On November 30 the Forum on Infrastructure took place, within the framework of the Rome MED Dialogues 2020. The conference was a first attempt to evaluate the impact of the Covid-19 pandemic on MENA region economies and to find shared proposals to revive economic growth, in particular by rethinking new investments in infrastructure, for transport, digital communication and energy. Cooperation between the two shores of the Mediterranean is emerging, even more in the aftermath of this global crisis, as an imperative to ensure a steady, green and sustainable recovery both in Europe and in the MENA region. Funds provided by multilateral developments, Next Generation EU and the G20 will be core assets to re-launch growth in the whole area.

A global overview

Over the past decades, the MENA region has been the second fastest in growth for private investments in the world, increasing at an average rate of 8% y/y. Infrastructure investment has grown from about $6 billion to approximately $12 billion in 10 years. Renewables accounted for about 50% of the investments, while power, waste and water investments accounted for the other half, with an increasing participation of the private sector in partnership with governments (PPPs). About ¾ of investments in the region was debt-financed and ¼ equity-financed.

The year 2020 has been a game changer that will bring structural economic and social changes that otherwise would have been impossible to undertake in normal times. Worldwide, governments have injected $12 trillion into the real economy and the public debt to GDP ratio has increased to about 100% from 83% in 2019. Worldwide total debt (public and private) has reached $277 trillion, $22 trillion more than in 2019, equal to 350% of global GDP. This legacy is putting public finance under strain. With two main consequences: the first one is more poverty (80/90 million people worldwide), inequality and unemployment, putting at risk social peace and sustainable recovery. The second one is even trickier: the public sector will be even more involved in business ownership and control, since loans and subsidies will be transformed into equity in the medium and long term. The crisis also triggers two challenges: 1) achieving social and environmental goals, considering the
enhanced participation of the public sector in business; 2) governments having to manage the asset side of the balance sheet: it will be necessary to improve governance, capabilities and transparency.

**Investing in infrastructure is the fastest way to inject money into the real economy and increase GDP:** this is why in government recovery plans trillions and trillions are devoted to infrastructure. Interest rates will remain low for a significant time. **Four priorities are emerging:** investing in maintenance; reviewing and restarting promising projects which are bottlenecked; speeding up projects in the pipeline; finally, starting planning for new projects.

**The situation in MENA countries**

The pro-capita GDP in the MENA region in the last 6 years has dropped by 25% to 50% in countries like Algeria, Tunisia, Syria, Yemen, Lebanon and Iraq. The only country which had positive growth is Egypt. Infrastructure is thus necessary to unlock economies’ potential. The infrastructural landscape in the region is also very different between countries. Some countries, such as Syria, Yemen, Lebanon and Iraq, are in a situation of infrastructural breakdown. On the other hand, states like Egypt and Jordan can be considered success stories: from importers to exporters of electricity. Renewable energy is one of the bright spots for the region and a green wave has started across countries, with unprecedentedly low prices for energy. **Integration is one of the major challenges in the MENA region.** Iraq, for example, is in constant need of energy and is striving to connect to the GCC electric grid to consume the over-capacity of other countries: an effort that will take years but will be really beneficial to the region. **Integration will reduce the need for installed capacity in each country,** since production and consumption could be shared in the region. The same applies to gas infrastructure, where grid integration across countries will reduce costs and create an integrated market for production and consumption.

In the MENA region **central banks have no ability to print money to sustain the economy and borrowing rates are steadily increasing, as is the debt to GDP ratio.** There are two main trends in the region: countries with strained public finances are seeking infrastructure that repays itself, through PPPs. **2) Development banks are fully committed to financing infrastructure and rebuilding national economies, in particular in the energy transition.**

