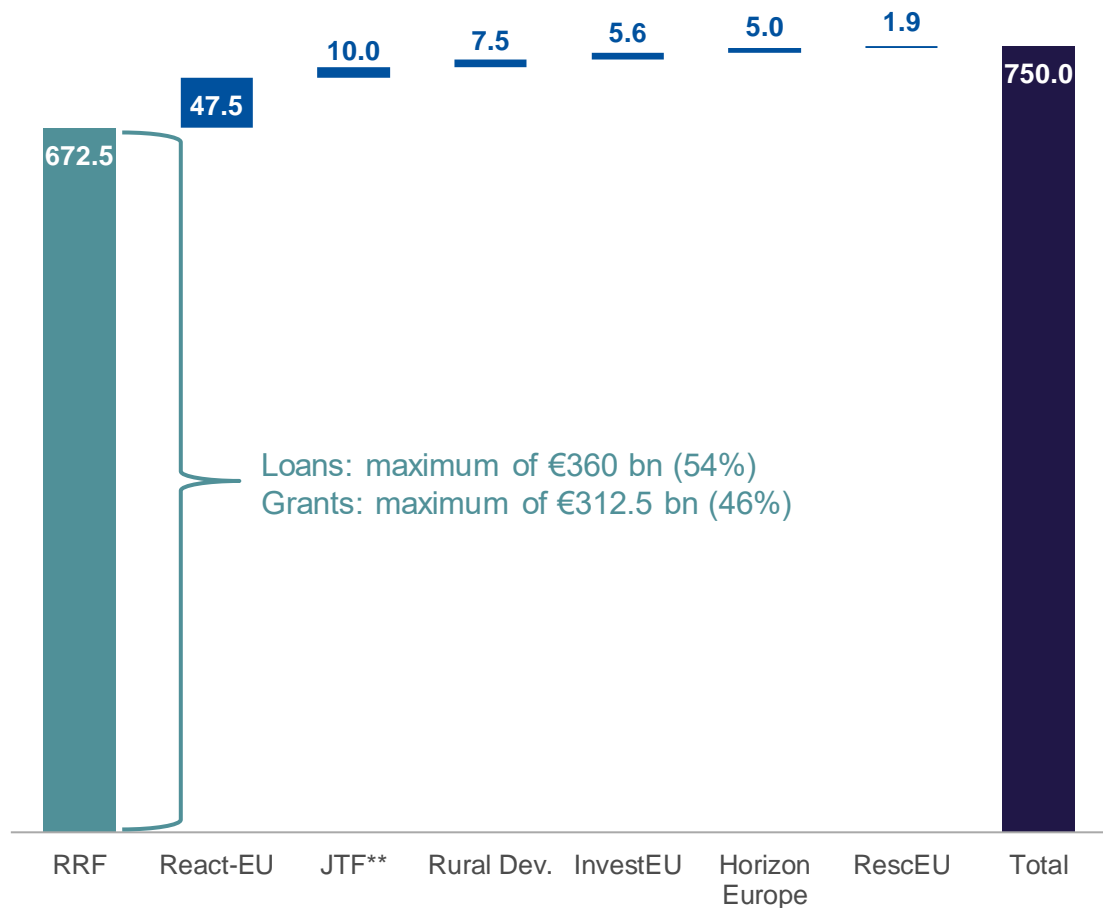


Conclusion

Next Generation EU in a nutshell

Next Generation EU: breakdown of funds

Total funds available, € bn (2018 prices)

