

Minimising the environmental impact of canteens and coffee bars

In a nutshell

| SUMMARY |
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| <p>It is best practice to:</p> <ul style="list-style-type: none">• procure canteen or coffee bar services, or the food and beverages for canteens and coffee bars managed in-house, introducing sustainability requirements such as seasonal, organic food, ensuring availability of vegetarian/vegan options and avoiding (where possible) offering products in single use plastic packaging; choose service providers who can offer services without the use of single use plastic items such as cups, dishes and cutlery (see also best practices on public procurement);• conduct staff engagement campaigns promoting sustainable food choices;• drive behaviour change in canteens and coffee bars by choice of architecture (i.e. changing how options are presented which can make a particular choice the natural or default preference) and pricing policy (i.e. lower price for more sustainable food options);• implement a reduction of food waste policy by implementing reduced food portions |
| Target group |
| Public administrations having office-based operations |
| Applicability |
| This best practice is applicable across all types and scales of public administration offices that have internal canteen or coffee bar facilities. |
| Environmental performance indicators |
| <ul style="list-style-type: none">• Percentage of low-impact food options served (e.g. seasonal, organic) (% of low-impact food out of the total purchase volume)• Amount of food waste generated per meal served (g/meal)• Percentage of food waste sent for anaerobic digestion (% sent for anaerobic digestion out of the total tonnes of food waste) |
| Bencharks of excellence |
| N/A |

Description

This best practice covers food procurement, catering-related consumables, energy and water consumption, and waste production relating to canteens and coffee bars. More general aspects of managing and minimising energy and water consumption, waste minimisation and segregation, and use of catering agencies for external events are covered in the

corresponding best practices. The best practices for this sector focus on environmental impacts, and will therefore not cover social aspects such as provision of healthy food options and catering to varied dietary requirements, unless covered under a more general sustainable food initiative.

While public administration offices will have significant control over procurement and waste production, they have little influence over national waste infrastructure or availability of technologies such as anaerobic digestion. Best practice in minimising the environmental impact of canteens and coffee bars may be most effectively administered through a multilateral approach of engagement, behaviour interventions and the formalisation of minimum standards.

Engagement campaigns

Staff engagement is an easily achievable and low cost option for reducing the impact of canteens and coffee bars. Staff engagement and behaviour change campaigns have a near zero cost of scale and may not require any initial capital outlay; allowing for acceleration of impact and savings. On the simplest level, an engagement campaign may consist of posters or leaflets within the office encouraging sustainable food choices. The introduction of 'game' elements or incentives can further multiply the impacts and maintain individual interest (for example DECC's Foodprints initiative, or Halmstad schools competition). Altering the routine behaviour of groups can have a large cumulative impact; while creating a culture of change across a whole office can multiply the effect, making unconventional behaviours common place and habitual.

'Nudge' behaviour interventions

Dietary decisions can be habitual, personal and 'locked in' actions – in some cases it may be preferable to utilise behavioural interventions, particularly 'nudge' approaches. 'Nudge' interventions aim to discreetly change behaviour through choice architecture (i.e. changing how options are presented which can make a particular choice the natural or default preference) (House of Lords Science and Technology Select Committee, 2011). This can be achieved, for example, through introducing more vegetable and low meat options without advertising them as specifically 'vegetarian'. Pricing policies which encourage healthier, more sustainable choices may also be adopted as a 'nudge' tactic, whereby staff making sustainable choices (e.g. vegetarian meal, using own reusable mug) pay less.

Setting minimum standards

It may be preferable to introduce minimum standards, alongside behavioural interventions, to achieve the greatest impact. While individuals can be influenced through engagement, sustainable procurement and minimum buying standards for catering contracts and equipment can achieve 'economies of scale' in directly influencing suppliers, having an impact across the supply chain, rather than just at an individual level. Public administration procurement policies can also stimulate the market for sustainable products on a wider regional scale and encourage frontrunner suppliers and/or progressive public purchasers through making sustainability criteria business-as-usual within the tendering process. Minimum buying standards should preference local, low-meat, fresh and sustainable food choices and may be included as part of the tendering process; whereby only suppliers meeting those standards or better will be procured by the public administration body.

Minimum buying standards for catering equipment may also be employed to procure the most energy and water efficient equipment – within the EU, the highest level of EU energy rating for appliances may be used as a guide.

Reducing food waste

Minimum standards should also be set for food waste, this may be done by measuring average food waste across a set period (e.g. a day, week, month) and a target reduction set. Reducing food portions, offering different sized portions, careful forward planning of menus can all help to reduce food waste on-site. Where anaerobic digestion facilities are available in the locality, these may be used for any residual food waste.

Environmental benefits

Low impact diet options can significantly reduce the greenhouse gas (GHG) emissions (particularly carbon dioxide, methane, and nitrous oxide) associated with food production and distribution. The impact of food on an individual's ecological footprint could be reduced by over 50% through switching to a low meat, locally sourced, organic and waste free diet (BioRegional, 2005). Sustainable agriculture practices also protect land, soil fertility, ground water and air quality

through the reduction of overgrazing and synthetic chemical use. Efficient catering equipment can also save energy and water.

