Constructing an Urban Future: The sustainability and resilience of cities – infrastructures, communities, buildings and housing.

• Paper / Proposal Title:
  Resilience by impact of the citizens, a twin city comparison to be followed up.

• Format(s):
  In-person presentation based on a Written paper

• Author(s) Name:
  Dr. Fred C. Sanders MSc MBA Senior-Fellow-Research (TSM) quest postdoc
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• University or Company Affiliation:
  Delft University of Technology, the Netherlands
  Architecture faculty, Urbanism department, ETD Chair

• Abstract (300 words):
  Dutch best practices of sustainability citizens initiative projects in Amsterdam and Rotterdam show that making cities sustainable not only depends on the technological and regulation developments. The mobilization of the people involved is the crucial factor. Without the support and initiatives of citizens most technology for sustainability driven implementations become food-loose.

  The focus of citizens comparing to that of the professionals from municipalities, regional and national government and related organizations like energy producing entities and housing authorities though differs in time-horizon and area-bound scale. Citizens their priorities by taking initiative do lay in the nearby living-area heading for results on short notice what differs from the focus of these professionals. That hampers citizens initiative support and citizen-initiatives results. Still in the Netherlands citizens do create growing numbers of initiatives in the fields of liveability, care-giving and sustainability nature nowadays.

  Circularty the coming deepening step into the Paris climate agreement (2016) does needs the success and enthusiasm of these citizen sustainability initiatives because circularity is even more strongly behaviour coupled. Citizens initiatives though show to be dependent on front running starting up citizens, a group based business case and clear targets. Green initiatives are the ideal initiatives for citizens to have their first experiences. Secondly comfortable local regulations and the support from municipality and government related professionals like en-
ergy producing entities, welfare and care organizations and local housing authorities seems to be important too. Making results out of these initiatives is not only in the hands of citizens.

These are the results of my PhD (2014) and advanced research of recent dates for the congresses of SBE16 Utrecht, WSBE17 Hong Kong, IASS17 Utrecht and coming City18+ Cambridge. Results that I nowadays as an ambassador of TU Delft Urbanist department may present to citizens, professionals and students to stimulate their working together on making cities more sustainable and ready for the coming future.

Prolonging this quest much can be learned by comparing twin cities results because these have the cultural and physical circumstances in common only economically there differ mostly. Special for the Abu Dhabi APMS ‘Urban Future’ conference the flourishing of citizen initiatives in the Dutch twin cities Amsterdam and Rotterdam will be compared and presented. All the essences of the conference as community sustainability responsibility, social resilient behaviour in relation to housing, city development and urbanization will be touched.

- Author biography (220 words)
Scientific biography of Dr. Fred C. Sanders. MSc. MBA Senior-Fellow Business research (200 w)
The resilience of citizens has always been my concern. The questions are how can citizens overcome the social stress of cities, help each other to take advancement of labor opportunities, how can they give foundation for sustainable cities and seek societal responsibility. That drives me into research, into workshops and lectures to involve other into this important topic of nowadays. My personal base for this interest has grown during my working period as an urbanist in sustainable city development for government and into social housing management (1985-2005). Originally I am a civil engineer and was invited to create my PhD at the Architecture department both at Delft University of Technology (2006-2014). My MBA and post MBA years I studied at Dutch Erasmus University and IMD Lausanne learning how to reach targets with others. That made me the researcher and ambassador that I am today, related to Delft University of Technology and the The Hague University of Applied Science. I try to prove that starting a scientific carrier doesn’t matter age. I was asked to start my PhD at fifty and since I defended my dissertation in 2014 I visited several congresses, started-up publishing on the new topic of citizen resilience and mobilization, and visited universities in Europe, the Russian hemisphere and in Asia.

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- Delft University of Technology, Architecture, Urbanism Sustainability
- The Hague University of Applied Science, Built Environment dep.
- TSM (MBA) Business School, Dutch Twente Un. of Technology.
to prove that starting a scientific carrier doesn't matter age. I was asked to start my PhD at fifty and since I defended my dissertation in 2014 I visited several congresses, started-up publishing on the new topic of citizen resilience and mobilization, and visited universities in Europe, the Russian hemisphere and in Asia.

It’s a great privilege to be one of the researchers that can work in the frontlines of this topic giving my contribution to the resilience of sustainable urbanization. The opportunity giving me on older age by the high ranked Delft University of Technology makes me very grateful and stimulates me into research of the newest factors of importance. Factors like citizen initiative catalysts, resistant behaviour of professionals, group dynamics including social cohesion, the importance of front running people, the influence of pride feelings and green initiatives. The whole of research could be mentioned citizen mobilization.

Education
- 1991 to 1993: NOVAM, financial program for RE developments, for area en location developments.
- 1985 to 1986: MBA at Erasmus University at Rotterdam, included organizational development.
- 1974 to 1982: Civil Engineering Delft Un of Technology: Coastal Engineering and Project management

Scientific working experience
- From 2016 on: Lecturer Building Environment at University The Hague of Applied Science.
- From 2014 on: Ambassador and funding manager ‘Citizens Initiative’ at TU Delft Architecture Urbanism.
- From 2014 on: Senior Lecturer at TSM Business School (Dutch Twente University of Technology).
- 2008 to 2014: PhD at Delft Un. Of Technology; urbanism, community dev. and sustainability in new and existing housing, livability and civilian initiative ‘The Third Way’, by Prof. dr. ir. A. van Timmeren.

Societal working experience
- From 2015 on: Commission Counselor at Water-district HHNK in the North-Holland region.
- From 2014 on: counselor at Wormerland city community and chairman financial control commission.

