

European Union countries' National Recovery and Resilience Plans: A cross-country comparison

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Next Generation EU: key features

RECOVERY AND RESILIENCE FACILITY

EUR 723.8 billion

338.0 in grants

385.8 in loans

POWER UP
Clean technologies and renewables

MODERNISE
Digitalisation of public administration

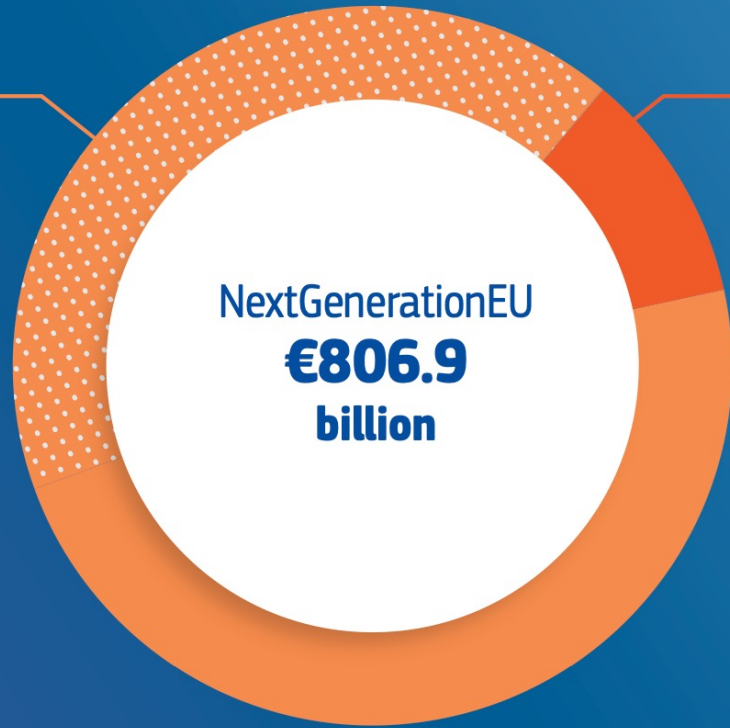
RENOVATE
Energy efficiency of buildings

SCALE UP
Data cloud and sustainable processors

RECHARGE AND REFUEL
Sustainable transport and charging stations

RESKILL AND UPSKILL
Education and training to support digital skills

CONNECT
Roll-out of rapid broadband services



NEXTGENERATIONEU CONTRIBUTION TO OTHER PROGRAMMES

EUR 83.1 billion

REACT-EU
50.6

JUST TRANSITION FUND
10.9

RURAL DEVELOPMENT
8.1

INNVESTEUE
6.1

HORIZON EUROPE
5.4

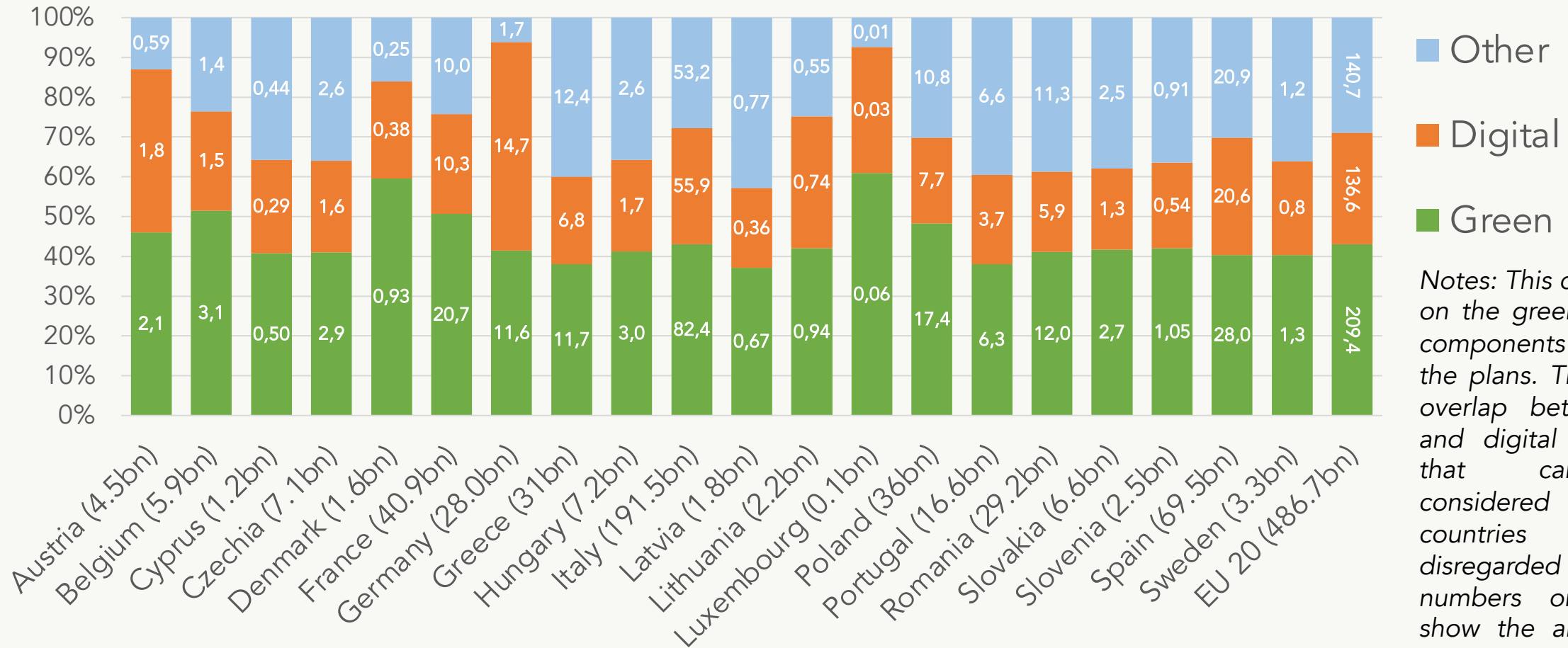
RESCEU
2.0

Source: European Commission.
