

# Sustainability in Dentistry

**ADOPTED** by the FDI General Assembly **August, 2017** in **Madrid, Spain**

## Context

The United Nations 2030 Agenda for Sustainable Development,<sup>1</sup> adopted in 2015, established 17 goals to stimulate efforts over the coming years in areas of critical importance for both humans and the planet. This Agenda is a plan of action for people, planet and prosperity. Oral health is an essential part of human life. Dentistry as a profession should integrate sustainable development goals into daily practice and support a shift to a green economy<sup>2</sup> in the pursuit of healthy lives and well-being for all through all stages of life.

Oral health professionals recognize the importance of collaborating in the interests of sustainability. They take responsibility for meeting the demands of society to reduce their impact on natural resources at the same time as promoting optimal oral health for all people and maintaining patient safety.

The concept of sustainable development<sup>3</sup> is based on three main pillars: the environment, the economy and society. The promotion of good oral health habits combined with the access of all people to health services together make a significant contribution to the welfare of populations around the world and could also contribute to achieving environmental goals as well as enhancing inclusive, productive and healthy lives.

In addition to the oral health team, Sustainability in Dentistry involves many stakeholders who all have a role to play, including national governments, scientists, educators, manufacturers, distributors, dental equipment technicians, waste collectors and processors. The FDI and the National Dental Associations (NDAs) are important channels for coordinating work and interacting with local authorities to advocate and facilitate activities related to sustainable development.

## Definitions

### **Sustainable development**

Development which meets the needs of current generations without compromising the ability of future generations to meet their own needs.<sup>3</sup>

### **Green economy**

Green economy is one that results in improved human well-being, while significantly reducing environmental risks and ecological scarcities.<sup>2</sup>

### **Sustainability**

The property of being environmentally sustainable; the degree to which a process or enterprise can be maintained or continued while avoiding the long-term depletion of natural resources.<sup>1</sup>

## Principles

Dentistry must be practised ethically, with high levels of quality and safety, in the pursuit of optimal oral health. Sustainability integrates a broader commitment of the oral health professional to social and environmental responsibility. The right of future generations to a world with adequate natural resources must be respected.

## Policy

- The prevention of oral diseases and the promotion of health should be recognized as the most sustainable way to ensure optimal, accessible and affordable oral health with minimal impact on the environment.
- The dentist as leader of the dental team should take steps to educate all of the dental team on sustainability practices and simultaneously reinforce that the safety of the patient and the quality of care provided should always be the team's primary concern.
- Whenever possible, dentistry should reduce the consumption of energy, water, paper and any materials which could be harmful to the environment, as well as emissions to air and releases to water.
- Dentists should consider the environment when deciding whether to use a single-use, disposable or reusable product, without compromising patient safety and quality of care, in consultation with regulatory bodies and government health policies.
- The dental industry should apply principles of sustainability to dental product lifecycles.
- Dental manufacturers should be encouraged to develop more sustainable dental materials and technologies and use materials that are biodegradable and/or recyclable whenever possible.
- National authorities should stimulate research on improvement and assessment of sustainability and on the environmental impact of dental practice so that oral health professionals can understand, monitor and report the impact of their actions.
- The use of low-power and low-pollution technologies should be promoted.
- NDAs and other related dental organizations (e.g. FDI regional organizations and NDA branches) should ensure their activities and operations are based on principles of sustainability. They are encouraged to formulate best practice documents for their dentists
- FDI and NDAs should be encouraged to integrate the concept of sustainable development into their continuing education activities.

## Keywords

Sustainability, Sustainable Development, Sustainable Dentistry, Green Dentistry

## Disclaimer

The information in this Policy Statement was based on the best scientific evidence available at the time. It may be interpreted to reflect prevailing cultural sensitivities and socio-economic constraints.

## References

1. United Nations. *Transforming our world: the 2030 Agenda for Sustainable Development*. Resolution adopted by the 80 General Assembly on 25 September 2015. A/RES/70/1. General Assembly, Agenda items 15 and 116, 81 2015. ([http://unctad.org/meetings/en/SessionalDocuments/ares70d1\\_en.pdf](http://unctad.org/meetings/en/SessionalDocuments/ares70d1_en.pdf), accessed on \_\_\_\_ 2017).

2. Sukhdev P, Stone S, Nuttall N. *Green economy developing countries success stories*. St-Martin-Bellevue United Nation Environ Programme UNEP. 2010.
3. *World Commission on Environment and Development (Brundtland Commission): Our Common Future*. Oxford: Oxford University Press. 1987. (<http://www.un-documents.net/our-common-future.pdf>, accessed on \_\_ \_\_\_\_ 2017).

## Further reading

- *Standard Practice for Managing Sustainability in Dentistry*. ASTM International E3014 – 15. 2015. (<https://www.astm.org/Standards/E3014.htm>, accessed on \_\_ \_\_\_\_ 2017).