There are significant environmental benefits to minimising food waste – a 30% reduction in food-related waste could achieve a 30% reduction in an individual's ecological footprint (BioRegional, 2005). Zero food waste in the UK alone could prevent 27million (m) tonnes GHG a year from entering the atmosphere, return over 1.3m tonnes a year of valuable nutrients to the soil, and generate over 1 terrawatt-hour (Twh) electricity a year (Vision 2020, 2013). Similarly a reduction in catering related packaging and consumables such as disposable cutlery and single-use containers can reduce waste even further.

Finally, minimising the environmental impact of canteens and coffee bars may have a ripple effect on minimising energy, water and waste levels across the office as a whole.

Side effects

There are no obvious cross-media effects associated with minimising the impact of canteens and coffee bars. However it may be noted that the introduction of on-site catering can increase overall energy, water and waste figures within an office environment.

Applicability

This best practice is potentially applicable across all typology and scale of Public Administration offices across Europe (provided they have internal canteen or coffee bar facilities).

Economics

Minimising the environmental impact of canteens and coffee bars should require minimal upfront investment and is mainly dependent upon the development of sustainable procurement policies. Some small investment may be required to upgrade to efficient catering equipment, however investment should only be made when current equipment has reached its end of life. Any investment made in highly efficient equipment should have a relatively short pay back through savings made due to lower energy and water consumption.

The most significant savings may be made through the reduction of waste. For example in the UK, landfill tax currently stands at £80/tonne and is increasing by £8/tonne every year (HMRC, 2014); while landfill tax in other EU countries range from an average of €30 up to €107.49/tonne in the Netherlands (ETC/SCP, 2012). Less food waste also reduces food procurement, for example Halmstad saved €17,180 annually through a reduction in portions required (Prewaste, 2012). Some empirical evidence also suggests indirect economic gains may be made through a reduction in absenteeism and improved productivity amongst employees with healthy diets (Dursi, 2008).

Driving forces for implementation

The driving forces behind minimising the environmental impact of canteens and coffee bars are primarily a reduction in greenhouse gas emissions and monetary savings associated with reduced waste, energy and water consumption. Initiatives may also be motivated by a desire to drive wider sustainable procurement programmes within areas under the public administrations control (Netherlands Enterprise Agency, 2011).

Public bodies may be driven by an ambition to provide healthy and nutritious food, either voluntarily (BHCC, 2012) or legislatively (Prewaste, 2012). There is also some empirical evidence to suggest that healthy eating options (as part of a wider 'healthy workplace' programme) can reduce absenteeism and improve retention, engagement and productivity (Dursi, 2008).

Reference organisations

[Brighton & Hove City Council, UK](#)

Brighton & Hove was the first city in the UK to write a food strategy back in 2006; aim four of the strategy focuses specifically on sustainable food procurement by public bodies in the city. They have also recently approved pioneering Minimum Buying Standards for public catering contracts

[Brussels Environment, Belgium](#)

The Sustainable Canteens project, coordinated by Brussels Environment, aims to support public administration canteens which wish to make the transition to sustainable food.

[Department of Energy & Climate Change, UK](#)

The CarbonCulture Platform provides a user-facing communications channel, incentivisation mechanisms and practical examples of individual interventions to encourage sustainable behaviour.

[Halmstad Municipality, Sweden](#)

Halmstad Municipality ran a behaviour change competition between schools to decrease food wastage and reduce associated CO₂eq emissions in school canteens.

[Netherlands Enterprise Agency / Ministry of Infrastructure and the Environment, Netherlands](#)

The Netherlands Enterprise Agency commissioned by the Ministry of Infrastructure and the Environment has developed sustainability criteria for various product/service groups procured by public authorities, including catering and canteen equipment.

[Vienna City Administration, Austria](#)

Natürlich gut Teller or 'Naturally Good Plates' is the leading sustainable food programme of the Vienna City Administration; it aims to reduce the negative impact of the food & drink industry and sets minimum sustainability standards for catered dishes.

Literature

BioRegional (2005). *Z-squared: the impact of food* [Online]. Available at: www.bioregional.co.uk/news-views/publications/z2theimpactoffoodjul05/ [Accessed 01 August 2014].

Brighton & Hove City Council (BHCC) (2014). *Minimum Buying Standards for catering contracts* [Online]. Available at: [http://present.brighton-hove.gov.uk/Published/C00000689/M00005085/AI00039994/\\$20140630172215_005800_0024851_CommitteeReportTemplate040](http://present.brighton-hove.gov.uk/Published/C00000689/M00005085/AI00039994/$20140630172215_005800_0024851_CommitteeReportTemplate040) [Accessed 01 August 2014].

Brighton & Hove (BH) Food Partnership (2012). *Spade to Spoon: Digging Deeper - A food strategy and action plan for Brighton & Hove* [Online]. Available at: www.brighton-hove.gov.uk/sites/brighton-hove.gov.uk/files/downloads/sustainability/Final_2012_Spade_to_spoon_Food_Strategy_low_res.pdf [Accessed 01 August 2014].