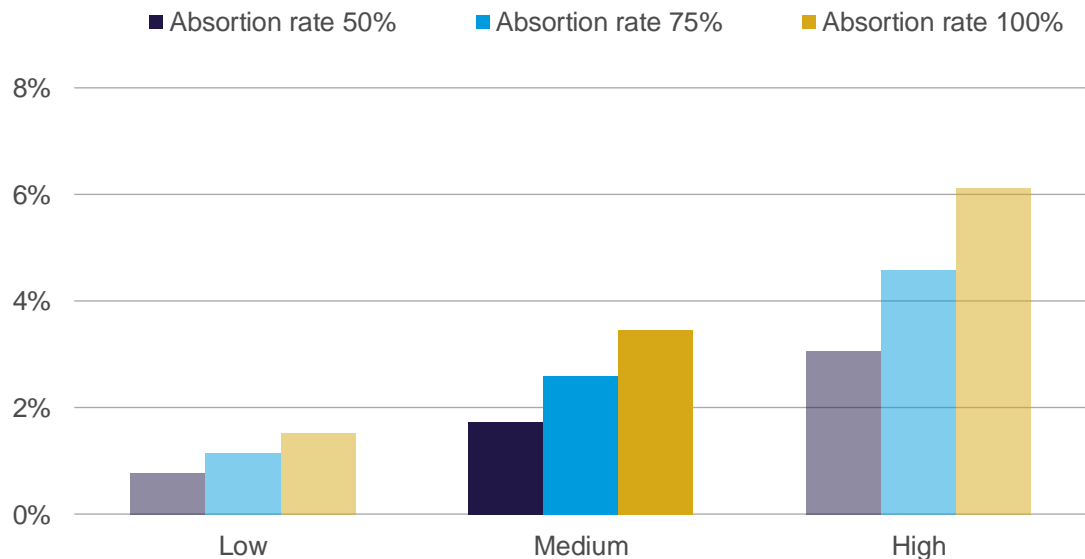


Materiality and potential impact of Next Generation EU

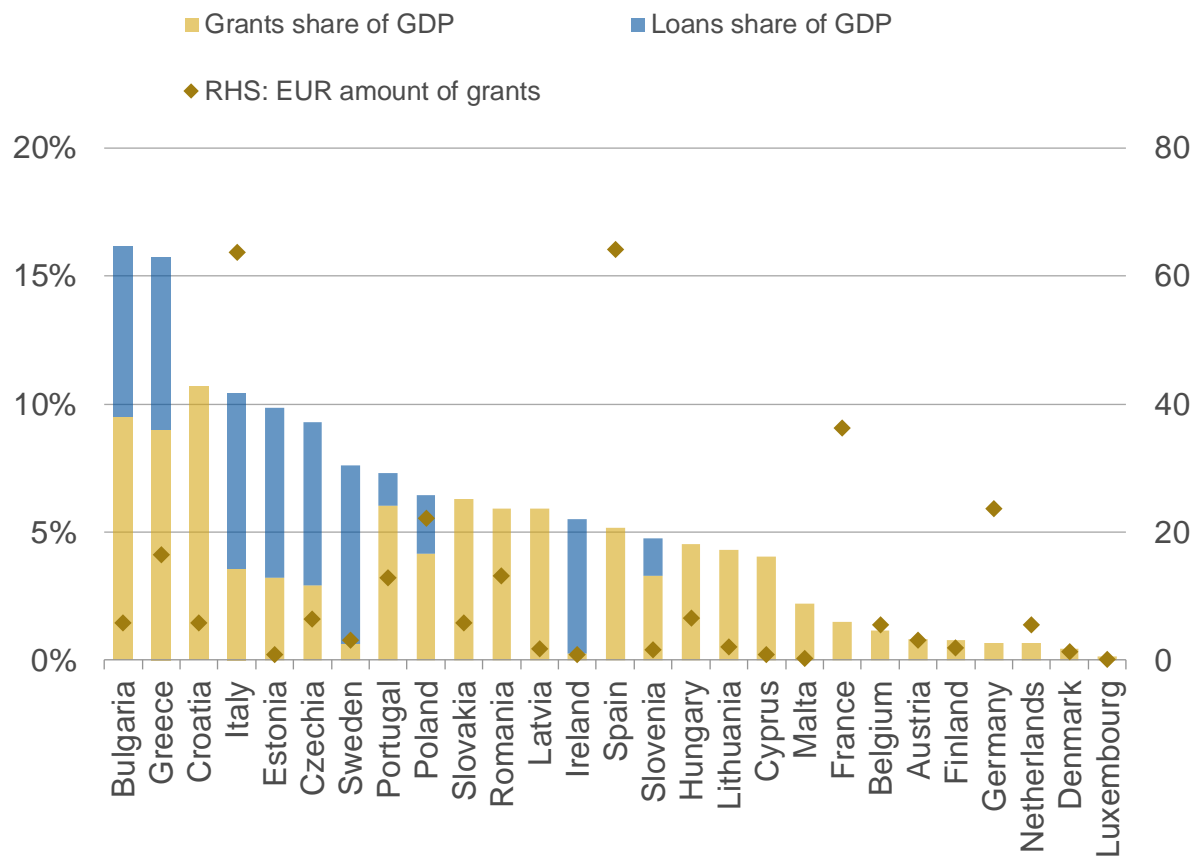
The ultimate impact of the fund on EU GDP depends on many variables, crucially:

- The **absorption rate** (the extent to which countries are able to actually spend the available funds)
- The **fiscal multiplier**: in the *low* scenario, we assume a conservative fiscal multiplier of 0.4. In the *medium* scenario we assume a fiscal multiplier of 0.9, and in the *high* scenario we assume an optimistic fiscal multiplier of 1.4.

