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**A THEORETICAL FRAMEWORK FOR ESTIMATING
THE GREEN NET NATIONAL PRODUCT IN A SMALL OPEN ECONOMY**

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Abstract: Extending previous literature on green national accounting, this paper clarifies the links between a country's conventional GDP and its Green Net National Product (GNNP) as well as the link between the GNNP and the concept of Genuine Saving. Consumer welfare is assumed to depend on the consumption of conventional goods and services as well the quality of the air and the aquatic environment and on various ecosystem services provided by agricultural land, forests, wetlands, and other green areas. Production requires inputs of capital and labour as well as renewable and non-renewable natural resources, and productivity depends inter alia on air quality and water quality. The GNNP is the sum of the conventional Net National Product recorded in the national accounts plus the value of the consumption of environmental services and the net saving in environmental assets (the net increase in the stock of natural capital). The paper derives formulas for the valuation of environmental services and assets in a small open economy like Denmark, accounting for the country's international climate policy commitments.