

Best Tall Buildings

A Global Overview of 2014 Skyscrapers





CTBUH Awards

Best Tall Buildings

A Global Overview of 2014 Skyscrapers

Antony Wood, Steven Henry & Daniel Safarik















Bibliographic Reference:

Wood, A., Henry, S. & Safarik, D. (2014) Best Tall Buildings: A Global Overview of 2014 Skyscrapers. Council on Tall Buildings and Urban Habitat: Chicago.

Book Design & Layout: Marty Carver

First published 2014 by Routledge 2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN

Simultaneously published in the USA and Canada by Routledge 711 Third Avenue, New York, NY 10017

Routledge is an imprint of the Taylor & Francis Group, an informa business

Published in conjunction with the Council on Tall Buildings and Urban Habitat (CTBUH), the Illinois Institute of Technology, and Tongji University, Shanghai.

© 2014 Council on Tall Buildings and Urban Habitat

Printed in Canada.

The right of The Council on Tall Buildings and Urban Habitat to be identified as author of this work has been asserted by it in accordance with sections 77 and 78 of the Copyright, Designs and Patents Act 1988.

All rights reserved. No part of this book may be reprinted or reproduced or utilized in any form or by any electronic, mechanical, or other means, now known or hereafter invented, including photocopying and recording, or in any information storage or retrieval system, without permission in writing from the publishers.

Trademark notice: Product or corporate names may be trademarks or registered trademarks, and are used only for identification and explanation without intent to infringe.

British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British Library

Library of Congress Cataloging in Publication Data A catalog record has been requested for this book

ISBN13 978-1-138-84289-2 ISSN 1948-1012

Council on Tall Buildings and Urban Habitat S.R. Crown Hall Illinois Institute of Technology 3360 South State Street Chicago, II. 60616 Phone: +1 (312) 567-3487 Fax: +1 (312) 567-3820 Email: info@ctbuh.org



Acknowledgments

The CTBUH would like to thank all the organizations who submitted their projects for consideration in the 2014 awards program.

We would also like to thank our 2014 Awards Jury for volunteering their time and efforts in deliberating this year's winners and finalists.

About the CTBUH

The Council on Tall Buildings and Urban Habitat is the world's leading resource for professionals focused on the inception, design, construction, and operation of tall buildings and future cities. A not-for-profit organization based at the Illinois Institute of Technology, Chicago, with an Asian office at Tongji University, Shanghai, the group facilitates the exchange of the latest knowledge available on tall buildings around the world through events, publications, research, working groups, web resources, and its extensive network of international representatives. Its free database on tall buildings, The Skyscraper Center, is updated daily with detailed information, images, data, and news. The CTBUH also developed the international standards for measuring tall building height and is recognized as the arbiter for bestowing such designations as "The World's Tallest Building."

