

Background

The World Commission on Environment and Development (1987) proposed the most consensual definition of sustainable development to date: "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs." More specially, as specified in the Brundtland report (WCED, 1987) the concept of sustainable development comprises three aspects: economic, social, and environmental. In addition, for development of a given territory to be considered sustainable, it must integrate the qualities associated with interactions and overlapping of these dimensions. Accordingly, development must be equitable (interaction between the economic and social dimension), liveable (correspondence of the environment to social needs, which can refer to the concept of quality of life), and viable (economic development must abide by the supportive capacity of the ecosystems, and depletion of non-renewable resource must be avoided).

The goal of sustainability in a city is the reduction of the city's use of natural resources and production of wastes, while simultaneously improving its liveability, so that it can better fit within the capacities of local, regional, and global ecosystems. Creating Sustainable City needs to be supported by sustainable technology development. The theme for the 2nd ICSTD is "Developing Sustainable Technology for a Better Future".

Much progress has been made, for example, in limiting pollution and reducing fuel consumption. Technology has to be developed in line with the achievement of the goal of sustainability in a city. The 2nd ICSTD will bring together national and international frontline thinkers, academics, executives, government and business officials, practitioners and leaders to present and discuss a wide range of engineering and architectural issues towards the achievement of sustainability in a city.

Scientific Committee

- Prof. I Wayan Redana (Udayana University)
- Prof. Sayiqh (President of World Renewable Energy)
- Prof. Dai Kue Choi (Chonbuk National University)
- Prof. Budhima Indraratna (University of Wollongong)
- Prof. Jae Kyoo Lim (Chonbuk National University)
- Prof. Ruihua Hu (Huanghe University of Science and Technology)
- Prof. Montasser Dewidar (South Valley University, Egypt)
- Prof. Alexander Curtberth (University of New South Wales, Australia)

- Prof. Tjok Gd. Tirta Nindhia (Udayana University)
- Prof. I Md. Alit Karyawan S. (Udayana University)
- Prof. I. A. Giriantari (Udayana University)
- Dr. Vu Cong Hoa (Ho Chi Minh City University of Technology)
- Dr. G. A. M. Suartika (Udayana University)
- Dr. W. Gede Ariastina (Udayana University)
- Dr. D. M. Priyantha W. (Udayana University)
- Dr. I Ketut Gede Darma Putra (Udayana University)

Parallel Session, Wednesday, October 31st, 2012

The 2nd International Conference on Sustainable Technology & Development (ICSTD) - Udayana University Campus

No	Time	R1 Architecture	R2 Architecture	R3 Architecture	R4 Civil Engineering	R5 Mechanical Engineering	R6 Electrical Engineering
1	13.30 - 13.45	A01 (ID 101) Implementation Concept of Ecological Architecture and Ecotourism in Wonorejo's Mangrove Ecotourism, Surabaya by M.Nelza Mulki Iqbal, Yeremia Azarya Dimpudus	A23 (ID155) Corelation between Gunung Padang and Sundanese Architecture by Nadia Absharina Idris, Adinda Putri Maharani, Miftah Tri Nur Fauzi	A43 (ID177) Culture Control of Toraja's Traditional Architecture Development by Amanda Erika Isdyati ^a , Arina Resyta Rahma ^b , Aszafaika Ladidinanda ^c , Dewanti Ashariani ^d , Ivan Winanto ^e , Reina Rivenska Dissa ^f , Sayyida Lathifa ^g Tiara Rossyda Sahara ^h	C01 (ID105) Studies on Transport- Modes in the Region of Southern Bali by I Wayan Suweda ^a , Achmad Wicaksono ^b , Indrasurya B. Mochtar ^c	M01 (ID104) Fuzzy-PID Ratio Controller of an Electro- Mechanical Continuously Variable Transmission for Automotive Application by B. Supriyo ^{a,b} , K.B. Tawi ^a , H. Jamaluddin ^a , H. Nasution ^a , A. Budianto ^a , M.S. Che Kob ^a and S. Ariyono ^c	E01 (ID122) The Role of University in Improving the Quality Sustainable Technological Development (IQSTD) by Yuda Bakti Zainal ^a , Een Taryana ^b , Rohani Jahja Widodo ^c
2	13.45 - 14.00	A02 (ID102) Braga Streets: A True Representation of Art Deco by Adinya Rossiyana and Team	A13 (ID134) Sustainable Architectural Design of Heinz Frick Home: Coping with the Global Challenges in the Asian Cities by	A41 (ID175) The Landscape of Kampung Naga Developed by the Village Culture By Abdul Said Ahtar ^a , Diba Aththaariq ^b , Iqbal Adam ^c , Oka Kartika ^d , Steffie Prilianty ^e , Prathito	C06 (ID117) Characteristics Of Sand Sheet Asphalt Mixture Utilizing Waste Aggregates by I Nyoman Arya THANAYA ^a , Putu Preantjaya WINAYA ^b ,	M02 (ID109) The variation of blade number and rotational operation in thevariouswind occurrence distributions of the clean and renewable wind power machine	E02 (ID165) Development of Mobile Application for Theater Booking System by Andik Setyono ^a , Md. Jahangir Alam ^b and Amit Roy ^c