Cumulative GDP impact after 5 years



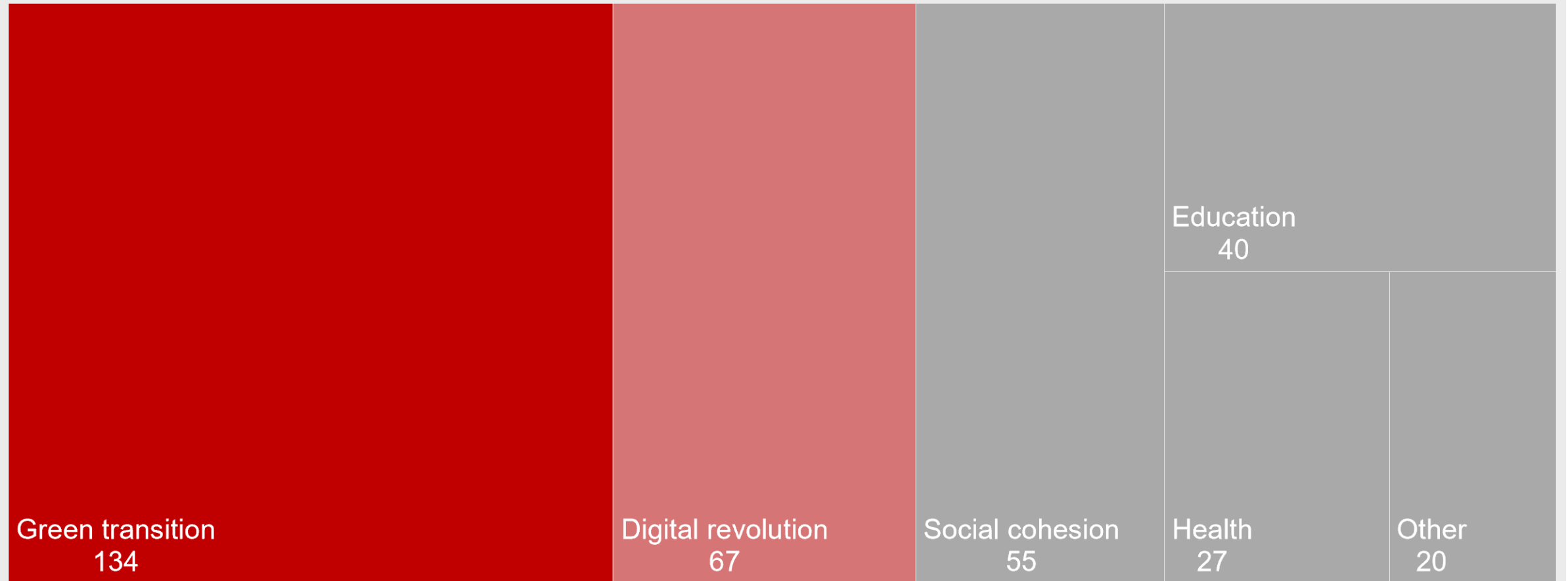
Recovery and Resilience Facility split across EU countries



Allocation of Next Generation EU funds in the big 4

Next Generation EU at a glance, bn EUR

■ Green transition ■ Digital revolution ■ Health ■ Social cohesion ■ Education ■ Other



Italian plan: Intensity Score (0-3), impact on metal demand

Item	Amount (bn)	Steel	Aluminium	Copper	Additional information
Digitalization and innovation	38				
Transition 4.0	13.38	0	0	0	Fiscal incentives for firms to augment productivity
Ultrafast broadband	6.71	0	0	1	Extend 5G coverage and 1 Gbps connectivity to areas which are currently not covered by it
Spatial economy and satellite technologies	1.49	1	1	0	Includes investments in new equipment/machinery
Tourism and culture 4.0	6.68	0	0	0	
Digitalization of public administration	9.75	0	0	1	Includes some investments in digital infrastructures
Green revolution and ecological transition	57.47				
Green energy	5.9	2	2	2	Investments in solar, wind (including off-shore), hydro
Strengthening digital infrastructure	4.11	0	1	1	Investments in smart grid and storage capacity
Hydrogen	3.19				Unclear how metals intensive it will be as many projects are still at an early stage.
Strengthening of local transport	4.2	2	2	1	Investments in metro, tramway, cable, trolley bus
Electric car infrastructure (charging stations)	0.74	1	1	2	
Renewal of green buses and green trains	3.64	2	2	1	Renewal of "green fleet"
Requalification of schools and judiciary buildings	1.21	1	2	1	Requalification of buildings to make them more energy efficient
Requalification of private and public residential buildings	14.15	1	2	1	Requalification of buildings to make them more energy efficient
Sustainable agriculture and circular economy	5.27	0	0	0	
Preservation of water resources	15.06	0	0	0	
Sustainable infrastructure	25.4				
Infrastructure for sustainable mobility	24.77	3	2	2	Railways (including high-speed ones)
Intermodal logistics	0.63				
Schooling and research	30.88	0	0	0	
Inclusion and cohesion	19.81	0	0	0	
Health	15.63	0	0	0	
Other	4.32				
Total	191.52				