Contents

Introduction 8	Foreword	6	The Jockey Club Innovation Tower, Hong Kong	88
Best Tall Building Americas	Introduction	8	Wangjing SOHO, Beijing	92
Winner: Winner: Winner: Winhor: Winner: Winder Wendell Wyatt Federal Building, Portland 22 Finalists: The Point, Gnayaquil United Nations Secretariat Building, New York Gty Nomines: Winner: Winder Tarde Center, New York Cty Magma Towers, Monterry Museum House, Toronto Peninsula Tower, Mexic Cty The Godfrey, Chicago The Good Shore Drive, Chicago Stol Lake Shore Drive, Chicago Stamen Financial Centre, Xiamen Asia Square, Singapore China Resources Building, Hong Kong Stamen Financial Centre, Nanjing Stamen Financial Centre, Nanjing Stamen Financial Centre, Foshun Stamen Financial Centre, Fo	CTBUH Best Tall Building Awards Criteria	19	Nominees:	
Winner: Academic 3, Hong Kong 100 Edith Green-Wendell Wyatt Federal Building, Portland 22 Albert Tower, Melboarne 102 Finalists: Anhui New Broadcasting & TV Center, Hefei 104 The Point, Gugyaquil 28 Changzhou Modern Media Center, Changzhou 108 United Nations Secretariat Building, New York City 36 Changzhou Modern Media Center, Changzhou 108 Nominees: Fake Hills, Beibai 112 4 World Trade Center, New York City 36 Gaangzhou Circle, Guangzhou 114 MuseumHouse, Toronto 40 Jinao Towers, Nanjing 118 MuseumHouse, Toronto 40 Jinao Tower, Nanjing 118 Peninsula Tower, Mexico City 42 Kent Vale, Singspore 120 Territoria El Bosque, Sattiago 44 L'Avenue, Shanghai 122 Torre Costanera, Santiago 48 Shanghai Arch, Shanghai 122 500 Lake Shore Drive, Chicago 50 Xiamen Financial Centre, Xiamen 128 1812 North Moore, Arlington 50 Asia Square, Singspore 130 Coureryard & Residence Inn, New York City 51 <td< td=""><td></td><td></td><td>41X, Melbourne</td><td>96</td></td<>			41X, Melbourne	96
Edith Green-Wendell Wyatt Federal Building, Portland 22 Finalists: The Point, Gnayaquil United Nations Secretariat Building, New York City World Trade Center, New York City Winner: One Central Park, Sydney Winner: One Central Park, Sydney Winner: One Central Park, Sydney Winner: De Rotterdam, Rotterdam Wonnees: Winner: De Rotterdam, Rotterdam 144 Nominees: Anhui New Broadcasting & TV Center, Hefie Anhui New Broadcasting & TV Center, Hofe Changzhou Under Changehou Modern Media Center, Changzhou Indiangehou Circle, Guangzhou Indiangehou Circle, Guan	Best Tall Building Americas		171 Collins Street, Melbourne	98
Finalists: The Point, Guayaquil United Nations Secretariat Building, New York City Nominees: 4 World Trade Center, New York City Magma Towers, Monterrey Magma Towers, Mexico City Magma Tower, Mexico City Magm	Winner:		Academic 3, Hong Kong	100
The Point, Guayaquil United Nations Secretariat Building, New York City Nominees: 4 World Trade Center, New York City 4 World Trade Center, New York City 5 Guangzhou Circle, Guangzhou 114 Magma Towers, Monterrey 186 MuseumHouse, Toronto 197 Peninsula Tower, Mexico City 198 Peninsula Tower, Mexico City 199 Territoria El Bosque, Santiago 199 Territoria El Bosque, Santiago 190 The Godfrey, Chicago 190 1812 North Moore, Arlington 190 Concord Cityplace Parade, Toronto 190 Souture, Toronto 190 Coutryard & Residence Inn, New York City 191 Coutryard & Residence Inn, New York City 191 Coutry Toronto 192 The John and Frances Angelos Law Center, Baltimore 193 The Peter Gilgan Centre, Toronto 194 Torres del Yacht, Buenos Aires 195 Tore Contana Park, Sydney 194 Rest Tall Building Asia & Australasia Winner: 196 Control Central Park, Sydney 196 Control Central Park, Sydney 197 Control Central Park, Sydney 198 Control Central Park, Sydney 199 Control Central	Edith Green-Wendell Wyatt Federal Building, Portland	22	Albert Tower, Melbourne	102
Baku Flame Towers, Baku 106	Finalists:		Anhui New Broadcasting & TV Center, Hefei	104
United Nations Secretariat Building, New York City Nominees: 4 World Trade Center, New York City 4 World Trade Center, New York City 5 Magma Towers, Monterrey 5 MuseumHouse, Toronto 6 Peninsula Tower, Mexico City 7 Cerritoria El Bosque, Santiago 7 The Godfrey, Chicago 7 Concord Cityplace Parade, Toronto 7 Courtyard & Residence Inn, New York City 7 Coutryard & Residence Inn, New York City 7 Coutryard & Residence Inn, New York City 7 The Peter Gilgan Centre, Toronto 7 Sept Station, Chicago 7 The Peter Gilgan Centre, Toronto 7 Sept Station, Stanged Stares 8 China Merchants Tower, Media Centre, Changebon 1 10 7 Changebou Modern Media Centre, Changebon 1 10 7 China Merchants Tower, Shenghen 1 110 7 Fake Hills, Beibai 1 112 7 Guangzhou Circle, Guangebon 1 Habitat, Melboarne 1 Inhipitat, Melboarne 2 Inhipitat, Melboarne 3 Inhipitat, Melboarne 4 Inhoarne 4 Inhoarne 4 Inhipatiat, Melboarne 4 Inhipatiat, Melboarne		28	Baku Flame Towers, Baku	106
Nominees: 4 World Trade Center, New York City 36 Guangzhou Circle, Guangzhon 114 Magma Towers, Monterrey 38 Habitat, Melbourne 116 MuseumHouse, Toronto 40 Jinao Tower, Nanjing 118 Peninsula Tower, Mexico City 42 Kent Vale, Singapore 120 The Godfrey, Chicago 44 L'Avenue, Shanghai 122 The Godfrey, Chicago 46 OLIV, Hong Kong 124 Torre Costanera, Santiago 48 Shanghai Arch, Shanghai 126 S00 Lake Shore Drive, Chicago 1812 North Moore, Arlington 50 ASE Centre Chongqing R2, Chongqing 130 Concord Cityplace Parade, Toronto 51 Asia Square, Singapore 130 Courtyard & Residence Inn, New York City 51 China Resources Building, Hong Kong 131 Courture, Toronto 52 DBS Bank Tower, Jakarta 131 K2 at K Station, Chicago 132 The John and Frances Angelos Law Center, Baltimore 133 The Peter Gilgan Centre, Toronto 134 Torres del Yacht, Buenos Aires 135 Torres del Yacht, Buenos Aires 136 Torres del Yacht, Buenos Aires 137 The Capital, Munbaia 138 The Central Park, Sydney 139 Best Tall Building Asia & Australasia Winner: De Rotterdam, Rotterdam 138 Best Tall Building Europe Winner: De Rotterdam, Rotterdam 138 Best Tall Building Europe Winner: De Rotterdam, Rotterdam 138 The Pakubuwono Signature, Jakarta 139 The Pakubuwono Signature, Jakarta 130 The Pakubuwono Signature, Jakarta 130 The Pakubuwono Signature, Jakarta 130 The Pakubuwono Signature, Jakarta 131 The Gloucester, Hong Kong 132 The Pakubuwono Signature, Jakarta 134 The Gloucester, Hong Kong 135 The Ghoucester, Hong Kong 136 The Pakubuwono Signature, Jakarta 137 The Pakubuwono Signature, Jakarta 138 Best Tall Building Europe Winner: De Rotterdam, Rotterdam 138 Best Tall Building Europe Winner: De Cover, Vienna 144 Ardmore Residence, Singapore 72 FIT Tower, Seoul 76 Ge Central Park, Sydney 64 Finalist: De Cover, Vienna 144 Nominees: 6 Bevis Marks, London 10 Brock Street, London	3 G 4		Changzhou Modern Media Center, Changzhou	108
World Trade Center, New York City 36 Guangzhou Circle, Guangzhou 114		34	China Merchants Tower, Shenzhen	110
Magma Towers, Monterrey 38 Habitat, Melbourne 116 MuseumHouse, Toronto 40 Jinao Tower, Nanjing 118 Peninsula Tower, Mexico City 42 Kent Vale, Singapore 120 Territoria El Bosque, Santiago 44 L'Avenue, Sbangbai 122 The Godfrey, Chicago 46 OLIV, Hong Kong 124 Torre Costanera, Santiago 48 Shanghai Arch, Sbangbai 126 500 Lake Shore Drive, Chicago 50 Xiamen Financial Centre, Xiamen 128 1812 North Moore, Arlington 50 ASE Centre Chongqing R2, Chongqing 130 Concord Cityplace Parade, Toronto 51 Asia Square, Singapore 130 Coutryard & Residence Inn, New York City 51 China Resources Building, Hong Kong 131 K2 at K Station, Chicago 52 DBS Bank Tower, Jakarta 131 K2 at K Station, Chicago 53 Infinity, Brishame 132 The Peter Gilgan Centre, Toronto 54 One AIA Financial Centre, Foshan 133 Torres del Yacht, Buenos Aires 54 RMIT Swanston Academic Building, Melbourne 134 YooPanama Inspired by Starck, Panama City 55 The Capital, Mumbai 134 VenCity, Buenos Aires 55 The Gloucester, Hong Kong 135 Best Tall Building Asia & Australasia Winner: 58 Finalist: 59 De Rotterdam, Rotterdam 138 Chifley, Spluny 64 Finalist: 50 Crower, Vienna 144 Ardmore Residence, Singapore 72 FKI Tower, Seoul 76 IDEO Morph 38, Bangkok 80 Sheraton Huzhou Hot Spring Resort, Huzbou 84			Fake Hills, Beihai	112
MuseumHouse, Toronto	, wa		Guangzhou Circle, Guangzhou	114
Peninsula Tower, Mexico City			Habitat, Melbourne	116
Territoria El Bosque, Santiago			Jinao Tower, Nanjing	118
The Godfrey, Chicago			Kent Vale, Singapore	120
Torre Costanera, Santiago 48 Shanghai Arch, Shanghai 126 500 Lake Shore Drive, Chicago 50 Xiamen Financial Centre, Xiamen 128 1812 North Moore, Arlington 50 ASE Centre Chongqing R2, Chongqing 130 Concord Cityplace Parade, Toronto 51 Asia Square, Singapore 130 Courtyard & Residence Inn, New York City 51 China Resources Building, Hong Kong 131 Couture, Toronto 52 DBS Bank Tower, Jakarta 131 K2 at K Station, Chicago 52 Fortune Plaza Phase III, Beijing 132 NEMA, San Francisco 53 Infinity, Brishane 132 The John and Frances Angelos Law Center, Baltimore 53 Jinling Hotel Asia Pacific Tower, Nanjing 133 The Peter Gilgan Centre, Toronto 54 One AIA Financial Center, Fosban 133 Torres del Yacht, Buenos Aires 54 RMIT Swanston Academic Building, Melbourne 134 YooPanama Inspired by Starck, Panama City 55 The Capital, Mumbai 134 ZenCity, Buenos Aires 55 The Gloucester, Hong Kong 135 Best Tall Building Asia & Australasia Winner:	Territoria El Bosque, Santiago		L'Avenue, Shanghai	122
