from each other. Compressing the contents that could simply occupy a whole book into 24 pages with plenty of supporting graphics, the authors are able to pin point the essential information that answers the question stated at the beginning. This brief summary is informative enough to convey the core idea, yet evoke the curiosity to explore further into the topic. In chapter 6, the last chapter, various case studies are collected to demonstrate the connection between other chapters. Couple of brief paragraphs, no more than two pages of text and graphics per each case study is, in some cases, a bit too concise articulate the physical form of the projects. Regardless of that, this chapter still provides good introduction to notable urban design projects worldwide. In addition, the authors also conclude the "discussion points" for each case study. Some of these points can really set off compelling discussion in a school seminar class or even in professional conversation. Many of the questions indeed emphasize the relationship of landscape architecture and urban design, such as the one for New Delhi case study, where the authors ask: How should we define the landscape? Is it the spaces between the buildings? Is it the green spaces of parks and gardens? Or is the whole city actually a landscape that needs to be considered as a connected system?

In summary, this particular book, and potentially other text books in the AVA Series, should be able to fulfill the forgotten needs of landscape architecture students as well as those of other visual arts. Subscription of appropriate series in school library is also worth it, as they can be used both as reference books for students and required text book for courses. The attractive graphic in the book can indirectly add inspiration to students that hopefully lead to curiosity and further researches in the topic. Moreover, although starting as a text book for school, this book can be appealed to professional landscape architects and those in related fields as well. The fact that this book is neither a heavily academic book, nor a flashy magazine with pages of advertisement, it offers another different choice for professional readers. And with good graphic, pocket book sized, and brief but informative contents in each topic, it can be perfect for landscape architects' "bed-time story book" that can help brush up their academic point of view as we as stimulate some bright, new ideas for their professional projects.

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Towards a Sustainable Northern European Housing Stock: Figures, Facts and Future

Itard, L. and Meijer, F. (2008) Amsterdam, The Netherlands: IOS Press 213 pp.

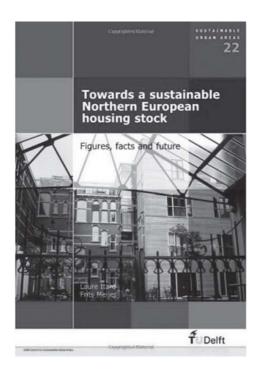
Itard and Meijer's book Towards a Sustainable Northern European Housing Stock addresses one of the most challenging issues on sustainable development confronting the world. Sustainable housing in this book is narrowly focused on the environmental dimension and specifically on the energy consumption of residential building stock. Although European countries have in recent two decades put sustainable housing high on the political agenda, the results so far are modest. Based on a search and inventory of data on the existing building stock and developments of related policies towards sustainable housing in eight Northern European countries including Austria, Finland, France, Germany, Netherlands, Sweden, Switzerland and United Kingdom, the book aims to figure out the possible instruments and incentives to realize a more sustainable building stock.

This book includes seven chapters implicitly organized into two parts. In the first part, the energy performances, characteristics, physical quality and developments of the residential building stock are addressed with the purpose of sketching a whole picture of the housing stock. The second part deals with the current policies, incentives and barriers towards sustainable housing, and presents recommendations for future policies and incentives to overcome the barriers. However, even though the main goal of the book stated by the authors is to identify the possible future instruments and incentives to realize a more sustainable building stock which is relatively brief (37 pages) compared to the first part.

One of the strength of this book lies in its broad and elaborate overview of the housing stock which could be used for those who are interested in understanding the historic development as well as the state of the art of the housing stock in Northern Europe. The statistical value of this book is also emphasized by the inclusive and informative appendices. Specifically, following the formulation of problem and research approach in the first chapter, chapter 2 investigates the energy consumption of buildings broken down by end use, dwelling type and age, type of fuel, etc. Chapter 3 provides insight in basic data as building typology, ownership categories and construction periods. Chapter 4 examines the physical quality of the residential building stock including insulation, heating and cooling systems, hot water, ventilation type and level, sanitation, elevators, and thermal comfort and health quality. Not all of these physical qualities are associated with energy performances of the buildings. Chapter 5 completes the first part of the book. In this chapter, the developments of the housing stock in terms of annual growth rate, demolition rate, and renovation activities are described.

