C- SWITZERLAND GLOBAL ENTERPRISE

INFRASTRUCTURE PROJECTS ABROAD

Succeeding in a demanding environment



OFFICIAL PROGRAM



Contents

WHAT DO WE ACTUALLY MEAN BY "INFRASTRUCTURE"?	3
AN IMPORTANT ECONOMIC FACTOR ACROSS THE WORLD	3
LARGE, COMPLEX AND LONG-TERM PROJECTS	4
MORE AND MORE PRIVATE RATHER THAN PUBLIC-SECTOR PROJECTS	5
GREAT POTENTIAL – BIG CHALLENGES	5
THE THREE PHASES OF AN INFRASTRUCTURE PROJECT	5
ANSWERS TO THE MOST IMPORTANT QUESTIONS	6
THERE IS INTERNATIONAL POTENTIAL FOR THESE SWISS INFRASTRUCTURE SOLUTIONS _	7
SUPPORT FOR SWISS SMES	10
MATCHMAKING FOR CLEANTECH COMPANIES	11
RELATED LINKS ON THE SUBJECT OF TENDERS	12

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DISCLAIMER

The information in this report has been compiled and researched from sources that are believed to be reliable and is written in good faith. Switzerland Global Enterprise and its network partners are not liable for any data that may be incomplete, inaccurate, or out of date; this includes information obtained from websites/sources over which Switzerland Global Enterprise or its network partners have no control. Unless expressly stated, the information provided in this report is not of a legal or juridical nature. Depending on how the term is defined, countries around the world invest an average of 8 to 14 percent of GDP in infrastructure projects each year. It's no wonder, then, that this lucrative market is also highly competitive. And it's also no wonder that more and more Swiss companies want a piece of this pie. We will demonstrate here how cooperation with foreign consortia and engineering procurement construction (EPC) contractors comes into being – and what you need to consider if you want to be successful in this demanding field.

WHAT DO WE ACTUALLY MEAN BY "INFRASTRUCTURE"?

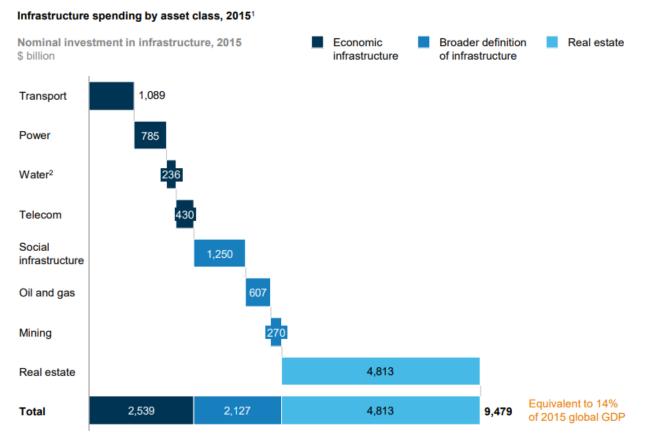
Wikipedia states that infrastructure comprises "all facilities, institutions, structures, systems, and non-material conditions that serve the general interest and economic structure of a state or its regions." To put it in somewhat simpler and cruder terms, infrastructure is all the underlying physical and organizational structures and facilities that keep a country, a region, a community – as well as a company – "running".

The following areas are generally summarized under the term infrastructure:

- Transport
- Energy
- Water
- Disposal
- Communication

AN IMPORTANT ECONOMIC FACTOR ACROSS THE WORLD

The degree to which a country's national and regional infrastructure is developed provides a key indicator of its productivity and correlates strongly with its prosperity. The differences in each country's infrastructure investments can therefore be huge. The global average expenditure is remarkable: according to a study by the McKinsey Global Institute, around eight percent of gross domestic product (GDP) was spent on constructing and maintaining public and private infrastructure in 2015. If you include – as the World Bank does – the oil, gas, mining and real estate sectors, investment reaches as much as 14 percent of GDP.