500 Lake Shore Drive, Chicago 50 Xiamen Financial Centre, Xiamen 128 1812 North Moore, Arlington 50 ASE Centre Chongqing R2, Chongqing 130 Concord Cityplace Parade, Toronto 51 Asia Square, Singapore 130 Courtyard & Residence Inn, New York City 51 China Resources Building, Hong Kong 131 K2 at K Station, Chicago 52 DBS Bank Tower, Jakarta 131 K2 at K Station, Chicago 53 Infinity, Brisbane 54 Fortune Plaza Phase III, Beijing 132 NEMA, San Francisca 53 Infinity, Brisbane 134 Tores del Yacht, Buenos Aires 54 RMIT Swanston Academic Building, Melbourne 135 The Peter Gilgan Centre, Toronto 54 One AIA Financial Center, Fosban 136 Torres del Yacht, Buenos Aires 55 The Capital, Mumbai 137 The Capital, Mumbai 138 The Capital, Mumbai 139 The Pakubuwono Signature, Jakarta 130 Best Tall Building Asia & Australasia Winner: One Central Park, Sydney 58 Winner: De Rotterdam, Rotterdam 138 Schifley, Sydney 64 Finalist: De Rotterdam, Rotterdam 138 Coutty, Vienna 139 Nominees: 140 Nominees: 151 Nominees: 152 Nominees: 153 Nominees: 154 Nominees: 155 Nominees: 156 Nominees: 157 Nominees: 158 Nominees: 158 Nominees: 158 Nominees: 159 Nominees: 150 Nomi			OLIV, Hong Kong	124
1812 North Moore, Arlington 50 ASE Centre Chongqing R2, Chongqing 130 Concord Cityplace Parade, Toronto 51 Asia Square, Singapore 130 Courtyard & Residence Inn, New York City 51 China Resources Building, Hong Kong 131 Couture, Toronto 52 DBS Bank Tower, Jakarta 131 K2 at K Station, Chicago 52 Fortune Plaza Phase III, Beijing 132 NEMA, San Francisco 133 Infinity, Brishane 130 Infinity, Brishane 130 Infinity, Brishane 130 Jinling Hotel Asia Pacific Tower, Nanjing 133 One AIA Financial Center, Foshan 133 Tree del Yacht, Buenos Aires 14 RMIT Swanston Academic Building, Melbourne 134 YooPanama Inspired by Starck, Panama City 15 The Capital, Mumbai 134 ZenCity, Buenos Aires 155 The Gloucester, Hong Kong 135 The Pakubuwono Signature, Jakarta 135 The Capital, Numbai 134 Concentral Park, Sydney 136 Finalist: 136 DC Tower, Vienna 138 Chifley, Sydney 137 DC Tower, Vienna 138 Chifley, Sydney 138 Chifley, Sydney 139 DC Tower, Vienna 144 Ardmore Residence, Singapore 172 Nominees: 136 Bevis Marks, London 148 Sheraton Huzhou Hot Spring Resort, Huzbou 148 Sheraton Hu	Torre Costanera, Santiago	48	Shanghai Arch, Shanghai	126
Concord Cityplace Parade, Toronto Courtyard & Residence Inn, New York City Courtyard & Residence Inn, New York City Couture, Toronto S2 DBS Bank Tower, Jakarta 131 K2 at K Station, Chicago NEMA, San Francisco The John and Frances Angelos Law Center, Baltimore The Peter Gilgan Centre, Toronto Torres del Yacht, Buenos Aires YooPanama Inspired by Starck, Panama City ZenCity, Buenos Aires Best Tall Building Asia & Australasia Winner: One Central Park, Sydney Finalists: De Rotterdam, Rotterdam San Square, Singapore China Resources Building, Hong Kong 131 Torres del Yacht, Buenos Aires Jinling Hotel Asia Pacific Tower, Nanjing 133 One AIA Financial Center, Fosban 134 The Capital, Mumbai The Capital, Mumbai The Gloucester, Hong Kong The Pakubuwono Signature, Jakarta 135 Best Tall Building Asia & Australasia Winner: One Central Park, Sydney Finalists: De Rotterdam, Rotterdam 138 Schifley, Sydney Abeno Harukas, Osaka Ardmore Residence, Singapore FKI Tower, Seonl IDEO Morph 38, Bangkok Sheraton Huzhou Hot Spring Resort, Huzbou Stationary September Stationary September September Stationary September September September September September Stationary September China Residence, Singapore Tothic Crima Residence, Singapore Sprotuce Building, Hong Kong Sportuce Student Spring Resort, Fortuce Plazar Plazar Sunding Institute Spring Resort, Fortuce Plazar Spring Ferminal Spring Resort, Funding Square Spring Ferminal Spring Resort, Huzbou Spring Finalists Sportuce Spring Ferminal Spring Resort, Huzbou Spring Finalists Sportuce Spring Ferminal Spring Resort, Huzbou Spring Finalist Spring Resort, Huzbou Spring Finalist Spring Resort, Huzbou Spring Finalist Spring Finalis	500 Lake Shore Drive, Chicago	50	Xiamen Financial Centre, Xiamen	128
Concord Cityplace Parade, Toronto Courtyard & Residence Inn, New York City 51 Couture, Toronto 52 Couture, Toronto 53 Couture, Toronto 54 Couture, Toronto 55 Couture, Toronto 56 Couture, Toronto 57 Couture, Toronto 58 Couture, Toronto 59 China Resources Building, Hong Kong 131 Couture, Toronto 59 China Resources Building, Hong Kong 131 Couture, Toronto 50 China Resources Building, Hong Kong 132 China Resources Building, Hong Kong 134 Couture, Toronto 50 China Resources Building, Hong Kong 135 China Resources Building, Hong Kong 136 China Resources Building, Hong Kong 137 China Resources Building, Hong Kong 138 Chifing, San Francisco 139 China Resources Building, Hong Kong 130 China Resources Building, Hong Kong 130 China Resources Building, Hong Kong 130 Infinity, Brisbane 130 Couture, Toronto 130 China Resources Building Hong Kong 131 Couture, Toronto 130 Couture, Toronto 131 Couture, Toronto 130 Couture, Toronto 130 China Resources Building, Hong Kong 131 Couture, Toronto 130 Couture, Toronto 131 Couture, Toronto 130 China Resources Building, Hong Kong 131 Couture, Toronto 130 Couture, Toronto 131 Couture, Toronto 130 China Resources Building, Hong Kong 131 Couture, Toronto 130 China Resources Building, Hong Kong 131 Couture, Toronto 130 Couture, Toronto 131 Couture, Jakarta 131 Couture, Toronto 132 Challes, Toronto 133 Couture, Jakarta 134 Cheric, Fosban 134 Cheric, Fosban 135 Cherich, Sugarta 134 Cherich, Mumbai 134 Cherich, Mumbai 134 Cherich, Mumbai	1812 North Moore, Arlington	50	ASE Centre Chongqing R2, Chongqing	130
Courtyard & Residence Inn, New York City Couture, Toronto 52 DBS Bank Tower, Jakarta 131 K2 at K Station, Chicago 53 Fortune Plaza Phase III, Beijing 132 NEMA, San Francisco 53 Infinity, Brishane 135 The John and Frances Angelos Law Center, Baltimore 54 Jinling Hotel Asia Pacific Tower, Nanjing 136 Torres del Yacht, Buenos Aires 137 Torres del Yacht, Buenos Aires 138 YooPanama Inspired by Starck, Panama City 139 ZenCity, Buenos Aires 130 Best Tall Building Asia & Australasia Winner: 130 Dest Tall Building Europe 131 Dest Tall Building Europe 131 Dest Tall Building Europe 132 Doc Tower, Vienna 133 Dest Tall States 134 Dest Tall Building Europe 135 Dest Tall Building Europe 136 Dest Tall Building Europe 137 Dest Tall Building Europe 138 Dest Tall Building Europe 139 Dest Tall Building Europe 130 Dest Tall Building Europe 130 Dest Tall Building Europe 131 Dest Tall Building Europe 130 Dest Tall Building Europe 130 Dest Tall Building Europe 131 Dest Tall Building Europe 130 Dest Tall Building Europe 131 Dest Tall Building Europe 130 Dest Tall Building Europe 130 Dest Tall Building Europe 131 Dest Tall Building Europe 132 Dest Tall Building Europe 133 Dest Tall Building Europe 134 Dest Tall Building Europe 136 Dest Tall Building Europe 137 Dest Tall Building Europe 138 Dest Tall Building Europe 139 Dest Tall Building Europe 130 Dest Tall Building Europe 130 Dest Tall Building Europe 130 Dest Tall Building Europe 131 Dest Tall Building Europe 130 Dest Tall Building Europe 131 Dest Tall Building Europe 130 Dest Tall E	Concord Cityplace Parade, Toronto	51	2. 2	130
Couture, Toronto K2 at K Station, Chicago NEMA, San Francisco The John and Frances Angelos Law Center, Baltimore The Peter Gilgan Centre, Toronto Torres del Yacht, Buenos Aires YooPanama Inspired by Starck, Panama City ZenCity, Buenos Aires The Gloucester, Hong Kong The Pakubuwono Signature, Jakarta Winner: One Central Park, Sydney Finalists: 8 Chifley, Sydney Abeno Harukas, Osaka Ardmore Residence, Singapore FKI Tower, Seoul Infinity, Brishane Jinling Hotel Asia Pacific Tower, Nanjing One AIA Financial Center, Fosban 133 RMIT Swanston Academic Building, Melbourne 134 The Capital, Mumbai 135 Best Tall Building Asia & Australasia Winner: De Rotterdam, Rotterdam 138 Fortune Plaza Phase III, Beijing 139 Infinity, Brishane 130 One AIA Financial Center, Fosban 131 The Capital, Mumbai 134 The Pakubuwono Signature, Jakarta 135 Best Tall Building Europe Winner: De Rotterdam, Rotterdam 138 Fortune Plaza Phase III, Beijing 139 Infinity, Brishane 130 One AIA Financial Center, Fosban 131 The Capital, Mumbai 134 The Pakubuwono Signature, Jakarta 135 Best Tall Building Europe Winner: De Rotterdam, Rotterdam 138 DC Tower, Vienna 144 Nominees: 6 Bevis Marks, London 148 IDEO Morph 38, Bangkok Sheraton Huzhou Hot Spring Resort, Huzhou 140 Brock Street, London 150	Courtyard & Residence Inn, New York City	51		131