The **European Investment Bank** (EIB), in particular, is historically fully committed in the region, in particular to vital infrastructure, such as for energy and water, but also transportation, like the financing of the Cairo metro. The **private sector in the region is generally constrained:** banks do not have wide access to foreign currency and have limited tools to counter the recession triggered by the pandemic. Thus, **multilateral banks are striving to support local banks** through emergency credit lines, trying to accelerate the development of real infrastructure projects on the ground and also providing technical support. Furthermore, the EU has made available €16 billion in further funds for external action, which are also translating into action plans implemented by the EIB. The Bank is committed to deploying €6-7 billion in projects outside the EU, contributing to the economic recovery of MENA countries, with doubled fund disbursement in 2020, from an average of €1 billion in 2019. Recently, the EIB has reviewed its lending policy, increasing investments in carbon-neutral projects and progressively eliminating carbon projects from its investments portfolio. The real challenge in the coming months will depend on project capacity-building to absorb and transform into real investments the huge fiscal stimulus provided by Next Generation EU and government fiscal plans.

**Infrastructure investments last for 30-40 years** and this is crucial to consider when endeavouring to attract private investments. **Infrastructure could either become competitive advantages for countries or transform into stranded assets** if not planned for and managed effectively.
assets in a short time: it all depends on the vision, planning and critical mass of investment but also on the acceptance of local communities. The involvement of the private sector is possible only with a clear and long-term vision, especially in the energy sector. Within this framework, an increasingly important role is being played by the EU Projects of Common Interest, which envisage priority infrastructure investments until 2050 in member states and in the neighbourhood, now also in the hydrogen sector. Energy and gas infrastructure should be the main focus where cooperation between the EU and MENA countries should start. The MENA region has a comparative advantage in renewables and high reserves of gas. Building new connection grids between the two shores will be one of the major assets to boost integration. Integration between the two shores will also be crucial to creating a regional value chain in infrastructure and to attracting more investments deriving from re-shoring. To attract more investments, however, further reforms are needed, in particular concerning taxation, a stable regulatory framework, guarantee on investments, transparency, an impartial judicial sector and less bureaucracy. But also government reforms, creating long-term fiscal plans that are lacking in most MENA countries: the oversight on future investment decisions is crucial. And, above all, investments cannot exist without long-term political stability.

Second session

Cooperation and coordination across the energy sector is the necessary ingredient to achieve decarbonisation but also the optimal cost in socially sustainable infrastructure investments. Many MENA countries in the past have increased their GDP thanks to fossil fuels. Policy-making, regulation and transparency are important aspects to ensure a sustainable energy transition but also centralization, since energy transition will require a remarkable amount of planning and coordination between single investment projects. Renewables will play a pivotal role in decarbonisation and hydrogen will be crucial as a complementary source of energy to overcome the intermittence of renewable production. Cooperation in infrastructure will also mean the ability to coordinate to re-use, in particular considering gas infrastructure. In the Mediterranean, more than 50% of the investments needed from now to 2030 do not have a business case today from a cost point of view: that was the same situation for renewables some years ago. This share will drop later, after 2030, as technology costs will go down. The role of funds is of absolute importance to unlock the energy transition and to distribute in a synergistic manner the evolution of the energy sector and balance the uneven distribution of investments. The MENA region is also crucial to creating sustainable mobility throughout the whole Euro-Mediterranean area: a switch to green diesel, gas, blue and green hydrogen will be essential on both shores of the Mediterranean to ensure a full-fledged and sustainable mobility market in the region and to reach the ambitious decarbonisation targets set by the European Commission and by most of the MENA countries.

To foster investments in the region, in November the meeting of Ministers of Trade of the Mediterranean Union encouraged economic actors in the Mediterranean to take greater advantage of the opportunities that the Euro-Mediterranean partnership provides in terms of trade, investments, and economic policy. They agreed to fight protectionism and to eliminate measures that 1) damage the fluidity of Mediterranean commercial links; 2) raise the costs of international trade and investments; 3) disrupt an effective participation in regional and global value chains, and 4) limit access to valuable inputs for economic operators and increase prices, affecting the competitiveness of our economies. Ministers are advocating for a free trade area by removing the main barriers, particularly those linked to the infrastructure and logistics sector given, the inefficiency of haulage and transport services. The scramble to establish Africa-to-Europe commercial corridors has given rise to a new global engagement with North Africa that is reshaping the basic economic architecture and the geopolitics of the region.
Morocco’s construction of its al-Boraq high-speed rail line, Africa’s first high-speed rail system, has established Morocco’s position as an Africa-to-Europe commercial corridor. Al-Boraq is linked to the Tanger Med project, under which Rabat is investing $7 billion in its network of ports, adding a strategically significant amount of container capacity on its Mediterranean coast.