 The World Bank's definition of infrastructure includes utilities (gas and electricity, water supply, telecommunications, sewerage, and waste collection and disposal), public works (roads and major dam and canal works for irrigation and drainage), and other transport sectors (railways, ports, waterways, and airports; OECD includes public works in a country, state or region, including roads, utility lines, and public buildings.
Lower water capex due to changes in the exact category definitions applied and updates to estimates by Global Water Intelligence. NOTE: Numbers may not sum due to rounding.

Source: IHS; Euroconstruct; IMF; World Bank; OECD; McKinsey; Global Institute Analysis

LARGE, COMPLEX AND LONG-TERM PROJECTS

Infrastructure projects are characterized by very different features, depending on their sector, size and location. However, all these projects have some factors in common: due to their scale, infrastructure projects usually require high investment volumes. They are also usually carried out by specially established project companies (special-purpose vehicles; SPV), which are in turn financed by the public sector and/or by private investors (banks, pension funds or specialized infrastructure funds). This allows the risk of an infrastructure project to be better and more clearly allocated.

Since numerous stakeholders are usually involved and the social and environmental impacts can often be very large, infrastructure projects are often highly complex. In the case of government projects, the influence exerted by authorities can further increase this complexity. Another common feature of all infrastructure projects is their long-term nature – both in terms of the time they take to implement (major projects are often not completed until decades after planning begins) and in terms of the financing horizon (which generally also spans decades).

MORE AND MORE PRIVATE RATHER THAN PUBLIC-SECTOR PROJECTS

Originally a task for the public sector, infrastructure is increasingly being privatized. This is especially true in the emerging markets, where private companies or consortia are often more efficient than the state – not only with regard to implementing infrastructure projects, but also when it comes to operating the corresponding facilities. There are also hybrid forms that mix public and private projects, such as partnerships between the public sector and private companies (public private partnerships; PPP). However, (partial) privatization of infrastructure projects can only work if some basic conditions are met: Firstly, the project must have a clearly defined revenue source – such as the revenue per kilowatt-hour generated at a power plant or the road charges on a toll road. Secondly, a degree of stability that allows for long-term financial planning is also crucial, as are regulations that permit the participation of private stakeholders and institutions to implement these guidelines consistently. And last, but not least, all risks contained in the project must be clearly and unambiguously allocatable.

GREAT POTENTIAL – BIG CHALLENGES

The transformation of infrastructures into sustainable ones, which is already underway in many industrialized nations, offers enormous potential as a mega-trend for the coming decades. As countries move towards decarbonization, the production of renewable energy and all aspects of electromobility will massively gain more weight. The same applies to the creation or expansion of infrastructures to improve the recycling economy.

Especially in developing countries, the "infrastructure gap" is still a big challenge – a consequence of high population growth and a lack of capital resources, legal uncertainty and corruption among other things. These factors lead to higher capital costs and therefore more expensive projects, which is why plans for small, decentralized facilities often fall by the wayside. At the same time, many countries are becoming more and more dependent on large corporations or third countries.

THE THREE PHASES OF AN INFRASTRUCTURE PROJECT

An infrastructure project can be roughly divided into three phases:

- Development
- Implementation
- Operations



In the case of large-scale projects, decades may pass between the project idea and the final funding. In general, both sides will profit greatly by getting suppliers involved at the earliest possible stage of the project. This allows for a course to be set with regard to the required technology and the necessary requirements at an early enough stage.

