Climate Threats
- High storm surge risks due to high frequency of strong typhoons that hit South Korea – hit by 13 typhoons in 2019
- Ling Ling (2019), a category-4 equivalent typhoon, was the strongest ever to hit South Korea – killed 8 people and knocked out power for 180,000 homes; AON estimated USD$24mm of economic losses for South Korea
- The country experienced more extreme hot and cold days, and the highest number of typhoons in 2019

Government Actions
- Published the “Promised of Seoul: Taking Actions Against Climate Change” in 2015 to promote actions such as eliminating all flood vulnerable regions by building pumping stations and rainwater recycling facilities
- The national government also released Korea’s Adaptation Strategy to Climate Change in 2011, focused on improving the urban drainage system and create a climate disaster insurance scheme...yet, no follow-up actions could be found

THE ECONOMY AT STAKE

Economy Overview
Home to well-known global brands such as Samsung and LG, Seoul is the economic powerhouse and technological hub of South Korea. It was ranked by the OECD as first in terms of R&D investments as a percentage of GDP in 2017. It is also the 6th largest business centre and real estate market according to JLL Global 300 Cities 2016. The major industries identified by the Seoul government are ICT, biotechnology, research and development, digital contents, and fashion. Tourism is also a major sector as Seoul was ranked the 10th most visited city (11mn) by the Mastercard Global Destination Cities Index 2019. In addition, the Korea stock exchange, which is located in Seoul, has 2,359 listed companies with a combined market capitalisation of USD$1.3tn, making it the 15th largest stock exchange in the world.


This fact sheet is part of the CWR Coastal Capital Threat Series. For methodologies see Avoiding Atlantic: The CWR APACCT 20 Index – Benchmarking coastal threats for 20 APEC cities with finite sector input © China Water Risk. All rights reserved, 2020 | Contact: info@chinawaterrisk.org
PEOPLE, LAND & ECONOMY AFFECTED BY LOCKED-IN SEA LEVEL RISE (SLR)

LOCKED-IN SLR IN SEOUL CAPITAL AREA AT 1.5°C - GLOBAL ELEVATION DATA (SRTM - 30M)

1.5°C Warming: 2.9m SLR

What’s at risk...
- 0.2mn Affected (2%)
- 203km² Affected (2%)


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LOCKED-IN SLR IN SEOUL CAPITAL AREA AT 4°C - GLOBAL ELEVATION DATA (SRTM - 30M)

4°C Warming: 8.9m SLR

What’s at risk...
- 1.7mn Affected (20%)
- 942km² Affected (8%)


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Note: The NASA SRTM-30m elevation data maps were used to benchmark coastal threats across the 20 cities to build the CWR APACCT 20 Index. Since our analyses show that impacts worsen when higher granularity maps (5m) are used, for more in-depth analysis, please use such maps where available. The median level of the locked-in SLR range was used for both the 1.5°C and 4°C scenarios above so impacts could be worse at the higher end of the ranges. To see SLR low/median/high range impacts and differences in mapping granularity – please see our report “Avoiding Atlantis: The CWR APACCT 20 Index”. Such permanently submerged areas have implications for financial tail risks – for more on this see “Sovereigns at Risk: APAC Capital Threats”. Local tide adjustments were not made.