K2 at K Station, Chicago NEMA, San Francisco The John and Frances Angelos Law Center, Baltimore The Peter Gilgan Centre, Toronto Torres del Yacht, Buenos Aires YooPanama Inspired by Starck, Panama City ZenCity, Buenos Aires Winner: One Central Park, Sydney Finalists: 8 Chifley, Sydney Abeno Harukas, Osaka Ardmore Residence, Singapore Fix I Tower, Seonl Infinity, Brishane Jinling Hotel Asia Pacific Tower, Nanjing Jinling Hotel Asia Pacific Tower, Nanjing Jinling Hotel Asia Pacific Tower, Nanjing The Capital, Mumbai The Capital, Mumbai The Capital, Mumbai The Gloucester, Hong Kong The Pakubuwono Signature, Jakarta Best Tall Building Europe Winner: De Rotterdam, Rotterdam Jinling Hotel Asia Pacific Tower, Nanjing The Pakubuwani Academic Building, Melbourne The Capital, Mumbai The Capital, Mumbai The Capital, Mumbai The Pakubuwono Signature, Jakarta Best Tall Building Europe Winner: De Rotterdam, Rotterdam Jinling Hotel Asia Pacific Tower, Nanjing The Pakubuwani Academic Building, Melbourne The Capital, Mumbai The Capital Pacital P	Couture, Toronto	52		131
NEMA, San Francisco The John and Frances Angelos Law Center, Baltimore The Peter Gilgan Centre, Toronto Torres del Yacht, Buenos Aires YooPanama Inspired by Starck, Panama City ZenCity, Buenos Aires State Tall Building Asia & Australasia Winner: One Central Park, Sydney Finalists: 8 Chifley, Sydney Abeno Harukas, Osaka Ardmore Residence, Singapore FKI Tower, Seoul Infinity, Brisbane Jinling Hotel Asia Pacific Tower, Nanjing One AIA Financial Center, Foshan 133 RMIIT Swanston Academic Building, Melbourne 134 RMIIT Swanston Academic Building, Melbourne 134 The Capital, Mumbai 135 The Gloucester, Hong Kong The Pakubuwono Signature, Jakarta 135 Best Tall Building Europe Winner: De Rotterdam, Rotterdam 138 Portes del Yacht, Buenos Aires 139 The Capital, Mumbai 130 The Pakubuwono Signature, Jakarta 131 The Pakubuwono Signature, Jakarta 131 The Pakubuwono Signature, Jakarta 135 The Pakubuwono Signature, Jakarta 135 The Pakubuwono Signature, Jakarta 136 The Pakubuwono Signature, Jakarta 137 The Pakubuwono Signature, Jakarta 138 The Pakubuwono Signature, Jakarta 139 The Pakubuwono Signature, Jakarta 130 Torres del Yacht, Buenos Aires 130 The Capital, Mumbai 134 The Pakubuwono Signature, Jakarta 135 The Gloucester, Hong Kong 136 The Capital, Mumbai 134 The Pakubuwono Signature, Jakarta 135 The Capital, Mumbai 134 The Pakubuwono Signature, Jakarta 135 The Gloucester, Hong Kong 150 The Capital, Mumbai 150 The Capital, Mum	K2 at K Station, Chicago	52		132
The John and Frances Angelos Law Center, Baltimore 53 The Peter Gilgan Centre, Toronto 54 Torres del Yacht, Buenos Aires 54 YooPanama Inspired by Starck, Panama City 55 ZenCity, Buenos Aires 55 Best Tall Building Asia & Australasia Winner: 58 One Central Park, Sydney 58 Chifley, Sydney 64 Ardmore Residence, Singapore FKI Tower, Seoul IDEO Morph 38, Bangkok Sheraton Huzhou Hot Spring Resort, Huzbou 55 The Qaliting Hotel Asia Pacific Tower, Nanjing 133 One AIA Financial Center, Fosban 133 The Capital, Mumbai 134 The Capital, Mumbai 134 The Capital, Mumbai 135 The Gloucester, Hong Kong 135 The Pakubuwono Signature, Jakarta 135 Best Tall Building Europe Winner: De Rotterdam, Rotterdam 138 The Pakubuwono Signature, Jakarta 135 Best Tall Building Europe Winner: De Rotterdam, Rotterdam 138 The Capital, Mumbai 134 The Capital, Mumbai 135 The Capital, Mumbai 135 The Capital, Mumbai 135 The Capital, Mumbai 135 The Capital, Mumbai 134 T	NEMA, San Francisco	53		132
The Peter Gilgan Centre, Toronto Torres del Yacht, Buenos Aires YooPanama Inspired by Starck, Panama City ZenCity, Buenos Aires Starck, Panama City The Capital, Mumbai The Capital, Mumbai The Gloucester, Hong Kong The Pakubuwono Signature, Jakarta Sest Tall Building Asia & Australasia Winner: One Central Park, Sydney Starck, Panama City The Gapital, Mumbai The Gloucester, Hong Kong The Pakubuwono Signature, Jakarta Sest Tall Building Europe Winner: De Rotterdam, Rotterdam Sentiedam, Rotterdam Tall Start The Gloucester, Hong Kong The Pakubuwono Signature, Jakarta Sept Tall Building Europe Winner: De Rotterdam, Rotterdam Tall Start The Gapital, Mumbai The Capital, Mumbai The Capital, Mumbai The Gapital, Mumbai The Capital, Mumbai The	The John and Frances Angelos Law Center, Baltimore	53		133
Torres del Yacht, Buenos Aires YooPanama Inspired by Starck, Panama City ZenCity, Buenos Aires 55 The Capital, Mumbai The Pakubuwono Signature, Jakarta 135 Best Tall Building Asia & Australasia Winner: One Central Park, Sydney Finalists: De Rotterdam, Rotterdam 138 8 Chifley, Sydney Abeno Harukas, Osaka Ardmore Residence, Singapore FKI Tower, Seoul IDEO Morph 38, Bangkok Sheraton Huzhou Hot Spring Resort, Huzbou 54 RMIT Swanston Academic Building, Melbourne 134 The Capital, Mumbai The Capital Paulis Instituted The Capital P	The Peter Gilgan Centre, Toronto	54		133
YooPanama Inspired by Starck, Panama City ZenCity, Buenos Aires 55 The Capital, Mumbai The Gloucester, Hong Kong The Pakubuwono Signature, Jakarta 135 Best Tall Building Asia & Australasia Winner: One Central Park, Sydney 58 Winner: Finalists: De Rotterdam, Rotterdam 138 8 Chifley, Sydney 64 Finalist: Abeno Harukas, Osaka Ardmore Residence, Singapore FKI Tower, Seoul IDEO Morph 38, Bangkok Sheraton Huzhou Hot Spring Resort, Huzbou 8 The Capital, Mumbai 134 135 135 136 137 137 138 139 139 139 139 130 130 130 130 130 130 130 130 130 130	Torres del Yacht, Buenos Aires	54		134
The Gloucester, Hong Kong The Pakubuwono Signature, Jakarta The Pakubuwono Signature,	YooPanama Inspired by Starck, Panama City	55		134
Best Tall Building Asia & Australasia Winner: One Central Park, Sydney 58 Winner: De Rotterdam, Rotterdam 138 8 Chifley, Sydney Abeno Harukas, Osaka Ardmore Residence, Singapore FKI Tower, Seonl IDEO Morph 38, Bangkok Sheraton Huzhou Hot Spring Resort, Huzhou The Pakubuwono Signature, Jakarta 135 The Pakubuwono Signature, Jakarta 135 Winner: De Rotterdam, Rotterdam 138 Finalist: DC Tower, Vienna 144 Nominees: 6 Bevis Marks, London 148 10 Brock Street, London 150	ZenCity, Buenos Aires	55		135
Winner: One Central Park, Sydney Finalists: Schiffley, Sydney Abeno Harukas, Osaka Ardmore Residence, Singapore FKI Tower, Seoul IDEO Morph 38, Bangkok Sheraton Huzhou Hot Spring Resort, Huzbou Best Tall Building Europe Winner: De Rotterdam, Rotterdam ISB Winner: De Rotterdam, Rotterdam IDEO Morph 38, Bangkok Sheraton Huzhou Hot Spring Resort, Huzbou Best Tall Building Europe Winner: De Rotterdam IDEO Morph 38, Bangkok IDEO Morph				
One Central Park, Sydney Finalists: Be Rotterdam, Rotterdam 138 8 Chifley, Sydney Abeno Harukas, Osaka Ardmore Residence, Singapore FKI Tower, Seoul IDEO Morph 38, Bangkok Sheraton Huzhou Hot Spring Resort, Huzhou 58 Winner: De Rotterdam, Rotterdam 148 DC Tower, Vienna 144 Nominees: 6 Bevis Marks, London 148 10 Brock Street, London 150	Best Tall Building Asia & Australasia		0	
Finalists: 8 Chifley, Sydney Abeno Harukas, Osaka Ardmore Residence, Singapore FKI Tower, Seoul IDEO Morph 38, Bangkok Sheraton Huzhou Hot Spring Resort, Huzhou De Rotterdam, Rotterdam 138 Finalist: DC Tower, Vienna 144 Nominees: 6 Bevis Marks, London 10 Brock Street, London 150	Winner:		Best Tall Building Europe	
8 Chifley, Sydney 64 Finalist: Abeno Harukas, Osaka 68 DC Tower, Vienna 144 Ardmore Residence, Singapore 72 FKI Tower, Seoul 1DEO Morph 38, Bangkok 80 Sheraton Huzhou Hot Spring Resort, Huzhou 84 Finalist: 08 DC Tower, Vienna 148 10 Brock Street, London 150	One Central Park, Sydney	58	Winner:	
Abeno Harukas, Osaka Ardmore Residence, Singapore FKI Tower, Seoul IDEO Morph 38, Bangkok Sheraton Huzhou Hot Spring Resort, Huzhou 84 Titalist: DC Tower, Vienna 144 Nominees: 6 Bevis Marks, London 10 Brock Street, London 150	Finalists:		De Rotterdam, Rotterdam	138
Abeno Harukas, Osaka Ardmore Residence, Singapore FKI Tower, Seoul IDEO Morph 38, Bangkok Sheraton Huzhou Hot Spring Resort, Huzhou 68 DC Tower, Vienna 144 Nominees: 6 Bevis Marks, London 10 Brock Street, London 150	8 Chifley, Sydney	64	Finalist:	
Ardmore Residence, Singapore FKI Tower, Seoul IDEO Morph 38, Bangkok Sheraton Huzhou Hot Spring Resort, Huzhou 84 Nominees: 6 Bevis Marks, London 10 Brock Street, London 150	Abeno Harukas, Osaka	68		144
IDEO Morph 38, Bangkok 80 6 Bevis Marks, London 148 Sheraton Huzhou Hot Spring Resort, Huzhou 84 10 Brock Street, London 150	Ardmore Residence, Singapore	72		
Sheraton Huzhou Hot Spring Resort, Huzhou 84 10 Brock Street, London 150		76		ar a si
Sheraton Huzhou Hot Spring Resort, Huzhou 84 10 Brock Street, London 150		80		
AvB Tower, The Hague 152		84		
			AvB Tower, The Hague	152