			Lo Leonardo Agung Mulyono¹, Devi Calista Silvanus², and Gunawan Tanuwidjaja³	Andy Wisambodhi^f, Tera Wednes Oktireva Harsa^g	Putu Anggi WEDAYANTI^c	by Ridway Balaka^{a)}, Aditya Rachman^{b)}, Yuni Aryani Koedoes^{e)}	
3	14.00 - 14.15	A04 (ID106) Role of government and governance to sustain heritage sites in Denpasar by Tri Anggraini Prajnawrdhi^a, Alpana Sivam^b, Sadasivam Karuppannan^c	A24 (ID156) Indonesian Airports: A Symbol of Local Representation by Lee Maw Jia^a, Veronica Ng Foong Peng^b	A44 (ID178) Renarrativization of Bengal Jatra: through the Eye of Architecture by ASHRAFI, Farhin^a, DIPTA, Talha Mahmud^b, AHMED, Tahsin^c, ISLAM, Md. Tauhidul^d	C10 (ID127) The Effect Of Rainfall Characteristic Change For The Global Climate And Flood Phenomenon by I Gusti Bagus Sila Dharma^a, I Putu Gustave Suryantara Pariartha^b	M03 (ID110) Prospect of Iran Natural Gas Export Projects by HEDAYAT OMIDVAR	E03 (ID166) Study and Design of the Video for Mobile Communication by Andik Setyono
4	14.15 - 14.30	A05 (ID112) Sustainable Development in the Border Region Plan Case Study: Pengragoan Village, Jembrana regency, Bali –Indonesia by I Dewa Gede Agung Diasana Putra	A26 (ID158) The Application of Traditional Malay Architectural Elements in Modern Museums of Malaysia by Lee Shing Yi, Veronica Ng Foong Peng	A45 (ID180) Topography Restoration of Historic City by HAN Dong soo^a, LEE Sung ho^b	C12 (ID138) Islamic Project Financing Implementationfor Sustainable Infrastructure Development in Indonesia by Ayomi Dita Rarasati^a, Eric Too^b, Bambang Trigunarsyah^c, Fiona Cheung^d	M05 (ID120) Performance Of Diamond Cutting Tool In The Turning Proses Of Stainless Steel,copper And Aluminium By Ida Bagus Puspa Indra¹, Tjokorda Gde Tirta Nindhia², I Nyoman Gede Antara²	E04 (ID194) APPLICATION OF HYBRID ACTIVE POWER FILTER TO REDUCE LOSSES DUE TO HARMONICS DISTORTION: A CASE STUDY IN A CITY HOTEL by I M. E. Purwa Antaka, W. G. Ariastina, I N. S. Kumara, and R. S. Hartati