On the other side, the efforts to develop a Europe-to-Africa corridor through the Central Maghreb fundamentally revolves around Algeria’s road connectivity within the Trans-African Highway system, starting in the country’s capital, Algiers. The recently formed Turkey-Italy-Tunisia transportation network that transits across the centre of the Mediterranean, creating an arc of commercial connectivity from the Maghreb to the wider Black Sea, is currently the leading contender to form a Europe-to-Africa corridor via the Central Maghreb that utilizes Algeria’s connectivity.

For its part, Egypt, combined with massive investments in renewable energy power generation, is becoming both a natural gas and electricity export hub and has the potential to radically reconfigure the pattern of energy connectivity between Europe, Africa, and the Middle East. In a parallel manner, Egypt is moving towards becoming a hub for an East Africa-to-Eastern Mediterranean commercial transportation corridor that connects with the European mainland at the massive Chinese-run trans-shipment port in Piraeus, Greece.

There is no doubt that investments in public infrastructure are going to be key for the implementation of the Green Deal. One problem with EU initiatives is that they look primarily at return on investment and the grant component is comparatively limited and requires the participation of investment banks and other financial actors.

The energy challenge

However, renewable energy developments in the MED region have gained momentum in recent years. The main driver behind these developments is the strong support from governments that recognize the urgency of tackling rising demand for energy and are attracted by the declining costs of solar.

In addition, multilateral development banks and development agencies have played a crucial role in financing projects in Egypt, Jordan, and Morocco at a time when international banks were reluctant to invest. To support their renewable sectors, countries have introduced several supporting mechanisms including competitive bidding, feed-in tariffs, tax exemptions, and power-purchase agreements, in addition to land and financial incentives.

Today there are three bright energy developments in the MED: taken together they can inaugurate a dynamic Mediterranean energy market.

First, Morocco has become a renewable energy production powerhouse; second, the Eastern Mediterranean Gas Forum was established in Cairo last September with several countries striving to position themselves as regional gas hub; Egypt is currently the frontrunner. Third, and probably most important, hydrogen has emerged as an energy vector and it is now destined to complement electricity in the energy transition. The recently released European hydrogen strategy will rely in part on electrolyser capacity in North Africa for the export of green hydrogen to Europe. In many aspects, hydrogen could become a game changer for the MED, and European financial support is clearly present to fund important projects of common European interest. However, North Africa should not only be considered as a source of abundant solar, wind and natural gas to be exported to Europe to satisfy its low carbon energy requirements. Unlocking North Africa’s huge energy potential will require much more than building and financing the requisite production and transportation infrastructure. To realize the vision for an integrated
Mediterranean energy market we need to back these three bright developments with concrete policies and investments. First, **free up energy carriers from being constrained by physical infrastructure**: AI, pipelines, transmission cables, all of which come with their own geopolitical baggage. To avoid this, it is necessary to **promote well-functioning markets and price benchmarks for LNG**, electricity and low-carbon hydrogen. Second, it is **essential to empower energy exporting countries to develop their own local energy ecosystems and competitive local end-use markets**. Third, policies and incentives are required to **enable local private sectors, including SMES, to acquire three main skills**: the capacity to develop projects in partnership with international private project developers; the capacity to deploy, operate, adapt, improve and reproduce imported technologies; the capacity to invent new technologies and commercial solutions. Fourth, it is necessary to **create an incentive framework linked to the European Green Deal by which all MED economies can meet net zero carbon emissions targets by 2050**: this could include establishing a shared emission-trading system; fifth, there must be support for the development of open access multi-carrier energy hubs, facilitating energy trade within North Africa and the Levant and facilitating price interplay between natural gas and electricity. Finally, consideration could be given to the establishment a Mediterranean energy infrastructure exchange or, at the minimum, an energy infrastructure fund to be managed jointly by the EIB and the Arab Petroleum Investment Corporation (APRICORP), to facilitate access to debt and equity capital for project developers and industry players and provide a mechanism for commercial lenders and institutional investors to recycle their capital.