Note: all amounts are in billion EUR, in current prices.

State of play

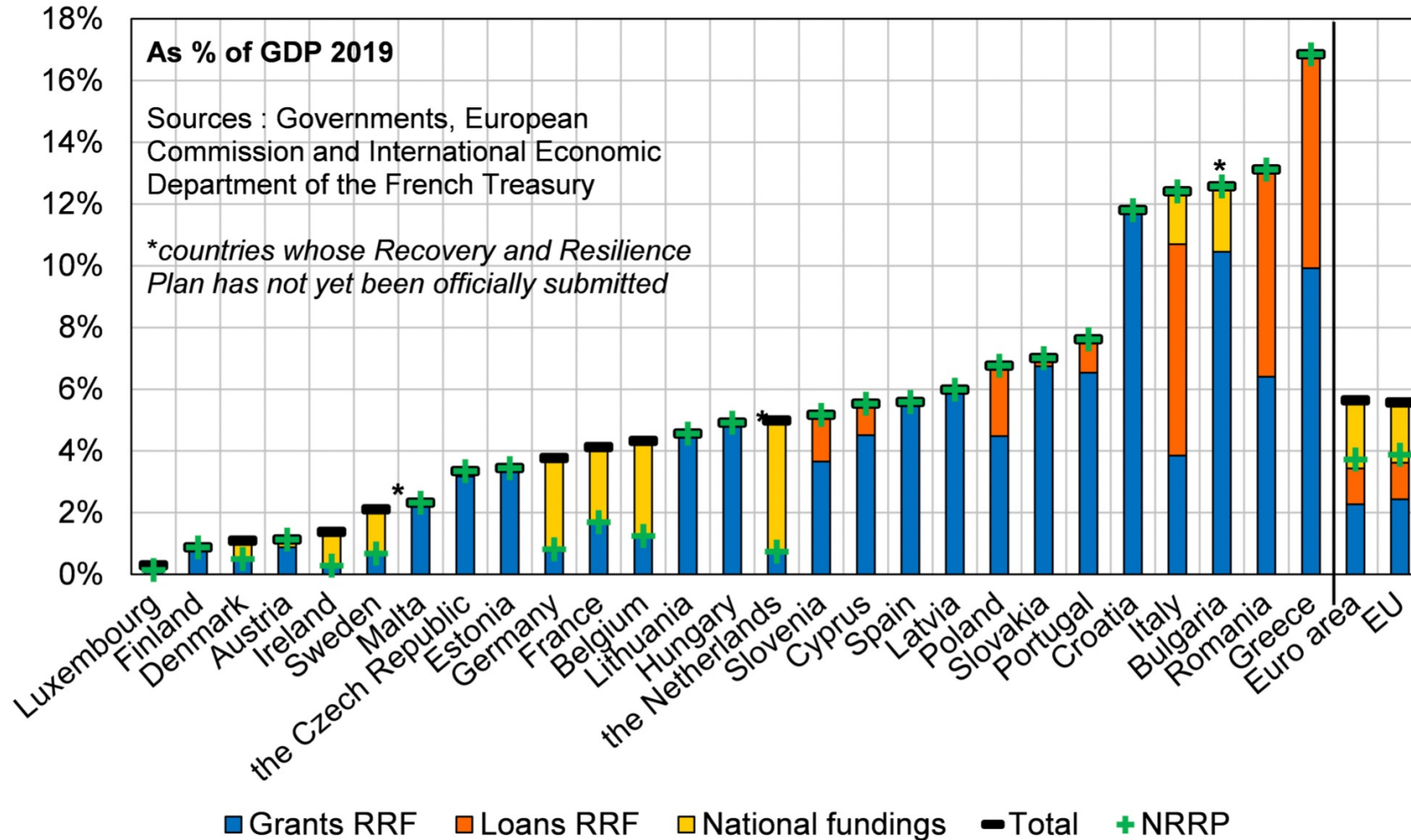
- Lots of pre-submission discussion between EC and Member States
- 26 plans submitted (missing: NL)
 - All request the maximum amount of grants => Grants could reach the max €338 billion amount (at current prices)
 - 7 request loans for €166 billion in total (out of max €385.8 billion)
 - The overall size of the RRF to be around €500 billion (out of max €723.8 billion)
- 22 plans endorsed by the EC (missing: HU, PL, SE, BG)
- Pre-financing disbursed to 16 countries
- Implementation started in several Member States

Overall resource allocation in the plans (% of total and € billions)



Notes: This chart is based on the green and digital components reported by the plans. There is some overlap between green and digital components that cannot be considered for most countries and thus disregarded for all. The numbers on the bars show the amounts in € billions.