BH Food Partnership (2013). *In Spades and Spoonfuls: How Brighton & Hove is delivering on its food strategy* [Online]. Available at: <http://bhfood.org.uk/downloads/downloads-publications/21-spade-to-spoon-progress-report-2013-a5/file> [Accessed 01 August 2014].

BH Food Partnership (2014). *The journey towards good food procurement in Brighton & Hove* [Online]. Available at: <http://sustainablefoodcities.org/Portals/4/Documents/Workshop%201%20Procurement%20Advice.pdf> [Accessed 01 August 2014].

Brussels Sustainable City (2014). *Sustainable Canteens* [Online]. Available at: www.sustainablecity.be/brusselsgreencapital/case-stories/sustainable-canteens?context=41 [Accessed 04 August 2014].

CarbonCulture (2012). Carbon Culture at DECC: How can user engagement save energy and carbon at work? [Online]. Available at: <http://research.carbonculture.net/decc-report-2012/> [Accessed 31 July 2014].

Dursi, Maria (2008). *Can health promotion programs effectively reduce health care costs, increase productivity and retain qualified employees?* [Online]. Available at: www.uri.edu/research/lrc/research/papers/Dursi-Healthcare.pdf [Accessed 11 August 2014].

ETC/SCP (2012). *Overview of the use of landfill taxes in Europe* [Online]. Available at: http://scp.eionet.europa.eu/publications/WP2012_1/wp/WP2012_1 [Accessed 12 August 2014].

FAO (2014). *Schools competing to reduce food waste in schools* [Online]. Available at: www.fao.org/nr/sustainability/food-loss-and-waste/database/projects-detail/en/c/150104/ [Accessed 04 August 2014].

HMRC (2014). *A general guide to landfill tax* [Online]. Available at: http://customs.hmrc.gov.uk/channelsPortalWebApp/channelsPortalWebApp.portal?_nfpb=true&_pageLabel=pageExcise_ShowContent [Accessed 12 August 2014].

House of Lords Science and Technology Select Committee (2011). *Behaviour change* [Online]. Available at: www.publications.parliament.uk/pa/ld201012/ldselect/ldsctech/179/179.pdf [Accessed 12 August 2014].

Knops, Louise (2013). Brussels and Wallonia: Green pioneer projects in sustainable food systems. *Green European Journal: Volume 5 – Food the (agri)cultural revolution* [Online]. Available at: <http://www.greeneuropeanjournal.eu/brussels-and-wallonia-green-pioneer-projects-in-sustainable-food-systems/> [Accessed 04 August 2014].

Natürlich weniger Mist (2014). *Wien isst natürlich gut!* [Online]. Available at: www.wenigermist.at/wien-isst-natuerlich-gut/ [Accessed 04 August 2014].

ÖkoKauf Wien (2012). *Kriterienkatalog "natürlich gut Teller"* [Online]. Available at: <http://images.umweltberatung.at/hm/kriterien-natuerlich-gut-teller.pdf> [Accessed 04 August 2014].

Österreichisches Ökologie-Institut (2010). *Abfallvermeidung und Abfalltrennung in Schulen und Kinderbetreuungsstätten der Stadt Wien* [Online]. Available at: www.wenigermist.at/uploads/2010/11/KIGASCH_Oekologie-Institut-Endbericht_100731_final2.pdf [Accessed 04 August 2014].

Prewaste (2012). *Halmstad schools competing to reduce food waste in canteens* [Online]. Available at: www.ambiente.marche.it/Portals/0/Ambiente/Rifiuti/PW_Traduzione/029_Pre_waste_29_SE_School_Canteens_KliMatsmart_18_0 [Accessed 04 August 2014].

Soil Association (2014). *Bronze Catering Mark standards* [Online]. Available at: www.sacert.org/catering/standards/bronze [Accessed 01 August 2014].

Stocker, Ulrike (2013). *Prevention of food waste in Vienna* [Online]. Available at: www.iswa2013.org/uploads/Stocker_Ulrike_Prevention_of_food_waste_in_vienna_presentation_284_EN.pdf [Accessed 04 August 2014].

Sustainable Everyday Project (2012). *Brussels/Food & sustainability* [Online]. Available at: www.sustainable-everyday-project.net/urbact-sustainable-food/2012/09/06/food-and-sustainability-3/ [Accessed 04 August 2014].

Vision 2020 (2013). *Vision 2020: UK roadmap to zero food waste to landfill* [Online]. Available at: www.bioregional.com/files/media/image/publications/Vision%202020%20Roadmap.pdf [Accessed 11 August 2014].

Wien (2014). "ÖkoKauf Wien" - *Programm für die ökologische Beschaffung der Stadt Wien* [Online]. Available at: www.wien.gv.at/umweltschutz/oekokauf/ [Accessed 04 August 2014].

WWF (2014). *Nachhaltige Fischerei* [Online]. Available at: www.wwf.de/themen-projekte/meere-kuesten/fischerei/nachhaltige-fischerei/ [Accessed 04 August 2014].