

## LAND USE & ENVIRONMENTAL LAW

### Municipal Codes Can Bolster Sustainability Efforts

REGULATIONS ADDRESS SOLAR POWER, GREEN ROOFS AND OUTDOOR LIGHTING

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Sustainability is a rising tide in land use planning. Anecdotally, nearly every municipality now undertaking a revision of its plan of conservation and development or its land use regulations has sustainability on its agenda.

In 2012, our firm was retained to be the legal part of a team led by Clarion Associates, a national firm, tasked with drafting a model sustainability code for the Capital Region Council of Governments (CRCOG), the 26-town region surrounding Hartford. With the project completed in late 2013 and the CRCOG having now published model regulations, we thought it would be helpful to municipal attorneys, municipal officials and property owners to review the array of legal issues, and some of the thornier problems, we confronted and tried to address during our work.

**What is sustainability?** Sustainability in its broadest sense refers to maintaining the diversity and productivity of biological systems, by protecting them from pollution and not depleting natural resources unnecessarily. In the narrower land use context, sometimes called “sustainable development,” the term refers to planning, development, construction and long-term maintenance practices that do not pollute, and either use renewable resources, maximize efficiency or both. Although sustainability overlaps with green building, the two are not synonymous, as green build-

ing’s focus is energy-efficient construction and maintenance, while sustainability extends to land use policies and practices, going well beyond structural energy efficiency.

Much of the recent literature about sustainability focuses on how much of the movement’s agendas can and should be achieved at the local level. Especially on energy-related issues, strong arguments can be made for top-down, uniform standards. In other words, if scientists and engineers have developed methods and products that prevent pollution and provide efficiency, do we leave it to municipal governments to adopt different rules at their discretion and on their own timetable?

With these fundamentals in mind, our team determined that these aspects of sustainability could be tackled at the local level: solar access, alternative energy sources, live-work units, special districts for energy management, green roofs, outdoor lighting and community gardens.

**Zoning regulation, building code, municipal code.** Each of the subjects listed above presented an initial question of whether regulations could be properly undertaken by a zoning commission under the Zoning Enabling Act, General Statutes §8-2, which “encourages energy-efficient patterns of development,” including “solar and other renewable forms of energy, and energy conservation”; under the planning commission/subdivision statutes, §§8-18 et seq; under §7-148, the Municipal Powers Act; under the inland wetlands and watercourses statutes, Chapter 440; or some combination or other source.



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While the debate continues in court cases about whether Connecticut is a so-called “Dillon’s Rule” state, in which municipalities have only expressly delegated or necessarily implied powers, most municipal attorneys look for an express authorization for every municipal enactment. So, for example, §8-2 refers to energy but not sustainability. Thus, does §8-2 include authority to locate and regulate land uses for the purpose of promoting sustainability as opposed to energy efficiency?

**Federal and state preemption.** The next threshold issue was preemption. The two familiar formulations are subjects of regulation in which the state or federal government “occupies the field” and those areas where federal/state and municipal rules conflict and local governments must yield to the higher level of authority. Preemption is particularly pertinent and complex in the energy field, such as lighting standards, where both the federal and state government have adopted a variety of programs, most of which are incentive-based.

For example, a local land use regulation that, in the name of sustainability, regulates the types of bulbs that may be used in outdoor lighting potentially implicates federal manufacturing standards and statewide energy rules found in the building code. Several years ago, a federal court invalidated an Albuquerque ordinance on appliance efficiency standards. Another problem is that federal and state law don't always keep up with current practices, raising the specter of preemption after a local government has tried to establish standards on its own.

**Solar access.** This may be the most important current issue in sustainability through land use. There are two core inquiries: how to regulate land development to maximize solar access and how to grant and guarantee solar access to existing property owners and structures. With the increasing number of grants and loans to residential homeowners to equip their homes with solar collection systems, planners and attorneys are finding solar rights an increasingly common consideration.

A recent matter in eastern Connecticut illustrates the problem. A homeowner received permission to install a freestanding array of solar panels that maximized solar collection by turning to follow the sun. The array came with an automatic "fold up" (flattened) mode when wind speeds exceeded a certain level. But when this system was activated and the array went into a flat storage mode, part of it was located in the side yard setback for the zone. The host town required the owner to apply for a variance and then denied the variance, forcing the owner to relocate the array.

The CRCOG model regulations contain "passive solar" techniques for new residential subdivisions, regulating house/roof orientation, street layout, topography and vegetation. However, acknowledging potential controversy, the model code stops short of what such states as California have done to guarantee solar access of existing homes by prohibiting, in defined instances, construction and vegetation on adjacent properties that could impede solar access.

**Alternative energy sources.** Alternative and renewable energy sources are central to promoting sustainability, but a critical first issue is whether zoning or subdivision regulation is a proper vehicle for regulating energy sources. A good example of the problem is geothermal heat pumps. They require drilling and installation of piping. But is a geothermal pump installed in a residential or commercial structure that is otherwise allowed by land use rules the business of anyone other than the builder and the purchaser/occupant? If part of the system's equipment will be above ground, then its visibility, location and noise levels may be subject to land use control. But it is difficult to see how the choice of geothermal is a land use issue.

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**Live-work units.** In a "live-work" residential unit, the occupant carries on a business in living space. Such arrangements eliminate commutes and their carbon footprints. The land use issue is whether the nonresidential use is compatible with the residential location. The CRCOG's model code contains a variety of recommendations for promoting accessory units that also allow a nonresidential use, and contains standards for the size, location and standards for compatible occupancy and business use. A key consideration in allowable locations is proximity to shopping and services.

Live-work units are well suited to adaptive reuse of existing buildings, especially buildings in mixed-use neighborhoods and with pedestrian-friendly environments.

**Special districts for energy.** Many of the issues raised in this article can be addressed with overlay or special district zoning, with alternative energy generation such as small wind installations and protecting solar access being an example. Special districts are especially suited to so-called microgrids, energy sources that serve a small number of users. Fuel cells, for example, can be regulated by overlay/special districts.

**Green roofs.** Green roofs—lawn and vegetation in lieu of roofing materials—absorb greenhouse gases, detain storm water and create pockets of open space. The land use issues for green roofs include whether vegetation may exceed building height, and whether to incentivize them by not counting them as impervious surfaces or allowing them to count toward open space requirements. Green roofs are now generally recognized as an element of low-impact design for storm water. They can, however, present maintenance, mold/air quality and weight/building code issues.

**Outdoor lighting.** Outdoor lighting presents fiercely complicated technical issues (lumens, foot-candles, photometrics, light "budgets"). The sustainability goals are conserving electricity and curbing light pollution (known as "dark skies initiatives"). Regulatory methods include mandatory cutoffs and brightness limits that prevent light invasion of adjacent properties. However, any lighting regulation will necessarily include a long list of exemptions, such as for security, traffic safety, outdoor recreation and commercial signage.

**Community gardens and urban farming.** Urban farming in cities is a recent national trend that is often incentivized through the reduction of real property tax assessments. The land use issues include allowing the use in areas not served by food retailers, and also parking, lighting, security, equipment storage, minimum and maximum size, prefarming soil testing, pesticide use, composting, organic practices and retail sale of produce.

At the end of our work advising on the legal aspects of drafting a sustainability code, two things were evident: There is, in fact, a substantial realm in which municipal land use regulation can promote sustainability; but regulation must be approached carefully, so legal incentives and restrictions align with and promote sustainability goals. ■

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