CalypSO, Rotterdam	154	Time Warner Center, New York City	212
Exzenterhaus Bochum, Bochum	156	Bloomberg Tower, New York City	212
Fletcher Hotel Amsterdam, Amsterdam	158	Tower Palace Three, Seoul	213
Maslak Spine Tower, Istanbul	160		
Solaria, Milan	162	Innovation Award	
The Tower, One St George Wharf, London	164	Winner:	
Tour Carpe Diem, Paris	166	BioSkin	210
E' Tower, Eindhoven	168		
Grand Office, Vilnius	168	Finalist:	22
One Angel Square, Manchester	169	Active Alignment	220
Solea, Milan	169	Nominees:	
		DfMA and Digital Engineering for Tall Buildings	222
Best Tall Building Middle East & Africa		LiftEye	224
Winner:		Steel Fiber Reinforced Concrete	220
Cayan Tower, <i>Dubai</i>	172		
Nominees:		Performance Award	
BSR 3, Tel Aviv	178	Winner:	
Champion Tower, Tel Aviv	180	International Commerce Center, Hong Kong	230
Portside, Cape Town	182	Finalist:	
The Landmark, Abu Dhabi	184	Jin Mao Tower, Shanghai	234
22 Rothschild Tower, Tel Aviv	186		434
Conrad Hotel, <i>Dubai</i>	186	Nominee:	
Rosewood Abu Dhabi, Abu Dhabi	187	Darling Quarter, Sydney	230
World Trade Center Doha, <i>Doha</i>	187		
The state of the s		Lifetime Achievement Awards	
Urban Habitat Award		Lynn S. Beedle Award, Douglas Durst	240
Winner:		Fazlur R. Khan Medal, Peter Irwin	240
The Interlace, Singapore	190	CTBUH 2014 Fellows	252
	190		
Finalist:		Awards & CTBUH Information	
NEO Bankside, London	196	CTBUH 2014 Awards Jury	253
Nominee:		Review of Last Year's CTBUH 2013 Awards	254
Gramercy Residences, SkyPark, Makati	200	Overview of All Past Winners	260
gior had ny estatements		CTBUH Height Criteria	264
10 Year Award		100 Tallest Buildings in the World	26
Winner:			
Post Tower, Bonn	204	Index	
	201	Index of Buildings	272
Finalists:	2.7.2	Index of Companies	27.
Taipei 101, Taipei	210	Image Credits	27
Torre Agbar, Barcelona	210	CTBUH Organizational Structure & Members	279
Uptown Munchen, Munich	211		
Highlight Towers, Munich	211		

