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2 AN ORDINANCE relating to reducing the greenhouse gas
3 emissions from projects subject to the state environmental
4 policy act and adding new sections to K.C.C. Chapter
5 20.44.

6 ..Body

7 SECTION 1. A. Climate change in the Pacific Northwest is projected to result
8 in increased average annual temperatures, significantly increased summer temperatures,
9 increased winter precipitation falling as rain, significant decreases in mountain snowpack,
10 more intense precipitation events, sea-level rise, and changes in the timing and magnitude
11 of stream flows.

12 B. Climate change impacts are expected to increase flood and erosion hazards,
13 affect water supplies for drinking water, salmon, hydropower and irrigation, increase
14 wildfire risks, exacerbate public health risks from respiratory problems due to increased
15 smog and temperatures, and negatively affect the diversity and abundance of wildlife and
16 their habitats.

17 C. In 2007 the United Nations' Intergovernmental Panel on Climate Change
18 found that “warming of the climate system is unequivocal... and most of the observed
19 increase in global average temperatures since the mid-20th century is very likely due to
20 the observed increase in anthropogenic (*human-caused*) greenhouse gas concentrations
21 (*primarily carbon dioxide*)”.

22 D. There is a growing scientific consensus that global temperature increases of
23 more than two degrees Celsius above pre-industrial levels would lead to devastating
24 impacts.

25 E. Findings from the United Nations' Intergovernmental Panel on Climate
26 Change indicate that limiting temperature increase to two degrees Celsius will require the
27 stabilization of atmospheric carbon dioxide concentrations to between four hundred fifty
28 and four hundred seventy-five parts per million.

29 F. Leading scientists have projected that stabilization of atmospheric carbon
30 dioxide emissions to avoid temperature increases greater than two degrees Celsius will
31 require a reduction of greenhouse gas emissions to approximately eighty percent below
32 current levels by the year 2050.

33 G. In October 2006 the council adopted Motion 12362 relating to county efforts
34 to reduce greenhouse gas emissions and prepare for climate change impacts. Motion
35 12362 and Executive Orders PUT 7-5 through 7-8 called for development of a King
36 County Climate Change Mitigation and Preparedness Plan. The executive released the
37 2007 King County Climate Plan in February of 2007 and the 2007 King County Climate
38 Report in February 2008.

39 H. Motion 12362 and Executive Order PUT 7-8 direct the county to review and
40 update policies related to air quality, climate and land use to reduce greenhouse gas
41 emissions and to address the impacts of climate change.

42 I. The King County Climate Plan and Climate Report and the Executive Proposed
43 King County Comprehensive Plan 2008 Update include policy goals of reducing King
44 County's greenhouse gas emissions and collaborating with local governments in the

45 region to reduce overall emissions to eighty percent below 2007 levels by the year 2050.

46 Specific actions include:

47 1. Continued implementation of “Smart Growth” policies to focus new urban
48 development within urban growth areas and along transit corridors;

49 2. Proposed updates to transportation policies and regulations supporting
50 walkable communities;

51 3. Continued development of energy co-generation projects at the Cedar Hills
52 landfill and wastewater treatment plants;

53 4. Increasing use of hybrid vehicles;

54 5. Adoption of the King County Green Building Ordinance (Ordinance 16147)
55 on June 23, 2008; and

56 6. Public outreach and education.

57 J. The United States Supreme Court in Massachusetts v. EPA determined that the
58 federal clean air act applies to greenhouse gas emissions and that the federal
59 environmental protection agency has authority to regulate greenhouse gas emissions as a
60 pollutant under the federal clean air act.

61 K. The Washington State Environmental Policy Act (SEPA), RCW Chapter
62 43.21C, includes the prevention or elimination of damage to the environment and the
63 biosphere as one of its purposes. SEPA requires proponents of major actions that will
64 have a probable, significant adverse environmental impact to prepare an environmental
65 impact statement.

66 L. Washington State Department of Ecology rules require proponents of major
67 actions subject to SEPA to complete a checklist that address the impact of the proposal

68 on the environment. The SEPA checklist specifically includes a requirement to analyze
69 the impact of the proposal's emissions on air quality, which includes climate.