The next chapter sets out to discuss the existing policies, incentives and barriers to stimulate sustainable housing development in particular for sustainable renovation of existing building stock. The policies are framed into four prototypes: regulative instruments, economic instruments, communicative instruments and organizational instruments. The main incentives identified are subsidies, tax reduction and publicity campaigns. The barriers differ for the type of tenure. However, in general, the lack of knowledge and the lack of cost effectiveness are pointed out as major barriers. Future policies and incentives to overcome these barriers are discussed in Chapter 7. It is assumed by the authors that using free market as a tool for environmental improvements is limited and therefore government regulations should be incorporated into policies. Besides, research on sustainable renovation needs to be highlighted since there is a lack of knowledge about standard solutions, technical aspects and occupant behaviors. In the end, ten recommendations with respect to the sustainable housing development are drawn based on the previous observations.

Another strength of this book is its emphasis on the crucial role of existing building stock in sustainable housing development, since initiatives in European countries are more geared toward the greening of new construction. Despite the extensive inclusion of existing housing stock, sustainability is constrained to a narrow scope in terms of emphasizing energy issues on the scale of individual buildings. Although the environmental issues like material consumption, hot water consumption and air quality are touched upon a little bit, it is mainly the energy is addressed throughout the book. It therefore completely ignores the environmental consequences from housing development on a larger scale than the individual buildings, notably the land use structure and land consumption as well as spatial urban sprawl. Residential buildings make up an important part of



the physical development of cities; therefore the development of residential areas is a source of urban sprawl which is regarded as environmentally unfriendly. In its turn, the urban structure partly determined by the residential development can influence the energy consumption for housing-related transport. This neglect of this dimension of sustainable housing in the book is perhaps because policies concerning this issue are relatively lacking in European countries.

As mentioned above, policies and incentives towards sustainable housing have a broad spectrum apart from energy efficiency issues. Sometimes, policies concentrated on other aspects of housing can be contradictory to the performances of housing in environmental sustainability. For instance, policies trying to promote ownership of detached single-family dwellings result in substantial construction of large dwellings which from an environmental point of view is quite problematic. Therefore, proposals of future policies and incentives towards promoting sustainable housing necessitate a thorough and comprehensive evaluation of the combined effectiveness of current policies, attempting to consider the tradeoffs between

different housing and even non-housing policies. This is apparently difficult to achieve and the authors admit that 'there is very little known about the relative effects and efficiency of policies'. In my opinion, in such case, recommendations for future policies proposed in the book seem loosely founded. An overall evaluation of the policy mix is likely to generate a negative result which will imply extensive and probably radical measures need to be taken, for example, growth containment. It can be observed that the investigation of policies and proposals made in this book are grounded on the neoclassical environmental economics or ecological modernization theory, such as the emphasis on the need of cost-benefit analysis.

In summary, the book succeeds in providing an overview of the sustainable housing development in Northern European countries. As a book trying to describe a realistic image of the characteristics and trend of housing stock and policies being currently implemented, it is considered informative. As a book tying to identify possible future instruments for a more sustainable housing stock stated as the main goal of the book, it is lack of in-depth analyses. Nevertheless, the introduction of this book to the audiences in developing countries has two intentions: (1) for researchers who are interested in understanding the development of sustainable housing stock in western countries, this book provides good sources and database, and (2) developing countries on the way of seeking roadmap to sustainable housing can learn some experiences from western countries. This book informs the readers about the background of the western countries for comparison with the background in developing countries. Accordingly, such learning cannot just copy and paste as developing countries have their own problems and economic and social contexts varying the West.

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