A large part of the investments foreseen by the Next Generation EU will be devoted to energy. By 2050 the largest amount of distributed energy will be on the distribution network rather than in the generation network: there will be a switch in this regard since more than 70% of these resources will come from distributed injecting energy. This requires network preparation, in particular in the MENA region if it wants to become a key renewable energy producer and a global platform for new technologies innovation, enabling decarbonisation.

**Italy is the European country currently most based on gas for energy generation and there is also a distortion concerning energy distribution of demand**, which is mostly concentrated in the industrialized North. On the other hand, renewables are mostly produced in southern Italy and it will be really difficult and challenging to transfer such a huge quantity of energy from south to north. A real game changer could be hydrogen. Italy, as a highly industrialized and manufacturing country, needs hydrogen as an economically sustainable and viable source to drive the energy transition, becoming at the same time a possible energy platform in the Mediterranean.

**Future trends in infrastructure and conclusions**

Four main trends must be considered in planning the future of infrastructure. First, the **growing and changing volumes of mobility**: in 10 years last-mile delivery is expected to grow 50 times, due to e-commerce and the large use of technology platforms. The rebound of tourism is already happening in China with a local focus. Second, the **link between infrastructure and digital technology**: in the next five years in Western Europe the smart city market is expected to increase from $5 billion to $11 billion, with a focus on investments in surveillance, security, mobility flows and parking. At the same time another big challenge – which will affect the entire region – is **climate change resilience**, since by 2050 a fourfold increase is expected in risks of drought/floods in North Africa. The most important trend will perhaps be **urbanization**: In the next 30 years, the level of urbanization worldwide will reach 70% and there will be over 100 million people living in the largest 20 cities in Europe and the MENA region. It will be crucial to provide these people with food, water, electricity and mobility infrastructure in order to ensure more jobs, more inclusivity and better quality of life.
Five main ingredients represent the founding pillars of rethinking infrastructure. First, **investing in “smart infrastructure” with clear and positive business cases**, favouring new investments in smart infrastructure with a focus on parking, traffic flows and security/surveillance that can dramatically increase quality of life and the cash -n for municipalities. Second, **facilitating large maintenance programs for infra resilience**: it is essential to facilitate large maintenance/resilience programs (potentially funded by large “concessions contracts”), leveraging the digital monitoring of infrastructure to increase safety and reduce the cost of ownership. Third, **pushing sustainability and electrification**: leveraging the sustainability and electrification of consumption projects, considering that the fast decrease in the cost of electric vehicles/buses can dramatically reduce emissions if combined with “smart” traffic policy. Fourth, **giving special powers to municipalities in metropolitan areas**: it is essential, in particular in special administrative regions, in order to increase capital attraction and dedicated/special vehicles for new tenders (design and build), also considering the important role of data platforms and ways to sustain investments. Finally, **opening local markets (at the city level) for concessions**: privileging the possibility of opening local/city markets for concessions and operators to increase efficiency, also by favouring the consolidation of operators/players and/or the market entry of global players.

In conclusion, to create integration between Europe and the MENA region **new forms of funding will be essential**, with a consequently increasing importance of public-private collaboration and decarbonisation as medium and long-term goals. The technology to achieve these objectives is rapidly improving and now more than ever crucial is **enhanced coordination and cooperation** in order to avoid dispersing the huge amount of public investments deriving from Next Generation EU and national fiscal stimulus plans. Integration is not starting from zero: many cables, pipelines and grids between North Africa and Europe are already in place. It is now time to **focus on shared projects**, which can ensure a sustainable transition for the whole Euro-MED region and a speedy and steady recovery.