CTBUH Awards

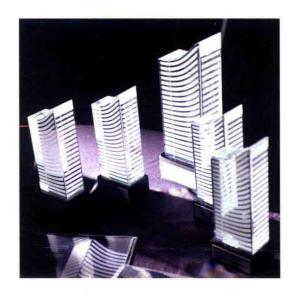
Best Tall Buildings

A Global Overview of 2014 Skyscrapers

Antony Wood, Steven Henry & Daniel Safarik















Bibliographic Reference:

Wood, A., Henry, S. & Safarik, D. (2014) Best Tall Buildings: A Global Overview of 2014 Skyscrapers. Council on Tall Buildings and Urban Habitat: Chicago.

Book Design & Layout: Marty Carver

First published 2014 by Routledge 2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN

Simultaneously published in the USA and Canada by Routledge 711 Third Avenue, New York, NY 10017

Routledge is an imprint of the Taylor & Francis Group, an informa business

Published in conjunction with the Council on Tall Buildings and Urban Habitat (CTBUH), the Illinois Institute of Technology, and Tongji University, Shanghai.

© 2014 Council on Tall Buildings and Urban Habitat

Printed in Canada.

The right of The Council on Tall Buildings and Urban Habitat to be identified as author of this work has been asserted by it in accordance with sections 77 and 78 of the Copyright, Designs and Patents Act 1988.

All rights reserved. No part of this book may be reprinted or reproduced or utilized in any form or by any electronic, mechanical, or other means, now known or hereafter invented, including photocopying and recording, or in any information storage or retrieval system, without permission in writing from the publishers.

Trademark notice: Product or corporate names may be trademarks or registered trademarks, and are used only for identification and explanation without intent to infringe.

British Library Cataloguing in Publication Data A catalogue record for this book is available from the British Library

Library of Congress Cataloging in Publication Data A catalog record has been requested for this book

ISBN13 978-1-138-84289-2 ISSN 1948-1012

Council on Tall Buildings and Urban Habitat S.R. Crown Hall Illinois Institute of Technology 3360 South State Street Chicago, IL 60616 Phone: +1 (312) 567-3487 Fax: +1 (312) 567-3820 Email: info@ctbuh.org

MIX
Paper from responsible sources
FSC
www.lsc.org
FSC* C011825

www.ctbuh.org

Acknowledgments

The CTBUH would like to thank all the organizations who submitted their projects for consideration in the 2014 awards program.

We would also like to thank our 2014 Awards Jury for volunteering their time and efforts in deliberating this year's winners and finalists.

About the CTBUH

The Council on Tall Buildings and Urban Habitat is the world's leading resource for professionals focused on the inception, design, construction, and operation of tall buildings and future cities. A not-for-profit organization based at the Illinois Institute of Technology, Chicago, with an Asian office at Tongji University, Shanghai, the group facilitates the exchange of the latest knowledge available on tall buildings around the world through events, publications, research, working groups, web resources, and its extensive network of international representatives. Its free database on tall buildings, The Skyscraper Center, is updated daily with detailed information, images, data, and news. The CTBUH also developed the international standards for measuring tall building height and is recognized as the arbiter for bestowing such designations as "The World's Tallest Building."

Contents

Foreword	6	The Jockey Club Innovation Tower, Hong Kong	88
Introduction	8	Wangjing SOHO, Beijing	92
CTBUH Best Tall Building Awards Criteria	19	Nominees:	
Best Tall Building Americas		41X, Melbourne	96
		171 Collins Street, Melbourne	98
Winner:		Academic 3, Hong Kong	100
Edith Green-Wendell Wyatt Federal Building, Portland	22	Albert Tower, Melbourne	102
Finalists:		Anhui New Broadcasting & TV Center, Hefei	104
The Point, Guayaquil	28	Baku Flame Towers, Baku	106
United Nations Secretariat Building, New York City	32	Changzhou Modern Media Center, Changzhou	108
Nominees:		China Merchants Tower, Shenzhen Fake Hills, Beihai	110 112
4 World Trade Center, New York City	36	Guangzhou Circle, Guangzhou	114
Magma Towers, Monterrey	38	Habitat, Melbourne	116
MuseumHouse, Toronto	40	Jinao Tower, Nanjing	118
Peninsula Tower, Mexico City	42	Kent Vale, Singapore	120
Territoria El Bosque, Santiago	44	L'Avenue, Shanghai	122
The Godfrey, Chicago	46	OLIV, Hong Kong	124
Torre Costanera, Santiago	48	Shanghai Arch, Shanghai	126
500 Lake Shore Drive, Chicago	50	Xiamen Financial Centre, Xiamen	128
1812 North Moore, Arlington	50	ASE Centre Chongqing R2, Chongqing	130
Concord Cityplace Parade, Toronto	51	Asia Square, Singapore	130
Courtyard & Residence Inn, New York City	51	China Resources Building, Hong Kong	131
Couture, Toronto	52	DBS Bank Tower, Jakarta	131
K2 at K Station, Chicago	52	Fortune Plaza Phase III, Beijing	132
NEMA, San Francisco	53	Infinity, Brisbane	132
The John and Frances Angelos Law Center, Baltimore	53	Jinling Hotel Asia Pacific Tower, Nanjing	133
The Peter Gilgan Centre, Toronto	54	One AIA Financial Center, Foshan	133
Torres del Yacht, Buenos Aires	54	RMIT Swanston Academic Building, Melbourne	134
YooPanama Inspired by Starck, Panama City	55	The Capital, Mumbai	134
ZenCity, Buenos Aires	55	The Gloucester, Hong Kong	135
		The Pakubuwono Signature, Jakarta	135
Best Tall Building Asia & Australasia		, , ,	
Winner:		Best Tall Building Europe	
One Central Park, Sydney	58	Winner:	
Finalists:		De Rotterdam, Rotterdam	138
8 Chifley, Sydney	64	Finalist:	
Abeno Harukas, Osaka	68	DC Tower, Vienna	144
Ardmore Residence, Singapore	72		va 3 1
FKI Tower, Seoul	76	Nominees:	9.99
IDEO Morph 38, Bangkok	80	6 Bevis Marks, London	148
Sheraton Huzhou Hot Spring Resort, Huzhou	84	10 Brock Street, London	150
		AvB Tower, The Hague	152

