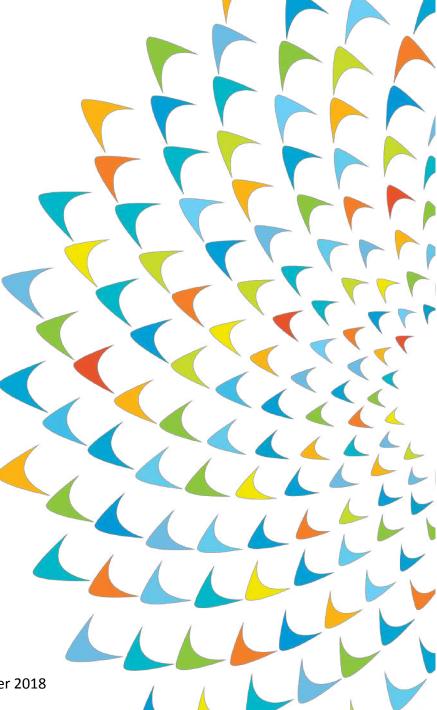


Green Buildings: Building a Climate Resilient Urban Future

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Outline

• What are green buildings? • Why go green? • How do we go green?



"...a building that, in its design, construction or operation, reduces or eliminates negative impacts, and can create positive impacts, on our climate and natural environment [...] preserve precious natural resources and improve our quality of life" (World Green Building Council)





| • | WORLD GREEN BUILDING COUNCIL | | AINABLE OPMENT ALS | | Source: http://ww | vw.worldgbc.org/gree | n-building-sustainable | -development-goals |
|---|--|---|--|--|--|--|---|---|
| Green buildings | | | Green building design can spur | Green buildings are the fabric of sustainable communities & cities | use 'circular' principles, where resources aren't wasted | Green buildings produce fewer emissions, helping to | Green buildings can improve biodiversity, | Through building green |
| can improve people's health & wellbeing | Green buildings can use renewable energy, becoming cheaper to run | Building green infrastructure creates jobs & boosts the economy | innovation & contribute to climate resilient infrastructure | | | combat climate change | save water resources & help to protect forests | we create strong, global partnerships |
| 3 GOOD HEALTH AND WELL-BEING | 7 AFFORDABLE AND CLEAN ENERGY | 8 DECENT WORK AND ECONOMIC GROWTH | 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE | 11 SUSTAINABLE CITIES | 12 RESPONSIBLE CONSUMPTION AND PRODUCTION | 13 CLIMATE ACTION | 15 LIFE ON LAND | 17 PARTNERSHIPS FOR THE GOALS |





- Refers to both a structure and the application of processes;
- Requires close cooperation amongst different stakeholders; and
- Complements the classical building designs.





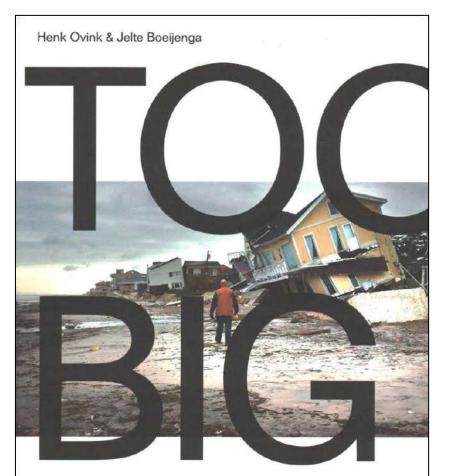


 Building designs that enable adaptation to a changing environment.





- Natural hazards.
- Infrastructure is vulnerable.
- Cost of materials and repairs are high.
- Cost disaster rehabilitation and recovery (building back better).
- Assessment tool: Integrated disaster and climate risk reduction assessment.