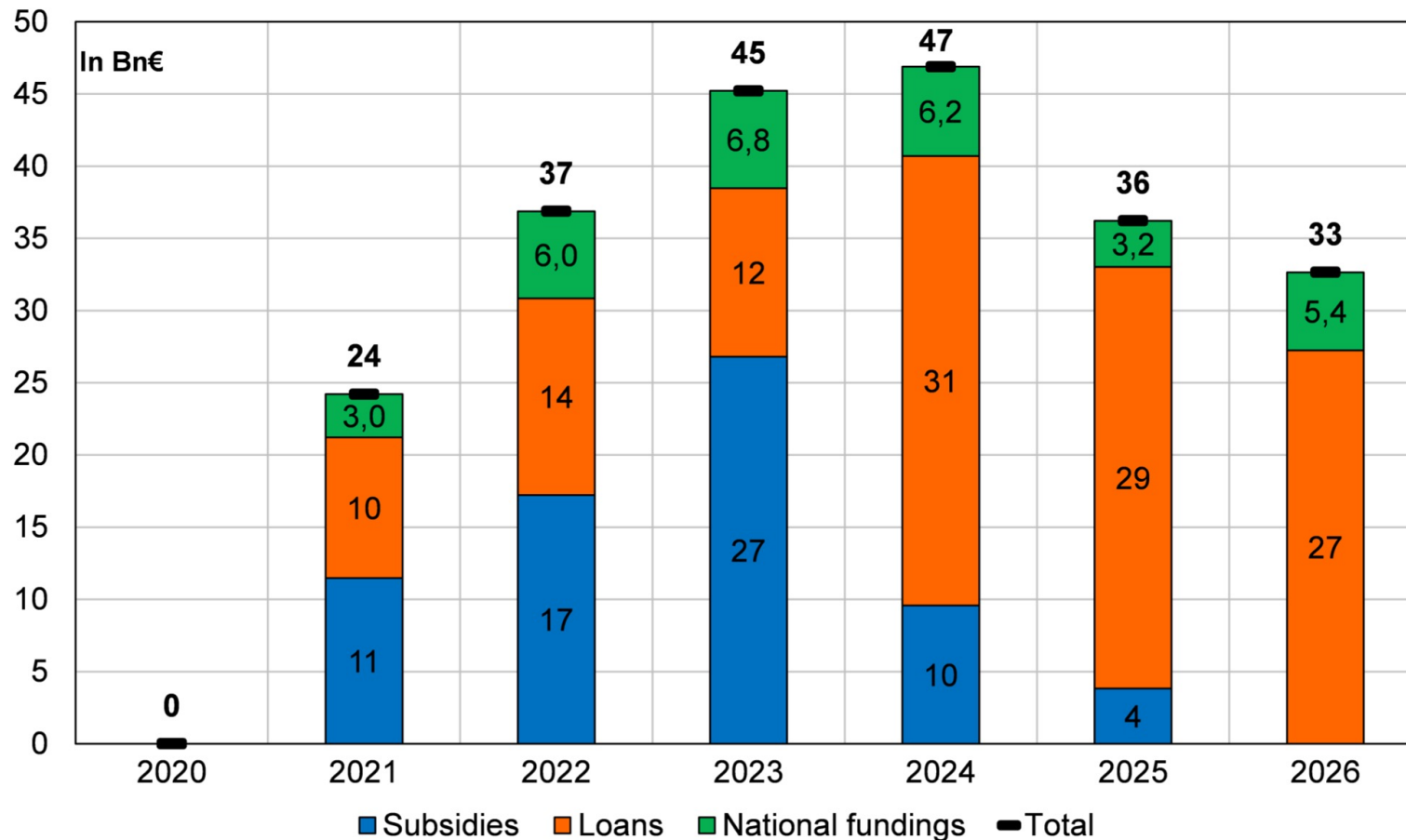
Macroeconomic impact of the plans must be assessed also considering their size (% of GDP) as well as RRF share in national recovery plans



- Some national stimulus packages - notably in Germany, France and Belgium - are financed in part by national resources, which come on top of EU grants.
- Others, notably Italy, Greece, and Romania, requested EU loans in addition to grants.

Plans do not cover the same period

Italian recovery plan



- In Germany and France, stimulus measures are concentrated on the period 2021 to 2023 and are pre-financed at national level before being gradually reimbursed from EU funds up to 2026.
- Spain and Italy are expected to spread their investments out to 2026, mainly using the loan component of the RRF.

