Dear Interviewees:

We consult you with the related information of arable land use through questionnaires for the research needs of the Key Project of Beijing Municipal Natural Science Foundation “Spatial optimizing land use allocation based on the simulation on carbon effects of land use change for low carbon Beijing” (No. 8151001). All the information in the questionnaire is only for research purposes and the data are processed and analyzed anonymously. The personal information involved in the questionnaire is for the purpose of understanding the basic situation of farming park and will not be disclosed to third parties without your permission.

Beijing Natural Science Foundation Key Project Research Group.

1. Basic features

(1) Park name ________, park type ________ (A: Factory crop cultivation, B: Large-scale planting, C: Large-scale livestock and poultry breeding, D: Modern multi-functional agriculture, E: Others ________);

(2) Build time ________, total fixed investment ________ yuan, gross annual production ________ yuan, total area ________亩, number of permanent staff ________, number of temporary staff ________;

(3) Your position in the park ________, contact information ________

2. Land use current status (marked functional areas on the map)

| Land use type | Area (亩) | Access (rent) | Note | Land use type | Area (亩) | Access (rent) | Note |
|---------------|-----------|---------------|------|---------------|-----------|---------------|------|
| Farmland with greenhouse | ________ | ________ | ________ | Soil grassland | ________ | ________ | ________ |
| Farmland -no greenhouse | ________ | ________ | ________ | Construction land | ________ | ________ | ________ |
| Orchard | ________ | ________ | ________ | Water | ________ | ________ | ________ |
| Forest | ________ | ________ | ________ | Other land | ________ | ________ | ________ |

3. Carbon footprint (Pre-farm, On-farm, Post-farm)

3.1 Energy and material inputs (pre-farm)

| Energy/material | Quantity (consumption and expense) | Note |
|-----------------|-----------------------------------|------|
| Water | ________ t | ________ |
### 3.2 生产、服务活动 production and service activities (on-farm)

#### 3.2.1 产品部分 products

| 农产品类型 | 名称 | 年播种面积 | 年产量 | 化肥施用量 (kg/亩) | 人工 (人·日) | 其他 | 减排措施 | 粮食 | 蔬菜及食 |
|------------|------|------------|--------|--------------------|-------------|------|-----------|------|----------|
| grain      |      |            |        |                    |             |      |          |      |          |
| wheat      |      |            |        |                    |             |      |          |      |          |

### 3.2.2 减排措施 reduction measures

- 1. 滴灌
- 2. 水肥一体化系统
- 3. 机械尾气净化
- 4. 其他

Emission reduction measures in production include: 1- drip irrigation; 2. integrated system of water and fertilizer; 3, mechanical tail gas purification; 4- others
### 2）养殖业 breeding

| 动物种类 type | 存栏量 stock | 饲养方式 feeding way | 饲料用量 feed consumption | 粪便量及处理方式 waste amount and treatment | 备注-减排措施 comment- reduction measure |
|---------------|-------------|---------------------|--------------------------|---------------------------------------------|------------------------------------------|
| 牛 cow        |             | 1-散养 free range   |                          |                                             |                                          |
| 羊 sheep      |             | 2-圈养 in captivity  |                          |                                             |                                          |
| 猪 pig        |             |                    |                          |                                             |                                          |
| 鸡 chicken    |             |                    |                          |                                             |                                          |
| 鸭 duck       |             |                    |                          |                                             |                                          |
| 其他 other    |             |                    |                          |                                             |                                          |

注: 粪便处理方式包括 1-沼气; 2-堆肥; 3-出售; 4-其他 note. waste treatments include 1-making biogas; 2-composting; 3-sell; 4- other

### 3.2.2 服务部分 service

| 服务类型 type | 年服务人次 annual reception | 人均消费 consumption per person | 碳排放源 carbon source | 备注-减排措施 comment- reduction measure |
|---------------|-----------------------------|-------------------------------|------------------------|------------------------------------------|
| 住宿 accommodation |                           |                               |                        |                                          |
| 餐饮 catering |                         |                               |                        |                                          |
| 采摘 pick-your-own |                       |                               |                        |                                          |
| 教育、观光 education, sightseeing |                   |                               |                        |                                          |
| 其他 other |                         |                               |                        |                                          |

### 3.3 产品销售 sale of products (post-farm)

| 产品类型 type | 名称 name | 年销售量 annual sale quantity | 年销售额 annual sale (10000 yuan) | 销售目的地 1-销售量-运输方式-距离-耗油量 delivery means- distance- fuel consumption | 销售目的地 2-销售量-运输方式-距离-耗油量 delivery means- distance- fuel consumption | 备注 comment |
|---------------|-----------|-------------------------------|----------------------------------|---------------------------------------------|---------------------------------------------|--------------|
| 粮食 grain    | 小麦 maize |                               |                                 |                                             |                                             |              |
|               | 玉米 wheat |                               |                                 |                                             |                                             |              |
| 蔬菜及食用菌 vegetable/edible mushrooms | | | | | | |
4. 对低碳土地利用的认识 Awareness of low-carbon land use

(1) 您是否听说过全球变暖？________ 是；2-否
Have you heard about global warming? _______1-yes;2-no

(2) 据您了解，引起全球变暖的原因是什么？According to your knowledge, what is the cause of global warming________ (可多选 Multi-choice)
1-化石燃料燃烧 fossil fuel combustion; 2-森林砍伐 deforestation; 3-人口增加 population growth; 4-气候自然变化 natural climate change; 5-秸秆燃烧 straw burning; 6-过度施肥 over fertilization; 7-其他 others________

(3) 您认为自身与节能减排有关系吗？Do you think you are responsible to energy conservation and emission reduction________1-是; 2-否; 3-不了解 not sure;
如有，您认为主要体现在哪些方面？If yes, which aspects do you think are mainly reflected in ____________1-化肥施用 fertilizer application; 2-农机使用 machinery use; 3-车辆排放 vehicle emissions; 4-垃圾处理 waste disposal; 5-教育宣传 education and propaganda; 6-其他 other________

关于节能减排，您目前有无享受相关鼓励政策？_______1-有; 2-无。Regarding energy conservation and emission reduction, have you ever enjoyed relevant encouragement policies so far? 1-yes; 2-no.
如有，是何政策？ If yes, what’s that. _______________________________________________________________________

(4) 关于节能减排，您有何建议？Do you have any comments and suggestions on energy saving and emission reduction?
________________________________________________________________________________________