Spain plan: Intensity Score (0-3), impact on metal demand

Item	Amount (bn)	Steel	Aluminium	Copper	Addition info
Infrastructure and resilient ecosystems	24.8				
Sustainable, safe and connected mobility	13.2	2	2	1	- Fiscal incentives to favour zero or low emission vehicles (both passenger fleet and freight) - Installation of private and public charge points - Strengthening of public transport sector mobility - Expanded rail transport
Building renovation wave and urban renewal	6.8	1	2	2	Sustainable and digital rehabilitation of public and private buildings, augmenting social rental Housing programme with energy efficient buildings
Environmental and digital transformation of agri-food and fishing	1.1	0	0	0	
Ecosystems biodiversity conservation and restoration	1.6	0	0	0	
Coastal preservation and water resources	2.1	0	0	0	
Energy transition	6.4				
Renewable energy deployment and integration	3.2	2	2	2	Investments to promote renewable-generated energy
Electrical infrastructures, smart network and storage	1.4	0	0	2	Expansion of network infrastructures, including storage capabilities
Renewable hydrogen roadmap and its sectoral integration	1.6				Unclear how metals intensive it will be as many projects are still at an early stage
Just energy transition	0.3	0	0	0	
Modernisation of key private and public sectors	21.2				
New industrial policy "Spain 2030" and Circular Economy strategy	3.8	0	0	0	
Boost to SMEs	4.9	0	0	0	
Modernisation and competitiveness of the tourism sector	3.4	0	0	0	
5G Roadmap	4.0	0	0	3	Ultra-fast broadband extension and mobile coverage. 30Mbps for 100% of the population.
Boosting culture and sports industry	0.8	0	0	0	
Modernisation of public Administration	4.3	1	1	1	Includes an "energy transition" component, through the rehabilitation of buildings and use of renewable energy.
Education, research and social inclusion	17.1				
Total	69.4				

Next Gen. EU will be positive for metal demand, but no game changer

Next Generation EU could boost demand for infrastructure and construction* by ~4% over a 5-year period



Steel

- Around 35% of total EU steel demand is infrastructure/construction related spending.
- We estimate a potential demand increase of around 1.1%, or 2.1Mt/year.
- Next Generation EU could boost demand for steel through:
 - Physical infrastructure, including railways, bridges, roads
 - Renewable energy infrastructure

~2.1Mt/year for 5 years



Aluminium

- Around 30% of total EU aluminium demand is infrastructure/construction related spending.
- We estimate a potential demand increase of around 0.9%, or 124kt/year.
- Next Generation EU could boost demand for Al through:
 - Transportation (buses, stations, public transit system)
 - Renewable energy infrastructure
 - Electric vehicles
 - Electric grid (long distance transmission line)

~124kt/year for 5 years



Copper

- Around 50% of total EU copper demand is infrastructure/construction related spending.
- We estimate a potential demand increase of around 1.4%, or 75kt/year.
- Next Generation EU could boost demand for Cu through:
 - Extending power grid
 - Renewable energy infrastructure
 - EV charging network
 - Improved and extended connectivity
 - Construction (wiring in building)

~75kt/year for 5 years

We see upside risk because specific projects may be much more metal intensive than the construction sector as a whole

Conclusion



Next Generation EU could provide a boost to the EU's economy of **~4% of GDP** over a 5-year period. But given the allocation of the fund, this boost will disproportionately benefit some countries. Here the GDP impact will be significantly more material than for the EU as a whole.



By increasing **infrastructure and construction** spending by about **4%** over a 5-year period, Next Generation EU will have a positive impact on metal demand. While this will not be a game changer, we estimate that the plan could result in a boost for steel, aluminium and copper demand by around **1.1%, 0.9% and 1.4% respectively** over a 5-year period. We see upside risk to specific commodity demand as individual spending projects may be more metal intensive than construction as a whole.



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