EC assessment: 19 plans are equally great - and 3 others are almost as great

	(1) Comprehensive and balanced response	(2) Country-specific recommendations	(3) Growth, jobs, economic, social and institutional resilience	(4) Do no significant harm to environment	(5) Green transition	(6) Digital transition	(7) Lasting impact	(8) Monitoring and implementation	(9) Cost justification	(10) Preventing corruption, fraud and conflicts of interests	(11) Coherence
Austria	A	A	A	A	A	A	A	A	B	A	A
Belgium	A	A	A	A	A	A	A	A	B	A	B
Croatia	A	A	A	A	A	A	A	A	B	A	A
Cyprus	A	A	A	A	A	A	A	A	B	A	A
Czechia	A	A	A	A	A	A	A	B	B	A	B
Denmark	A	A	A	A	A	A	A	A	B	A	A
Estonia	A	A	A	A	A	A	A	A	B	A	B
Finland	A	A	A	A	A	A	A	A	B	A	A
France	A	A	A	A	A	A	A	A	B	A	A
Germany	A	A	A	A	A	A	A	A	B	A	A
Greece	A	A	A	A	A	A	A	A	B	A	A
Italy	A	A	A	A	A	A	A	A	B	A	A
Ireland	A	A	A	A	A	A	A	A	B	A	A
Latvia	A	A	A	A	A	A	A	A	B	A	A
Lithuania	A	A	A	A	A	A	A	A	B	A	A
Luxembourg	A	A	A	A	A	A	A	A	B	A	A
Malta	A	A	A	A	A	A	A	A	B	A	A
Portugal	A	A	A	A	A	A	A	A	B	A	A
Romania	A	A	A	A	A	A	A	A	B	A	A
Slovakia	A	A	A	A	A	A	A	A	B	A	A
Slovenia	A	A	A	A	A	A	A	A	B	A	A
Spain	A	A	A	A	A	A	A	A	B	A	A

Cost justification?

- It cannot be that no EU government is able to justify costs to 'a high extent'
- Reasons for giving grade B for cost justification include:
 - ✓ Varying degrees of detail
 - ✓ Gaps in information and evidence
 - ✓ Lack of independent validation
 - ✓ Was the requirement appropriate? In an uncertain and moving environment, some flexibility for reallocating the envelopes could have been promoted.

Comparing plans: different classifications

- To make comparison possible, Bruegel dataset uses several systems of classification to sort spending items in countries' plans:
 - By 6 pillars defined by Art. 3 or the RRF Regulation
 - By 7 flagship areas defined by the EC
 - By Bruegel own 2-level classification
- Some items contribute to climate or digital spending but have a different primary purpose; these are therefore not classified as such
- Furthermore, Bruegel reports total spending of each item, not just the shares marked as contributing to climate or digital spending in accordance with the Regulation, because some countries did not provide this info in sufficient detail
- Different systems of classification can therefore produce contributions to climate/green and digital spending different from those defined by Regulation

Comparing the plans of France, Italy, Spain and Germany



Piano Nazionale
di Ripresa e Resilienza

#NEXTGENERATIONITALIA



Recovery, Transformation
and Resilience Plan



Deutscher Aufbau- und Resilienzplan

EC assessment of climate and digital targets

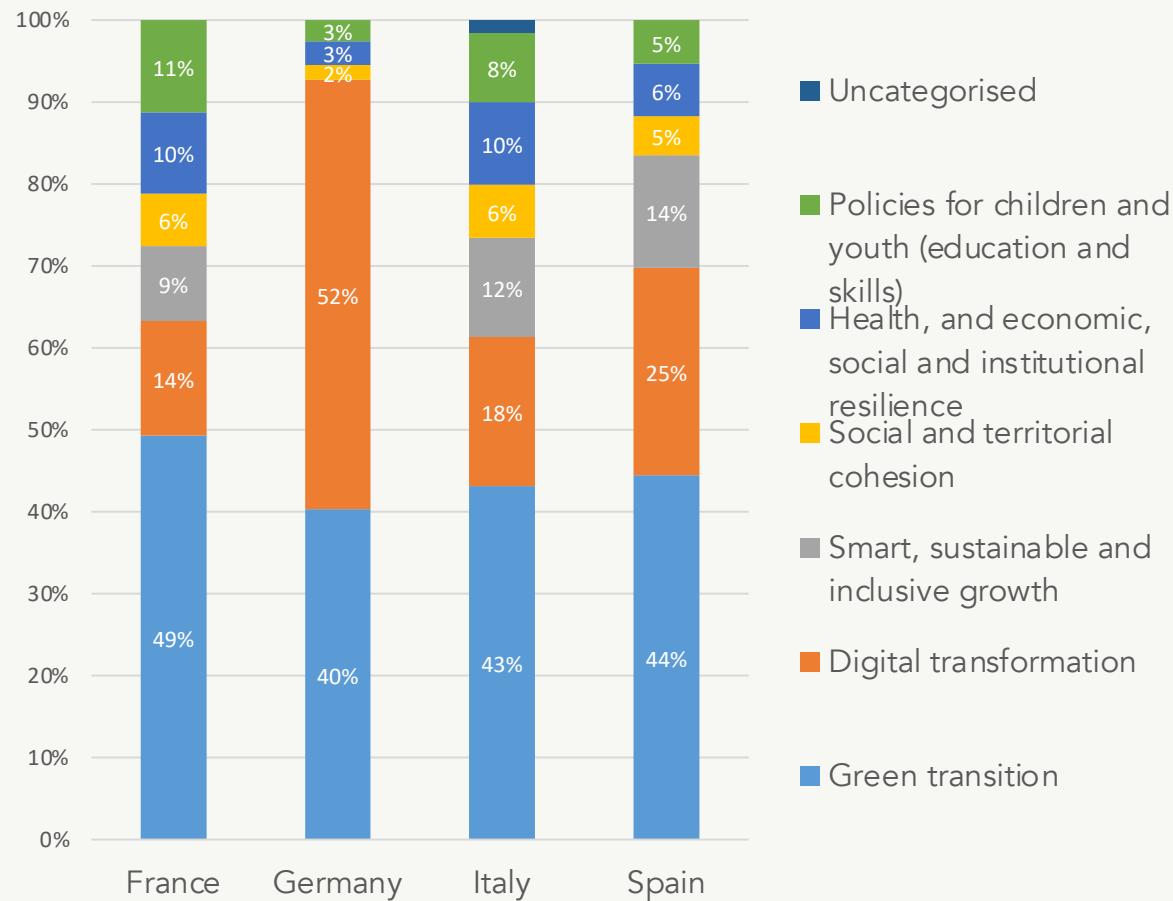
- All countries allocate sufficient resources to climate (>37%) and digital (>20%) as defined by Regulation
- Yet shares are somewhat different from national plans