CalypSO, Rotterdam	154	Time Warner Center, New York City	212
Exzenterhaus Bochum, Bochum	156	Bloomberg Tower, New York City	212
Fletcher Hotel Amsterdam, <i>Amsterdam</i>	158	Tower Palace Three, Seoul	213
Maslak Spine Tower, Istanbul	160		
Solaria, Milan	162	Innovation Award	
The Tower, One St George Wharf, London	164	Winner:	
Tour Carpe Diem, Paris	166	BioSkin	216
E' Tower, Eindhoven	168		
Grand Office, Vilnius	168	Finalist:	220
One Angel Square, Manchester	169	Active Alignment	220
Solea, Milan	169	Nominees:	
		DfMA and Digital Engineering for Tall Buildings	222
Best Tall Building Middle East & Afric	ca	LiftEye	224
Winner:		Steel Fiber Reinforced Concrete	226
Cayan Tower, Dubai	172		
Nominees:		Performance Award	
BSR 3, Tel Aviv	178	Winner:	
Champion Tower, Tel Aviv	180	International Commerce Center, Hong Kong	230
Portside, Cape Town	182	Finalist:	
The Landmark, Abu Dhabi	184	Jin Mao Tower, <i>Shanghai</i>	234
22 Rothschild Tower, Tel Aviv	186		234
Conrad Hotel, Dubai	186	Nominee:	
Rosewood Abu Dhabi, Abu Dhabi	187	Darling Quarter, Sydney	236
World Trade Center Doha, <i>Doha</i>	187		
		Lifetime Achievement Awards	
Urban Habitat Award		Lynn S. Beedle Award, Douglas Durst	240
Winner:		Fazlur R. Khan Medal, Peter Irwin	246
	190	CTBUH 2014 Fellows	252
The Interlace, Singapore	190		
Finalist:		Awards & CTBUH Information	
NEO Bankside, London	196	CTBUH 2014 Awards Jury	253
Nominee:		Review of Last Year's CTBUH 2013 Awards	254
Gramercy Residences, SkyPark, Makati	200	Overview of All Past Winners	260
		CTBUH Height Criteria	264
10 Year Award		100 Tallest Buildings in the World	267
Winner:			
Post Tower, Bonn	204	Index	
	201	Index of Buildings	272
Finalists:	-	Index of Companies	273
Taipei 101, Taipei	210	Image Credits	277
Torre Agbar, Barcelona	210	CTBUH Organizational Structure & Members	279
Uptown Munchen, Munich	211		
Highlight Towers, Munich	211		

Foreword

Jeanne Gang, 2014 Awards Jury Chair

It has been my pleasure to serve once again as Awards Jury Chair for this year's CTBUH Best Tall Building Awards. During my tenure, I've been consistently impressed with the depth and range of the juries' conversations. It is incredibly reassuring to recognize that despite our differences of discipline, geography, or language, we find so many commonalities when united in the appreciation of good design. Sharing ideas and analysis with such highly accomplished professionals and colleagues has been truly energizing.

It is always difficult and perhaps inherently unfair to judge a building through the brief process of an awards program when the actual project represents years of hard work by its design team. This year we re-examined and adjusted the process undertaken by the jury to allow more time for reflection and deeper inquiry into the projects' performance and innovation. Prior to selecting the regional Finalists, jurors were given an extra week to review the submissions, as well as the technical evaluations provided by our newly appointed Technical Jury. The extended timeline also provided the opportunity to solicit and review any additional information the jury felt was vital to the selection process and to request further feedback from the Technical Jury. These modifications served to strengthen an already thorough process, ensuring not only exemplary finalists throughout all of the categories but also careful attention to how we on the jury define and measure excellence.

While admirable buildings were submitted from every region, projects from Asia were undeniably compelling. With so many quality buildings to choose from, the jury found it difficult to select just a few. Ultimately, we decided to include a larger-than-usual sampling of Finalists from Asia, in order to recognize some of the most successful tall buildings in recent history.

Overall this year, the projects most appreciated by the jury propelled the tall building typology into new arenas, looking beyond pure height to their impact on urban environments. The expanded spatial aspects and connections between indoors and outdoors as demonstrated by IDEO Morph 38, Bangkok, and the Ardmore Residences, Singapore, both Finalists in the Asia & Australasia category, were especially promising. Projects such as The Interlace, Singapore, recognized as both a Finalist in the Asia & Australasia category and as the Winner of the inaugural Urban Habitat Award, have literally inverted conventional thinking about tall buildings. The way in which The Interlace and other projects engage the ground and the environment in new ways is exemplary. And the jury was particularly impressed with vegetated, solarresponsive tall building projects like One Central Park, Sydney, the Asia & Australasia Winner, which plays a role in urban ecology.

Having witnessed firsthand the progress and progressiveness of this building type, even just over the past two years, I am ever-more excited about the future of tall buildings and the transformative

potential of the ideas they incubate. This year's entries show that innovation is everywhere, yet there is also much to improve. Herein lies the challenge: if we really want to radically improve tall buildings, we need to continue to push ourselves and our clients to measure success through understanding the building's energy performance. Unless we as designers and jurors prioritize, disclose, and track this information, we are missing a major point of impact and our process remains flawed. Let us continue to discuss the idea of energy performance and together find ways to encourage forward movement on this front.

Thank you to my fellow jurors Sir Terry Farrell; David Gianotten; Saskia Sassen; David Scott, who served as Technical Jury Chair; Thomas Tsang Wai Ming; and of course Antony Wood, whose experience and passion is appreciated by all. Thanks also to this year's technical jurors Guo-Qiang Li, Nengjun Luo, Douglas Mass, Paul Sloman, and Peter Williams. And finally, my deep appreciation goes to Steven Henry at the CTBUH for once again tirelessly stewarding this program.

Introduction

In 2014, it seems that the tall building community has finally recovered from the shock of the 2008 financial crisis, which had delayed or canceled many projects and had a chilling effect on investment in the immediate years following. But 2014 was not a year in which the built evidence demonstrated the industry simply shaking off the dust and resuming just as before. Many of the tall building projects of the boom era that never came to be – overwrought, gaudy, disconnected from place – were perhaps best left on paper. In 2014, there



are now strong signs that a return to largesse would not be a sustainable strategy. There seems to be a dawning recognition that, in order to deliver transformative, let alone viable, projects, some first principles about the way we build have to be re-examined.