70 M. The King County Executive promulgated Executive Order PUT 7-10 that
71 requires King County, when it is the lead agency under SEPA, to require project
72 proponent to disclose the greenhouse gas emissions resulting from the proposal.
73 Greenhouse gas emissions associated with development come from multiple sources and
74 fall into three major categories: embodied emissions that include the extraction,
75 processing, transportation, construction and disposal of building materials, landscape
76 disturbance; energy emissions from heating, lighting and other uses after the project is
77 completed; and transportation related emissions created by the development after it is
78 completed.

79 N. The Executive's Proposed King County Comprehensive Plan 2008 Update
80 includes a policy that allows King County to exercise its substantive authority under
81 SEPA to condition or deny actions based on their greenhouse gas emissions.

82 O. In December 2007, Washington's Departments of Ecology and Community,
83 Trade and Economic Development, in conjunction with the Center for Climate Strategies,
84 released official greenhouse gas emissions estimates for 1990 through 2020. These
85 projections forecast statewide emissions through 2020 based on an assumption that there
86 are no changes in public policies or citizen behavior. The forecast includes expected
87 growth in population, employment, business activity, and the built environment.

88 P. The Washington State Legislature in 2008 passed and the governor enacted
89 into law House Bill 2815 which establishes statewide targets for greenhouse gas
90 reductions. These targets are to reduce annual greenhouse emissions to 1990 levels in

91 2020, to twenty-five percent below 1990 levels in 2035, and to do its part to reach global
92 climate stabilization by reducing emissions to fifty percent below 1990 levels in 2050.
93 King County's goal is consistent with the State goal: to do its part to help achieve global
94 climate stabilization by mid century.

95 Q. Washington's forecasted average greenhouse gas emissions for 2010 and 2011
96 are one hundred and four million metric tons of carbon dioxide equivalent (MMTCO₂e).
97 Washington's estimated greenhouse gas emissions for 1990 are estimated to be fifteen
98 percent below the forecasted average emissions for 2010 and 2011.

99 R. Most structures and developments constructed in 2010 and 2011 will still be in
100 use in 2020 and will be contributing to greenhouse gas emissions through energy and
101 transportation related emissions. Requiring new development to reduce greenhouse gas
102 emissions by fifteen percent below the estimate average emissions in 2010 and 2011 for
103 similar development constructed to meet minimum regulatory requirements in a location
104 with average transportation related emissions will ensure that new development is
105 equitably contributing towards achieving King County's and Washington State's climate
106 stabilization goals.

107 S. In addition to reducing greenhouse gas emissions, the incorporation of green
108 and sustainable practices into the design, construction and operation of development
109 projects reduces other types of pollution, reduces the use of natural resources, reduces
110 energy and other operating costs, enhances asset value, optimizes performance and
111 creates healthier and more appealing environments for building occupants. In general,
112 strategies that reduce transportation related greenhouse gas emissions also encourage

113 healthier lifestyles by making the communities more walkable and reduce transportation
114 related expenses for residents of those communities.

115 T. The burden of reducing greenhouse gas emissions cannot be placed solely on
116 new development. All sectors of the economy and types of development activity will
117 need to take action to reduce emissions in accordance with the state goal while at the
118 same time accommodating projected population and employment growth.

119 U. In developing requirements and procedures for SEPA review and mitigation
120 of greenhouse gas emissions, King County should strive to minimize the burden on
121 applicants by providing technical assistance as available and relying on existing programs
122 that have demonstrated greenhouse gas mitigation benefits.

123 V. King County should apply the principles of impact avoidance, sometimes
124 referred to as mitigation sequencing, to reducing greenhouse gas emissions to ensure that
125 preference is given first to measures that will avoid emissions, then to measures that will
126 reduce emissions, and only then to measures that compensate for emissions through off-
127 sets or similar provisions.

128 NEW SECTION. SECTION 2. A new section is hereby added to K.C.C. chapter
129 20.44 to read as follows:

130 A.1. The applicant for a project action subject to the State Environmental Policy
131 Act, together with the SEPA checklist required by WAC 197-11-960, shall submit to
132 King County an estimate of the greenhouse gas emissions that would result from the
133 project action before and after measures that will reduce greenhouse gas emissions are
134 considered.