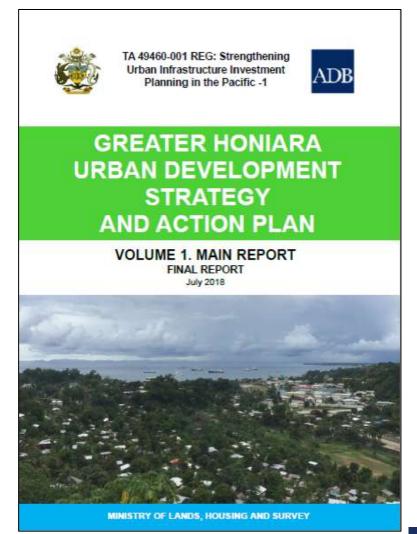


Rebuild by Design: A Transformative Approach to Climate Change

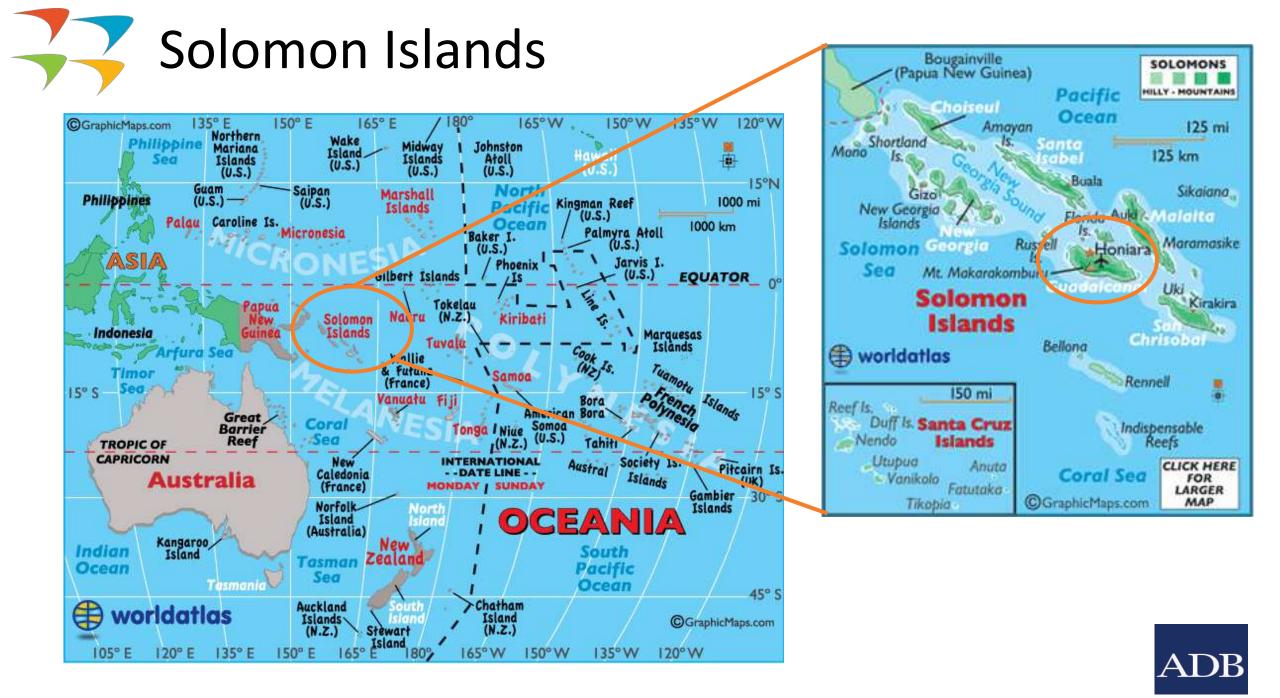
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Urban Future – Long-term Resilience Efforts

- Enhance building codes,
- Improve land use regulation,
- New construction techniques,
- Retrofitting homes and systems,
- Setting up compliance systems,
- Raising public awareness,
- Hazard and GIS mapping, and
- Improving national disaster recovery and reconstruction frameworks.
- Planning process and tool: City/Town Urban Development Strategy and Investment Framework.
- Safeguards tool: ADB Safeguard Policy Statement 2009









| | | | | | | | Budget by year (US\$, millions) | | | | |
|---|-----|-------------|----------------------|-------------------|------|------------------------------------|---------------------------------|------|------|------|------|
| Goal/ Programme/ Action | | Lead Agency | Source of Funding | Funding Status | | Estimated Cost (US\$, millions) | 2018 | 2019 | 2020 | 2021 | 2022 |
| Improve Resilience to Natural Hazards and Climate Change | | | | | 5.60 | 0.72 | 0.00 | 0.38 | 0.31 | 0.03 | 0.00 |
| CR 2 Disaster Risk and Climate Proofing of individual developments 0.1 | | | 0.50 | 0.06 | 0.00 | 0.03 | 0.03 | 0.00 | 0.00 | | |
| CR 2.1 Incorporate disaster risk management considerations in National Building Code (NBC) and development control regulations | All | MID | TBD | Unsecured | 0.50 | 0.06 | | 0.03 | 0.03 | > | |

Source: Solomon Islands Government, Greater Honiara Urban Development Strategy and Action Plan, 13 September 2018,.

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| Goal/ Programme/ Action | | Strategic elements | Lead Agency | Source of Funding | Funding Status | Estimated Cost (SBD, millions) | Estimated Cost (US\$, millions) | Budget by year (US\$, millions) | | | | | |
|-----------------------------|--|-----------------------|-------------|----------------------|-------------------|-----------------------------------|------------------------------------|---------------------------------|-------|-------|-------|-------|--|
| | | | | | | | | 2018 | 2019 | 2020 | 2021 | 2022 | |
| Ensure | Inclusive Growth | í. | | | | | | | | | | | |
| Ensure Water Supply for All | | | | | | 714.64 | 91.47 | 0.82 | 17.00 | 22.13 | 17.13 | 14.57 | |
| WS 2 | Security of Water Supply | | | | | 521.46 | 68.03 | 0.14 | 13.26 | 17.96 | 15.26 | 12.83 | |
| WS 2.1 | Conduct Demand Management Awareness Programmes | All | SIWA | ADB/ AusAid | Planned | 16.00 | 2.05 | 0.14 | 0.51 | 0.51 | 0.51 | 0.38 | |
| WS 2.2 | Recommission White River bores and install additional bores at Mataniko | All | SIWA | ADB | Planned | 85.80 | 10.98 | | 2.75 | 2.75 | 2.75 | 2.75 | |
| WS 2.3 | Plan, design, construct WTP on Lungga River & install transmission mains, pumping stations & reservoirs | All | SIWA | ADB | Planned | 325.77 | 41.70 | | 8.00 | 12.00 | 12.00 | 9.70 | |
| WS 2.4 | Plan, design, construct augmented treated water storage | All | SIWA | ADB | Planned | 103.90 | 13.30 | | 2.00 | 2.70 | | | |

Source: Solomon Islands Government, Greater Honiara Urban Development Strategy and Action Plan, 13 September 2018.





- Process: Resilient urban planning, development and investment prioritization;
- Tools and entry points: Contain guiding principles for assessments; and
- Behavior change: Institutional strengthening and capacity development.