Commercial working experience
- From 2014 on: president of SKV, Foundation for supporting entrepreneurial CPO developments.
- From 2013 on: coaching Jane Jacobs walks for city neighbourhood developments in the Netherlands
- From 2008 on: president of CPO-NL, for supporting building housing and sustainable developments.

Past working experience
- 2015 to 2016: Procorp, governance control (visitation) for Social Housing NGO’s
- 2008 to 2014: Cognitum, governance control for Social Housing NGO’s
- 2008 to 2009: director for RE city developments at ASR insurances company.
- 1996 to 2007: chairman of ZVH, a Social Housing Foundation at Zaandam The Netherlands
- 1994 to 1995: RE manager at the Ministry for Civil Works included the water defense system.
- 1986 to 1994: senior project manager at RGD, the governmental RE development department
- 1983 to 1986: project manager at the Dutch Royal Marines RE department.

Additional positions
• **2010 to 2014**: chairman of the financial control commission for the **Counsel of Wormerland**

• **From 2010 on**: advising Rambler, foundation to design clothing with homeless youngsters

• **2005 to 2008**: chairman of the taskforce ‘Housing’ for the foundation of Delta Metropolis dev.

• **2000 to 2007**: commissioner-ships for a RE broker, societal RE dev. and contractor in social housing.

• **1998 to 2000**: chairman of the **Federation of social housing companies** in the Zaandam region.

• **1995 to 1996**: chairman of the **IPMA** Europeans Seminar ‘Quality in project management’.

• **1990 to 1998**: chairman of the entrepreneurs dep. of KIVI, the Dutch Engineering branch org.

**Scientific publications**


SANDERS, F. C. 2009b. Social resilience in sustainable neighbourhoods, the workshop (Dutch: Sociale duurzaamheid in wijken als nieuwe woonparadigma). Rotterdam: CPI-Rotterdam institute of Erasmus University.

SANDERS, F. C. 2010a. *Social Glu in resilient neighbourhoods (Dutch: Sociale samenhang, basis voor houdbare wijken)* (Peer-reviewed), Delft University of Technology.


SANDERS, F. C. 2012. Social Real-Estate, lifebuoy for social neighborhoods in crises times? *BOSS Magazine (Delft University of Technology, the Real Estate & Housing Department)*, 34-38.

SANDERS, F. C. 2014. *Sustainable Development through Resident’s Collective Initiatives (Dutch: Duurzame ontwikkeling door collectief bewonersinitiatief, leidraad voor professionals om*
SANDERS, F. C. 2015. Civilian initiatives as catalyst for neighborhood liveability as real estate professionals change their attitude (Dutch: Burgerinitiatief gewenst en onbegrepen, de houding en werkwijze van professionals moet veranderen). *VHV Bulletin (Forum Magazine of Social Housing Community Delft University of Technology)* 42.1, 4-7.


SANDERS, F. C. 2016b. Learning from the collapsed 'Da Vinci' Icebridge building at Juuka Finland (Dutch: Ingestorte IJsbrug van 'Da Vinci' in Juuka Finland een project vol kansen!). *VHV Bulletin (Forum Magazine of Social Housing Community Delft University of Technology)*.


SANDERS, F. C. & OVERTOOM, M. E. 2016. Optimal conditions for group-dynamic challenges, the results of mock-up research on group-dynamics during the January 2014 Juuka Finland 'Ice Dome' building by university students (Peer-reviewed). In: PRONK, A. E. T. U. (ed.) *ISOFF ICE 12-13 February Nunnanlahti Finland.*: ISOFF ICE.


SANDERS, F. C. & VAN TIMMEREN, A. 2017a. Pride the Civilians Motivator for Res-lient Sustainable Cities, results of the 2016 questionnaire research under Dutch Amsterdam council members (Peer-reviewed). *WSBE17 5-7 June*. Hong Kong China: WSBE.


**Reviewed drafts**

URBAN DESIGN INTERNATIONAL (2015 and 2016) manuscript on 'satisfaction with life in public housing of urban neighbourhoods in Nigeria'

URBAN DESIGN INTERNATIONAL (2017) manuscript on 'constraining sustainable urban mobility'

URBAN STUDIES (2017) manuscript on 'Modelling the changes of employment areas'.
MOOC

Scientific publications – in production
SANDERS, F.C. (2018) *People’s societal engagement en enactment, a global cultural analysis.* XXXX
SANDERS, F.C. et al. (2018) *Provisioning civilian-initiative for community sustainability - The results of mock-up research on group-dynamics during the January 2014 Juuka Finland ‘Ice Dome’ building by university students initiated by the Eindhoven Technical University.* INTERNATIONAL JOURNAL OF URBAN SUSTAINABLE DEVELOPMENT.
(Sanders and Timmeren, 2016) (Sanders and Overtoom, 2016) (Sanders, 2016b) (Sanders, 2006c) (Sanders, 2007) (Sanders, 2009a) (Sanders and Dautzenberg, 2010) (Sanders, 2010b) (Sanders, 2010a) (Sanders, 2010c) (Sanders, 2011) (Sanders, 2012) (Sanders, 2014) (Sanders, 2016a) (Sanders, 2016a) (Sanders, 2016b) (Sanders, 2015) (Sanders, 2016c) (Sanders, 2006b) (Sanders, 2006a) (Sanders and Bieleman, 2007) (Sanders, 2009b) (Dautzenberg and Sanders, 2009) (Sanders and Van Timmeren, 2017a) (Sanders and Van Timmeren, 2017b) (Pronk et al., 2017) (Sanders, 2017)