Country	% green	% digital	Total RRF
Italy	37%	25%	€191.5bn
Spain	40%	28%	€69.5bn
France	46%	21%	€39.4bn
Germany	42%	52%	€25.6bn

Source: Bruegel.

Breakdown of total RRF spending (grants + loans)

RRF spending by Article 3 pillar (% of total)

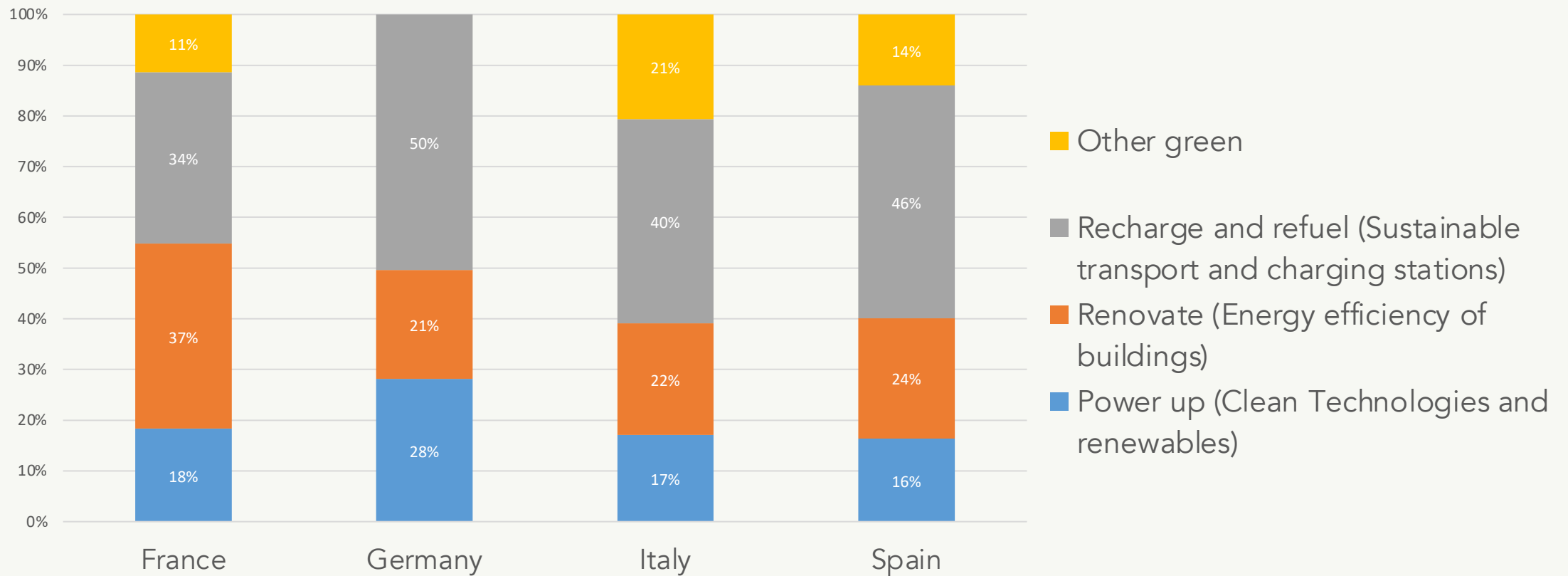


Source: Bruegel.

- Note: much of digital spending as defined by Regulation is captured by other categories such as education and skills; while most of climate spending is captured by green transition category
- Only in Germany most digital spending is actually covered by digital transformation
- The bigger the plan, the higher diversification (e.g. Italy Vs Germany)
- French plan one of the greenest
- German plan most digital-oriented in EU

Focus on green spending

RRF spending by flagship area (% of total green spending)



Source: Bruegel.

'Green spending' is RRF spending allocated to the three green flagship areas and the residual category.

Focus on green spending

- Flagships give a first good summary of green spending priorities
- France allocates higher share of green spending to 'Renovate' (energy efficiency of buildings) than most other EU member states (37% vs 21% on average)
- While relatively less on 'Recharge and Refuel' (sustainable transport) and 'Power up' (clean tech and renewables)
- 'Other green': urban planning, biodiversity, waste and recycling...