135 2. The estimate of greenhouse gas emissions that would result from the project
136 action before measures that will reduce greenhouse gas emission shall assume that the
137 project action is designed to comply with minimum county, state and federal regulations.
138 The estimate of greenhouse gas emissions that would result from the project action after
139 measures that will reduce greenhouse gas emission are considered may include measures
140 identified under Section 3 of this ordinance as well as other measures implemented by the
141 project proponent that will result in a reduction in greenhouse gas emissions.

142 3. The estimate shall include separate estimates for embodied, energy, and
143 transportation related greenhouse gas emissions. The transportation related emissions
144 shall be based on the average emissions for the site as estimated by the department. The
145 estimate shall be made using tools provided by or approved by King County.

146 B.1. Embodied greenhouse gas emissions include all emissions resulting from
147 construction and development related activities, including emissions related to materials
148 used in the project action, transportation of people, goods and materials to the project
149 site, operation of equipment in the construction or development, and energy use in the
150 construction and development.

151 2. Energy related greenhouse gas emissions include emissions over the life of
152 the project after the project action is complete that result from heating, cooling, lighting,
153 operating equipment, and similar activities.

154 3. Transportation related greenhouse gas emissions include emissions over the
155 life of the project after the project action is complete that result from transporting people
156 and goods to and from the project site.

157 C. A project action, as defined under the state environmental policy act, shall be
158 deemed by King County to not have a significant, adverse impact on the environment
159 with respect to greenhouse gas emissions and climate if the proponent demonstrates that
160 the project action will result in greenhouse gas emissions that are at least fifteen percent
161 below the emissions estimated under subsection A of this section. For a project action
162 that is located within the urban growth area and that is on a site with average
163 transportation emissions that exceed the county average for transportation emissions,
164 mitigation measures that are designed to reduce transportation emissions and that will
165 reduce emissions for the area in which the project action is located shall be given a bonus
166 in calculating the amount of greenhouse gas emission reductions that result from
167 implementation of those mitigation measures.

168 D. King County may determine that a project action will not have a significant
169 adverse impact on the environment with respect to greenhouse gas emissions and climate
170 change if the proponent of the project action demonstrates it has reduced greenhouse gas
171 emissions to maximum extent practical and that further measures to reduce greenhouse
172 gas emissions are not economically feasible over the life of the project action.

173 E. A non-project action, as defined under the state environmental policy act, shall
174 be deemed by King County to not have a significant, adverse impact on the environment
175 with respect to greenhouse gas emissions and climate change if the non-project action is
176 consistent with the goal established in the King County Comprehensive Plan to reduce
177 greenhouse gas emissions to 1990 levels by 2020 and to reduce greenhouse gas emissions
178 to eighty percent below 2007 levels by 2050.

179 NEW SECTION. SECTION 3. A new section is hereby added to K.C.C. chapter
180 20.44 to read as follows:

181 In order to demonstrate that a project action will achieve the reduction in
182 greenhouse gas emissions set forth in Section 2C. of this ordinance, the proponent of a
183 project action may incorporate into the proposed action quantifiable measures to reduce
184 greenhouse gas emissions. Measures that the proponent of the project action may
185 implement to reduce greenhouse gas emissions include, but are not limited to:

186 A. Construction measures that result in reduced energy consumption, such as
187 compliance with Built Green™ standards of the Master Builders Association of King and
188 Snohomish Counties or the United States Green Building Council's LEED® Green
189 Building Rating System, use of efficient lighting and lighting control systems, use of
190 efficient heating and cooling systems, implementation of energy efficiency measures not
191 required by law and construction of cottage housing and other dwelling units that are
192 smaller than average;

193 B. Measures in the construction process that result in lower greenhouse gas
194 emissions, such as the use of low-emission construction vehicles, use of low embodied
195 emissions materials, such as steel and concrete using manufacturing process that result in
196 lower greenhouse gas emissions and reuse and recycling of building materials and
197 demolition waste;

198 C. Incorporation of renewable energy measures, such as building location and
199 design and use of solar and wind power systems;

200 D. Implementing measures designed to reduce total vehicle miles traveled, such
201 as transit oriented developments, bicycle paths and pedestrian walkways, providing

202 bicycle parking and other amenities for users of non-motorized transportation, grid road
203 system layout and promotion of ride-sharing and other transportation demand
204 management strategies that reduce vehicle miles traveled;