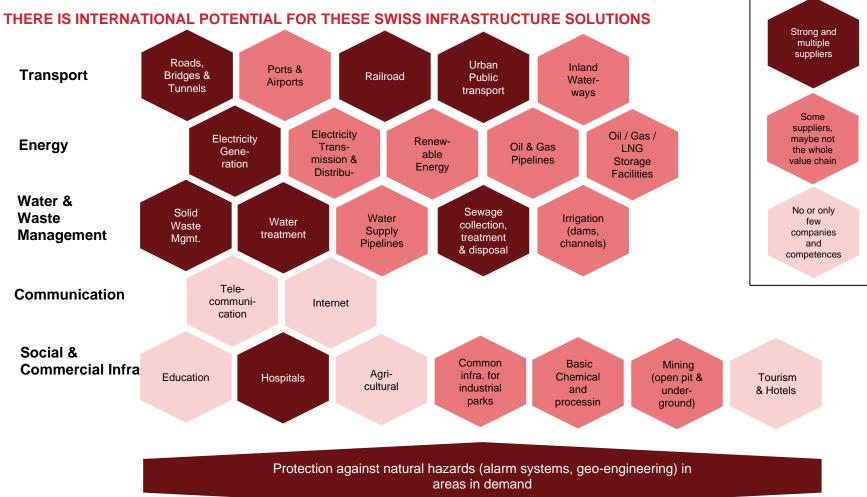
Depending on the phase and project mode, service providers or component suppliers will need to approach various contacts. Services such as concept studies or engineering services are already required during an infrastructure project's development phase; the point of contact is usually the project owner (a ministry in the case of public projects, a

concession holder in the case of PPP, or a developer in the case of private projects). Suppliers of technologies and construction materials are usually selected as part of the procurement process or by an EPC (engineering, procurement, construction) contractor. An EPC is responsible for delivering a project to the owner on a turnkey basis, at a predetermined time. If an infrastructure project is operational, it will present opportunities for long-term commitment in operations and maintenance. These contracts are also awarded to specialized companies via tendering processes.

ANSWERS TO THE MOST IMPORTANT QUESTIONS

1. In which foreign infrastructure projects is there potential for Swiss solutions and products?

To show the potential for Swiss companies in foreign projects, S-GE, Swiss Export Risk Insurance (SERV) and Swissmem have mapped all segments and sub-sectors of the infrastructure sector – the darker the coloring, the greater the potential in international infrastructure projects.



Source: SERV, Swissmem, S-GE

2. What criteria should suppliers use when selecting their target markets in the infrastructure sector?

First and foremost, it is important to find projects where your core competencies are required. To do this, a company must have the strength and "self-confidence" to stand up in international comparisons. It is particularly important to present project references.

To ensure sustainable success, it is recommended to only focus on a few selected markets and regions. In this often politically-shaped environment, medium or long-term planning horizons as well as the establishment of strong local networks are indispensable – especially for service providers.

Since infrastructure projects often span decades, a target region's stability and legal certainty comprise essential selection criteria. It is also important that the regulatory framework allows for an equal partnership.

Due to the importance of the infrastructure sector, essentially any market is interesting, provided that the criteria mentioned above are met.

3. Infrastructure projects are usually implemented by consortia or an EPC contractor. How do Swiss companies increase their chances of entering a partnership?

EPC contractors reduce complexity by working with partners who can sub-contract the largest possible work packages. Swiss companies should therefore organize amongst themselves more and form clusters that offer solutions with greater value.

→ Check out "Support for Swiss SMEs" at the end of the document

4. How important are local contacts?

A lot of infrastructure projects are put out to tender. These are not always public, however: they often (especially in the case of private projects) only go out to a closed circle. An order can also be placed directly with a partner on an "open-book" basis. The latter is advantageous for suppliers, as they do not have to deal with time-consuming and costly tender processes. However, you will only be contacted for an "open-book" award if you are known and well networked in the market. A strong, trustworthy partner – or your own local presence – can therefore be vital keys to success.

Prominence among authorities and in political circles is invaluable when it comes to achieving a strong position – and this is especially true with regard to government lighthouse projects.

→ Check out "Support for Swiss SMEs" at the end of the document

5. It is difficult for Swiss companies to compete with foreign competitors in terms of price. What other arguments can they score points with?

Swiss companies facing competition from local rivals in a tender can score points with their expertise and their unique selling proposition (USP). However, this only works if this "uniqueness" is explicitly required. This is another reason why getting involved in a project as early as possible is crucial: In an ideal scenario, this will enable you to help determine the requirements as a consortium member and gain a decisive advantage thanks to the high quality of your own products and services.

Sometimes, clients also want or require parts of the value creation to be transferred to the target country – meaning that only key components and/or expertise come from Switzerland.