Only a tiny selection of the tall buildings completing in the past 12 months or so have received CTBUH awards this year. But the value of throwing the spotlight on these projects is that doing so exposes themes that are reflective of, or have wider implications for, the industry as a whole. For in these projects we can see the vestigial signs of an emerging consciousness: one that recognizes the value of designing with, instead of against, nature - and the responsibility to do so. We see not a blind faith in technology, but a shrewd fusion of simple, time-tested principles with digital validation, creating solutions that have the potential to carry us through difficult conditions that surely await us in the near future. We see data being "liberated" and put to use in ever-expanding ways, so that as we ascend higher, we assume less. We see forms as inventive as ever, but with a renewed sense of purpose. And we see the achievements of our best practitioners as a reminder of why we build in the first place.

One of the strongest trends evident in the projects completing this year was the number of high-quality refurbishments and environmental upgrades of existing tall buildings, to become more energy-efficient, more functional, and safer. Establishing a precedent



for renovating tall buildings is clearly important to the industry, as there is no template for demolishing buildings of the height we are now seeing constructed when they begin to underperform. Nor can we expect that there will be much tolerance for the environmental consequences of demolishing massive buildings and wasting their embodied carbon, or continuing to operate them with outmoded and inefficient technology.

But we must be honest and admit that these buildings do have a service life that ends at some point. Now the second major wave of tall buildings – which, with their thin envelopes and tight engineering, have proved to perhaps be more difficult to retrofit than the masonry and punched-opening buildings of the first generation – has reached that point. However, at least two projects in this book prove that second-generation skyscrapers can be retrofitted for another half-century's operation, at least. Still, we are running out of excuses for not considering how the buildings we construct today might be continuously optimized or feasibly altered tomorrow.

Opposite: Americas Winner Edith Green-Wendell Wyatt Federal Building, Portland; a dramatic conversion/renovation of a 1940s office building

Left: Americas Finalist United Nations Secretariat Building, New York City; modernized without sacrificing its original iconic design

The Americas Winner, the Edith Green-Wendell Wyatt Federal Building, and Americas Finalist United Nations Secretariat, were particularly outstanding in their refurbishment, because they reflect the commitment of national and transnational government bodies to demonstrate the power of reinvestment in existing buildings when it comes to the environment. The Edith Green-Wendell Wyatt project is a dramatic conversion of a concrete-frame, 1970s office building into a light-filled, strategically shaded contemporary facility that engages its surroundings. Meanwhile, the UN Secretariat project restored the external appearance of one of the Modern movement's greatest icons, while substantially improving the mechanical, safety and communications systems, light penetration, and arrangement of the internal spaces.

Private industry has often railed against government regulation of its activities in the name of curbing climate change and greenhouse gases, and it's no secret that some of the suppliers of raw materials and hardware for tall buildings have been first to the front lines in such protests. As such, it is critical that governments take the steps to show that they are willing to undertake the degree of change they seem to be demanding of private concerns. And this isn't just a case of "self-sacrifice" for the betterment of the environment. In retrofit cases such as Edith Green-Wendell Wyatt, once-dismal and outdated real estate has become more valuable, and begins paying for itself almost immediately, not just in lower energy

bills, but in the higher productivity of its occupants. For all the exposure that operating energy costs get in the building industry, for most companies it is staff/salaries that are the number-one cost. Thus, if they're happier, healthier, and more productive, that's a bottom-line argument that is hard to counter.

Just as importantly, there now exists the beginning of a template for dealing with aging tall building stock. Many commercial mid-century office buildings share characteristics with this year's modernization awardees — low floor-to-ceiling heights, poor insulation, poor natural light penetration, outdated cellular office plans, and embedded, poorly performing HVAC systems. Many property owners are now facing a crisis in how to convert their underperforming assets from the Modernist era into contemporary Class-A office space that meets today's high occupant and regulatory standards. Through projects such as Edith Green-Wendell Wyatt and the UN Secretariat, governments now have shown that the "talk" can be "walked." Now it's the corporates' turn to do similar.

And so it is that "green" building design and retrofits have entered the architectural vanguard, and have been working their way up in scale to the tall buildings we are accustomed to working on and in. An even more recent, and sometimes even more sensually stunning development, is the incorporation of vertical greenery in tall buildings. Early pioneers from the 1990s include Germany's Commerzbank and Chile's Consorcio, and many of the CTBUH Best Tall Buildings regional winners of the past few years incorporate some form of sky lobby with planted greenery, such as The Bow, Calgary, or planted, habitable roof areas, such as the Pinnacle @ Duxton, Singapore. But in recent years, green walls have been taken, quite literally, to new heights, particularly in Southeast Asia, where the tropical climate is exceptionally conducive to plant growth. In fact, the CTBUH has researched this trend extensively, and released a comprehensive technical guide on the subject, Green Walls in High-Rise Buildings, this year.



Bangkok's Ideo Morph 38 project, included both in the Green Walls guide and in this volume, for instance, actually uses a panelized system of mesh with creeping vines as an element of architectural enclosure, providing aesthetic, shading, and cooling benefits up to the 32nd floor of one of the towers.

At One Central Park, Sydney, the 2014 Best Tall Building Asia & Australasia, technological sophistication in the form of directional heliostats cantilevering from the tower's peak regulates the sunlight that reaches the ground as well as the greenery-festooned shelves that cover all faces of the tower. This is not mere window-dressing; the unprecedented level of green implementations on this project not only provide shading, driving reductions in energy consumption, they also facilitate an intangible but critical new asset in the form of a public park. This inverts the traditional interpretation of tall buildings as constructions that are additive to, rather than subtractive from, the public realm. To

Opposite: Asia & Australasia Finalist Ideo Morph 38, Bangkok; creeping vines grow up the side of the building to the 32nd floor

Top: Asia & Australasia Winner One Central Park, Sydney; extensive use of greenery on all façades of the building

Bottom: Asia & Australasia Finalist Abeno Harukas, Osaka; the tallest building in Japan provides public green spaces throughout the building

add needed new housing and new public space that consumes an exemplarily low amount of energy – that is an achievement worth celebrating and studying.

Asia & Australasia Finalist Abeno Harukas, Osaka, the tallest building in Japan, takes a different approach; less obvious perhaps, but just as valid. Its green assets are very much "inside" the building, yet they are also shared with the public. At the top levels is a public garden and peripheral walkway, open to fresh air but also protected from stiff winds by a glass façade, thus combining a fantastic view with a stellar green asset. Elsewhere in the building, intermediate setbacks are similarly outfitted with refreshing, open, and yet protected patches of greenery. This is in addition to the amazing concentration of such a diverse range of amenities as retail, museum, hotel, office, school, hospital, and park in one small urban footprint over a busy railway station. Abeno Harukas pushes the boundaries of what tall buildings can achieve on several different levels.

As design technology has advanced over the years, it has become increasingly common to see new interpretations of the skyscraper form. Not all of these can be justified; many proposed during the building boom in advance of the financial crisis of 2008 carried little merit other than being sculptural curiosities. In today's more chastened climate, however, we now see a resurgence of unusual shapes, the best of which are elegant, distinctive,