Green: main measures

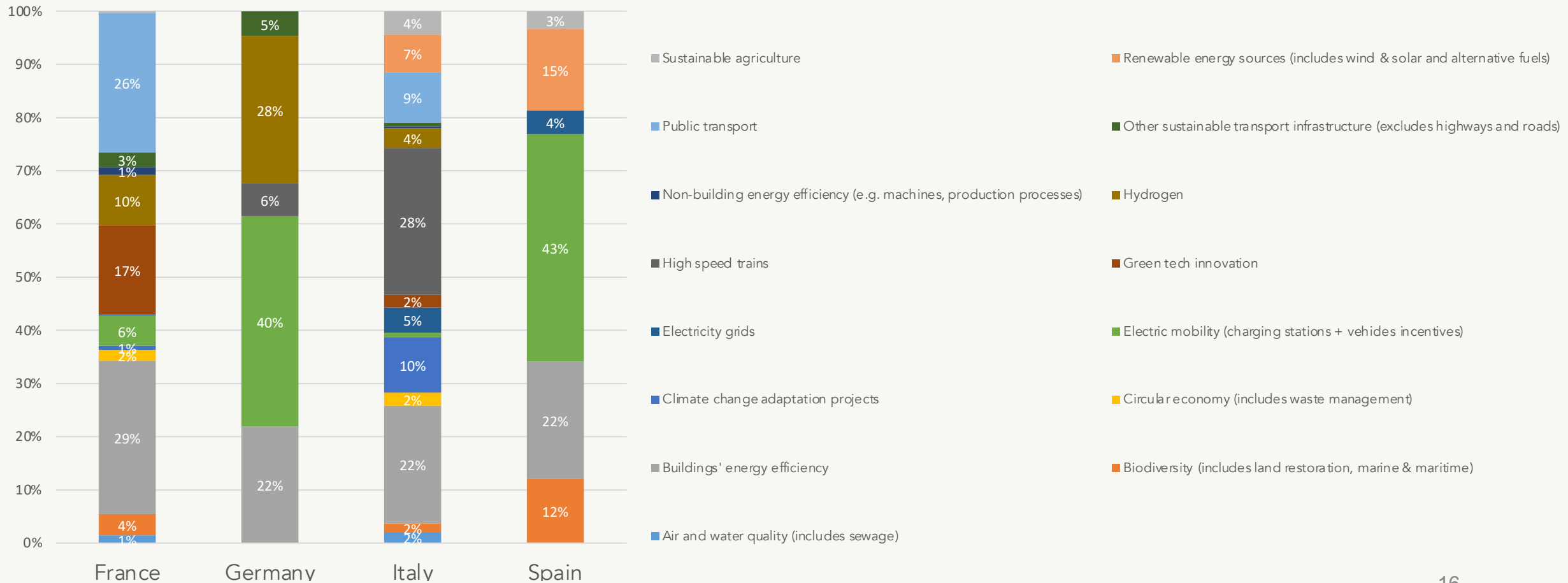
Italy	Spain	France	Germany
Energy efficiency in residential buildings (€12bn)	Energy efficiency residential renovations (€3.4bn)	Renovation of buildings (€5.8bn)	Energy efficiency in residential buildings (€2.5bn)
Sustainable mobility (€32bn)	Sustainable mobility plan (€6.5bn)	Modernisation of the rail network (€4.4bn)	Support for electric cars (€2.5bn)
Renewable energy and circular economy (€11bn)	Renewable energy sources (€3.9bn)	Decarbonised hydrogen (€1.9bn)	Hydrogen leap (€1.5bn)

Source: Bruegel.

A more granular view on green spending: Bruegel classification



RRF spending by Bruegel classification (% of total green spending)