205 E. Protection of open space, agricultural or forest lands;

206 F. The purchase of development rights from rural properties that are transferred
207 to urban properties pursuant to the provisions of K.C.C. Chapter 21A.37 and that result in
208 a reduction of vehicle miles traveled and

209 G. The use of greenhouse gas offsets that are real, verifiable, additional and not
210 being double-counted.

211 NEW SECTION. SECTION 4. A new section is hereby added to K.C.C. chapter
212 20.44 to read as follows:

213 A. Based on the advice of the advisory committee established pursuant to
214 subsection B of this section, the department of development and environmental services
215 may adopt and amend public rules that:

216 1. Establish standards for evaluating and quantifying greenhouse gas emissions
217 for project actions governed by Section 2 of this ordinance and identifying and
218 quantifying the emission reductions that result from measures implemented to reduce
219 greenhouse gas emissions;

220 2. Identify measures to be included on a green list that when implemented under
221 specified conditions will result in emissions reductions of at least fifteen percent as
222 provided in Section 2C. of this ordinance; and

223 3. Establish standards for when carbon offsets may be included as a measure to
224 reduce greenhouse gas emissions from a project action. At a minimum, the standards

225 shall require the consideration of opportunities to avoid or reduce greenhouse emissions
226 before the consideration of offsets and allow the proponent of an action to demonstrate
227 further reductions in avoiding or reducing emissions are not practical because the
228 proponent has previously implemented measures that resulted in greenhouse gas
229 emissions reductions.

230 B. The department shall convene an advisory committee to assist in the
231 development of the public rules provided for in subsection A of this section and in the
232 report required by section 6 of this ordinance. The advisory committee shall at a
233 minimum include representatives of residential development, commercial and residential
234 construction, commercial and real estate development, mechanical engineering, and
235 environmental organizations, and King County. The department may also invite other
236 local governments, the state, and others to participate. Members of the advisory
237 committee should have technical expertise in estimating greenhouse gas emissions.
238 Meetings of the advisory committee shall be open to the public. The department shall
239 publish notice of meeting times and locations on the department's website.

240 C. Public rules adopted or amended pursuant to this section shall take effect no
241 sooner than ninety days after the date the rules or amendments to the rules are adopted.
242 The department shall send a copy of the adopted rules, any public comments received on
243 the proposed rules, and a summary of the department's response to the comments to the
244 King County Council within twenty-one days after the date the rules are adopted.

245 NEW SECTION. SECTION 5. A new section is hereby added to K.C.C. chapter
246 20.44 to read as follows:

247 A. The department shall assist proponents of actions governed by Section 2 of
248 this ordinance. The assistance should include forms and software that enable proponents
249 of actions to estimate greenhouse gas emissions and the greenhouse gas emission
250 reductions that result from implementing measures, including those identified by the
251 department under subsection A.2 of this section.

252 B. King County may provide incentives for applicants who propose projects that
253 meet green building or low impact development standards. The incentives may include,
254 but are not limited to, free technical assistance, cost sharing and fee discounts, permit
255 processing assistance and priority processing for development proposals that are
256 estimated to achieve at least a thirty percent reduction in greenhouse gas emissions.

257 NEW SECTION. SECTION 6. The department of development and
258 environmental services in consultation with the department of natural resources and parks
259 shall report to the King County Council not later than March 31, 2011 on the
260 requirements of this ordinance. The report shall include:

261 A. By project type, the number, number of dwellings units, square footage,
262 disturbance area, and other relevant factors, estimated average greenhouse gas emissions,
263 measures selected to reduce greenhouse gas emissions, and estimated reductions in
264 greenhouse gas emissions that resulted from the measures selected; and

265 B. A comparison of the greenhouse gas reductions achieved by activities subject
266 to Section 2 of this ordinance with greenhouse gas reductions achieved by other segments
267 of the economy in King County, the success of King County in achieving the goal of
268 reducing greenhouse gas emissions in the region to 1990 levels by 2020, and any
269 recommendations for changes in the target established in Section 2 of this ordinance.

270 SECTION 7. If any provision of this ordinance or its application to any person or
271 circumstance is held invalid the remainder of the ordinance or the application of the
272 provision to other persons or circumstances is not affected.

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