6. What does one have to consider with regard to financing? Who is responsibility for this?

Whether an infrastructure project lives or dies depends on whether the corresponding financing can be secured. And this only happens if the risks are known and allocated and the project promises a reasonable return for both the project owner and the lender.

While a supplier is dependent on the "bankability" of a project, this is not the case for suppliers of concept studies or engineering services during the development phase. Depending on the size of the project, it can be assumed that three to ten percent of the capital expenditure for an infrastructure project (CapEx) is earmarked for the development phase.

Project development is associated with higher risks, as implementation is subject to uncertainties, particularly in the early phases. It can therefore make sense for solution providers to participate in the project development – and to seek cooperation with specialized investors and financiers, in order to increase the chances of implementation.

7. In a nutshell: What are the most important points to consider when it comes to making your commitment to foreign infrastructure projects a success?

- You must view your "internationalization" as a long-term project.
- You must make the necessary resources available to establish local networks.
- Cooperation with complementary partners makes it possible to put together larger offers and thus increase value. These kinds of sub-contracting solutions increase the chances of winning projects.
- Support services should be used as early as possible to obtain information, as a "door opener" and for support.

SUPPORT FOR SWISS SMES

Where can Swiss SMEs find support for accessing international infrastructure projects?

Switzerland Global Enterprise

We support Swiss SMEs in their international business with locations in all parts of Switzerland and in 31 countries with around 200 employees - including and in particular in accessing international infrastructure projects. In doing so we use a unique national and global partner network. For example, in the infrastructure sector we work closely with Swissmem, Swissrail, Serv and SECO. In this way we create added value for our customers and prosperity for Switzerland. As a nonprofit organization, we provide a public service for our clients on behalf of the Swiss Confederation (State Secretariat for Economic Affairs SECO) and the cantons.

SERV

The <u>Swiss Export Risk Insurance SERV</u> insures the export business of Swiss companies against payment default due to political or economic risks and can help in the event of liquidity bottlenecks. As part of the ECA Pathfinding project, SERV is making an important contribution by actively brokering large-scale projects in buyer markets, especially in the infrastructure sector, for the benefit of Swiss exporters.

SwissRail

<u>Swissrail Industry Association</u> is the association of the Swiss railway industry. It represents over 120 member companies from the various sectors of the rail transport supply industry. Swissrail supports its members in their export activities by, among other things,

organizing joint stands at international trade fairs and delegation trips to interesting markets.

Another important task of the association is the protection of the interests of the industry at home and abroad.

SWISSMEM

<u>Swissmem</u> is the leading association for SMEs and large companies in Switzerland's mechanical, electrical engineering and metal industries (MEM industries) and related technology-oriented sectors. Swissmem promotes the national and international competitiveness of its more than 1,200 member companies through effective lobbying, needs-based services, targeted networking and training and further education of employees in the MEM industries in line with labor market requirements.

MATCHMAKING FOR CLEANTECH COMPANIES



On S-GE matchmaking you will receive requests from potential customers from around the world who are looking for Swiss suppliers, or you can find out about new relevant projects or tenders, which you can participate in. S-GE verifies these contacts, saving you time and resources and opening up new opportunities and global growth for you. As a Swiss or Liechtenstein SME with an interest in exporting, this service is currently still free of charge for you.

Test it now: s-ge.com/matchmaking

DO YOU HAVE ANY QUESTIONS? OUR EXPERT IS THERE FOR YOU.



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RELATED LINKS ON THE SUBJECT OF TENDERS

You will find global project announcements here. Contact us if you are interested in a project – we can provide you with our know-how and contacts together with our national and international partner network!

Switzerland

- Simap.ch
- Konkurado

International

- United Nations
- Germany Trade and Invest
- Tenders Info
- Global Tenders

European Union

- Eurospider
- Tenders.ch
- TED: Tenders Electronic Daily

United Kingdom

- <u>GOV.UK</u>
- Tenders Direct

Americas and Canada

- BNamericas
- Buyandsell
- Government of Canada

UAE and Saudi Arabia

- Saudi Tenders
- Tender UAE
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Africa

- Africa Gateway
- South African Government

Australia

- Australian Government
- Australian tenders
- Tenders.net

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