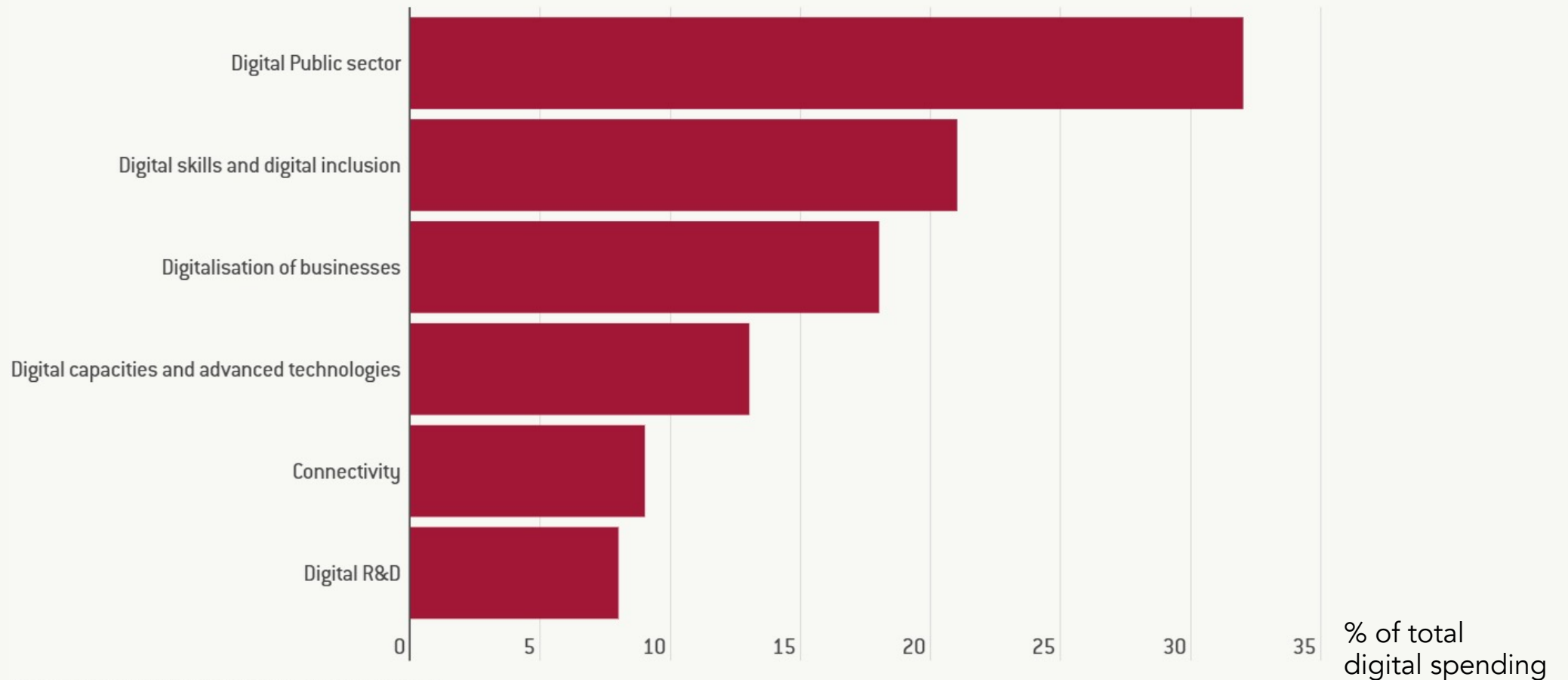


Source: Bruegel. 'Green spending' is RRF spending allocated to 'green transition' in Bruegel classification (level 1).

A more granular view on green spending: Bruegel classification

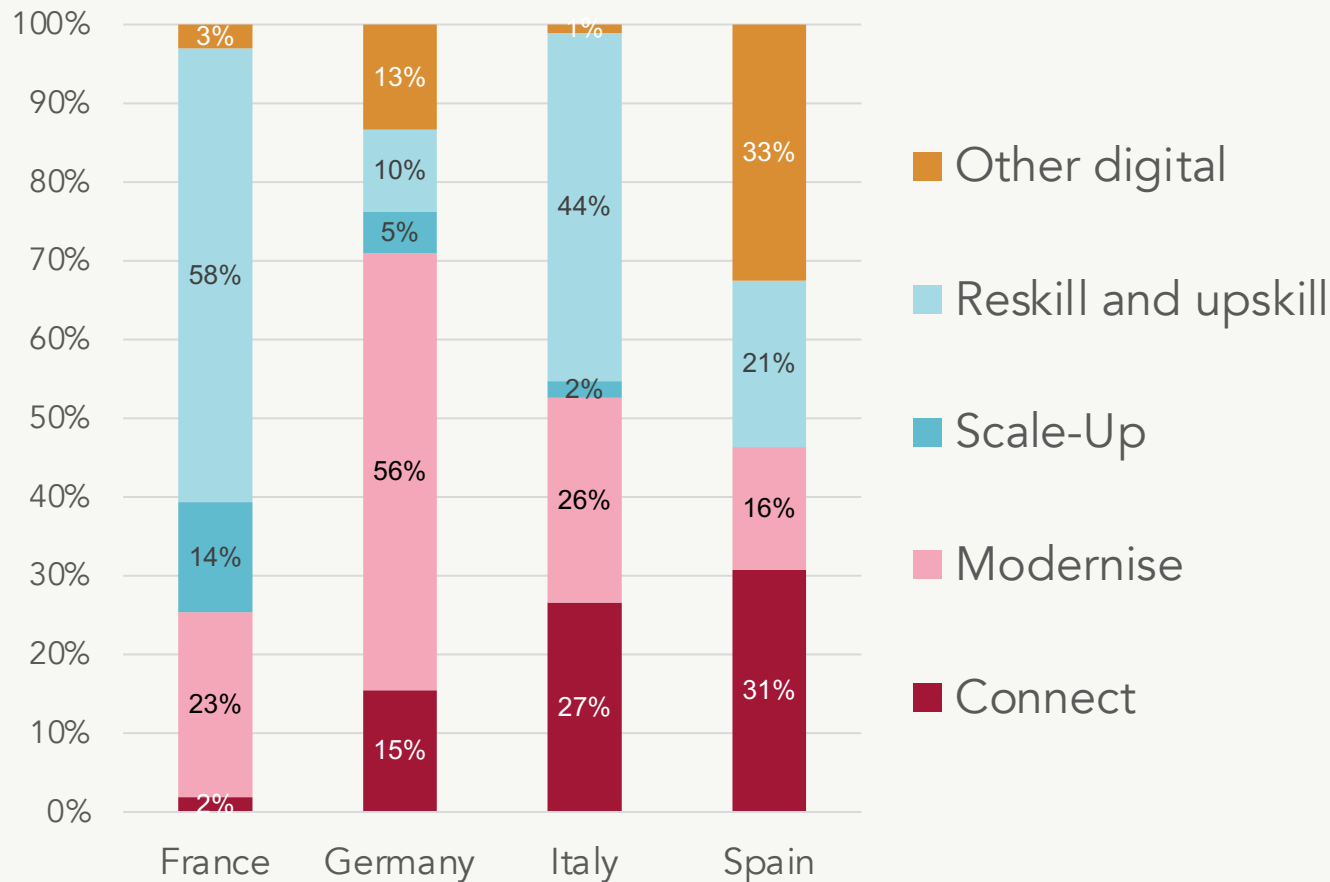
- Most countries (including FR) allocate significant amounts to building **renovation**, both public and private
- **Mobility**: FR and IT focus more on trains and public transport (regional vs HST), while DE and ES put emphasis on EVs
- **Renewables**: FR and DE little compared to IT and ES, but substantial contributions to **hydrogen** development
- FR plan particular attention for green tech **innovation**
- **Adaptation**: IT has prominent component, FR little
- **Biodiversity**, air and water quality and recycling present but relatively minor in most EU plans

Focus on digital spending



Source: Bruegel based on the national recovery plans.

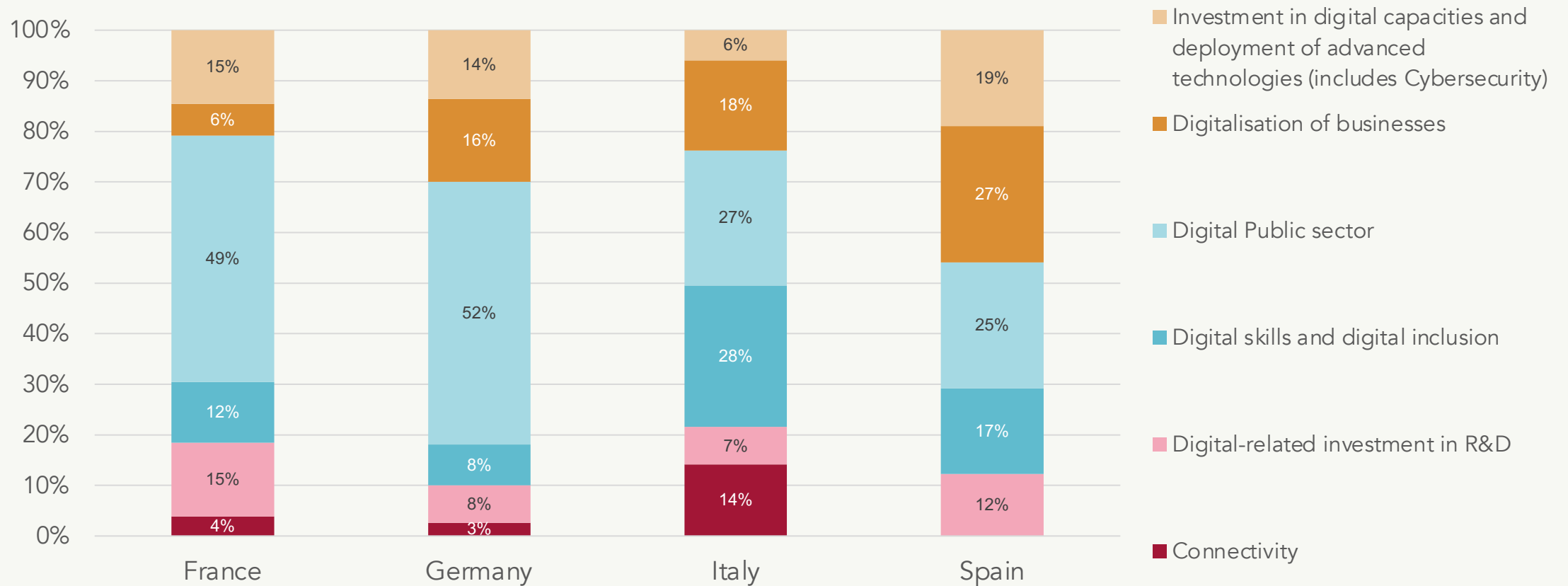
Breakdown of digital spending by flagship area



Source: Bruegel.

- All countries allocate a significant share of their digital spending to “Modernise” (Digitalisation of Public administration) and “Reskill and upskill” (Education and Training to support digital skills)
- France is focusing more on “Scale-Up” (Data cloud capacities and sustainable processors) than the other big countries
- Italy and Spain focus relatively more on “Connect” (Roll-out of rapid broadband services)

A more granular view on digital spending: Bruegel classification



Source: Bruegel.

Digital: main measures

Italy	Spain	France	Germany
Development of ultra-fast and 5G networks (€6.7bn)	Digital skills training (€3.6bn)	Digitalisation of schools (€385m)	Investment in microelectronics and communication technologies (€1.5bn)
Digitalisation of businesses (€12.4m)	Digitalisation of business (€3bn)	Digitalisation of companies (€385m)	Next generation cloud infrastructures and services (€750m)
Digitalisation of the public administration (€6bn)	Digitalisation of public administration (€3.2bn)	Digitalisation of public administration (€500m)	Digitisation of public services (€3bn)

Source: Bruegel.

Implementation and challenges

- **RRF funding is performance based:** the disbursement of funds will be closely linked to the achievements of the projects and not only to traditional compliance requirements
- **Absorption:** will countries be able to absorb NGEU funds according to schedule?
- **Cost justification:** since no EU country was able to justify costs properly, how to avoid wasteful spending and double EU funding?
- **Green and digital:** will Member States continue to promote 'twin transitions' when fiscal consolidation starts in 2023?

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Thank you for your attention

Acknowledgements

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