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## ECONOMIC IMPACT STATEMENT

### A. ESTIMATED PRIVATE SECTOR COST IMPACTS

#### 2. Estimated economic impact.

The proposed 2022 Building Efficiency Standards are not a "Major Regulation" as defined by Government Code section 11342.548 for which a Standardized Regulatory Impact Assessment is required. Section 11342.548 defines "Major Regulation" as "any proposed adoption, amendment, or repeal of a regulation *subject to review by the Office of Administrative Law pursuant to Article 6 [of Chapter 3.5 of Part 1 of Division 3 of Title 2 of the Government Code]* that will have an economic impact on California business enterprises and individuals in an amount exceeding fifty million dollars as estimated by the agency" (emphasis added). Because the proposed 2022 Building Efficiency Standards are "building standards" as defined by Health and Safety Code section 18909 and Government Code section 11342.530, they are not "subject to review by the Office of Administrative Law pursuant to Article 6." Consequently, they do not meet the definition of a Major Regulation.<sup>1</sup>

#### 3. Number of businesses impacted.

The following industries are the most positively impacted by increased energy efficiency, renewable generation and demand response<sup>2</sup>:

- Residential Building Construction (NAICS 2361)
- Nonresidential Building Construction (NAICS 2362)
- Electrical Contractors (NAICS 23821)
- Plumbing, Heating, and Air-Conditioning Contractors (NAICS 23822)
- Drywall and Insulation Contractors (NAICS 23831
- Manufacturing (NAICS 32412, 3279, 3332, 3334, 3336, 3341, 3342, 3344, 3345, 3351, 3352, 3353, 3359 (part))
- Advertising and Related Services (NAICS 5418)
- Engineering Services, Architectural Services, Environmental Consulting Services, Other Scientific and Technical Consulting Services (NAICS 541 (part))
- Management of Companies and Enterprises, Public Administration (NAICS 5511, 92 (part))
- Office Administrative Services (NAICS 5611)

 <sup>&</sup>lt;sup>1</sup> See Government Code Section 11342.548 and Health and Safety Code 18930.<sup>2</sup> The University of California, Berkeley "California Workforce Training and Needs Assessment for Energy Efficiency, Distributed Generation and Demand Response." See Table 3.10 et seq., pages 69-75, <u>https://laborcenter.berkeley.edu/pdf/2011/WET\_Part1.pdf</u>.
<sup>2</sup> The University of California, Berkeley "California Workforce Training and Needs Assessment for Energy Efficiency, Distributed Generation and Demand Response." See Table 3.10 et seq., pages 69-75, <u>https://laborcenter.berkeley.edu/pdf/2011/WET\_Part1.pdf</u>.

California's Energy Code is part of the California Building Construction Standards and therefore impacts nearly all newly constructed buildings, as well as specific additions and alterations to nearly all existing buildings. Therefore, the Energy Code may eventually impact all business and individuals in the state that own or inhabit buildings. Based on the number of businesses in the "Advanced Energy Employment" sector, we estimate between 21,500 to 43,000 businesses are impacted by the implementation of the Energy Code.<sup>3</sup> This range reflects a range of between half of all the businesses in the Advanced Energy Employment sector at the low end, and all businesses in the Advanced Energy sector being impacted at the high end.

#### 4 and 6. Number of businesses and jobs created and eliminated.

The proposed Standards are cost effective over the life of the measure.<sup>4</sup> Increased energy efficiency in California's buildings will have short term initial costs, but long-term benefits from reduced utility costs. For individuals this will result in increased disposable income, and for businesses lower costs and (most likely) additional profit. The following industries are the most positively impacted by increased energy efficiency, renewable generation and demand response<sup>5</sup>:

- Residential Building Construction (NAICS 2361)
- Nonresidential Building Construction (NAICS 2362)
- Electrical Contractors (NAICS 23821)
- Plumbing, Heating, and Air-Conditioning Contractors (NAICS 23822)
- Drywall and Insulation Contractors (NAICS 23831
- Manufacturing (NAICS 32412, 3279, 3332, 3334, 3336, 3341, 3342, 3344, 3345, 3351, 3352, 3353, 3359 (part))
- Advertising and Related Services (NAICS 5418)
- Engineering Services, Architectural Services, Environmental Consulting Services, Other Scientific and Technical Consulting Services (NAICS 541 (part))
- Management of Companies and Enterprises, Public Administration (NAICS 5511, 92 (part))
- Office Administrative Services (NAICS 5611)

<sup>&</sup>lt;sup>3</sup> See TN #223071-2 (<u>https://efiling.energy.ca.gov/GetDocument.aspx?tn=223071-2</u>).

<sup>&</sup>lt;sup>4</sup> Public Resources Code section 25402(b)(3) requires the Energy Code to be cost effective in its entirety. Generally, each individual efficiency measure is cost-effective, as indicated by CASE and/or staff reports included in the record. For the 2022 Energy Code, the Energy Commission is proposing to adopt indoor air quality standards for health and safety that are not demonstrably cost effective without complex modeling that predicts the value of improved human health and safety outcomes. Public Resources Code section 25402.8 states: "When assessing new building standards for residential and nonresidential buildings related to the conservation of energy, the commission shall include in its deliberations the impact that these standards would have on indoor air pollution problems." The costs associated with these health and safety measures are miniscule compared to the overall benefits provided by the 2022 Energy Code.

<sup>&</sup>lt;sup>5</sup> See footnote 2.

The evidence in the record indicates that employment impacts based on the implementation of the 2022 Energy Code will result in an estimated 781 jobs created and 6,868 jobs eliminated. The jobs eliminated are the result of a single measure that will reduce indoor nonresidential lighting power requirements.<sup>6</sup> This estimate is based on an analysis by Evergreen Economics of data from the IMPLAN V3.1 modeling software. As noted in the CASE Report on Nonresidential Indoor Lighting: "the IMPLAN model provides a relatively simple representation of the California economy and, though the Statewide CASE Team is confident that direction and approximate magnitude of the estimated economic impacts are reasonable, it is important to understand that the IMPLAN model is a simplification of extremely complex actions and interactions of individual, businesses, and other organizations as they respond to changes in energy efficiency codes." The Energy Commission has no evidence that any standard promulgated in the proposed 2022 Energy Code will create or eliminate businesses.

# 7. Will the regulation affect the ability of California businesses to compete with other states by making it more costly to produce goods or services here?

California's Energy Code applies to buildings built in the state of California. No California construction businesses should be at a disadvantage versus businesses in other states when all builders and manufacturers have to meet the same standards to build or sell building products in California. More broadly, while there are initial up-front costs imposed by the Energy Code, there are long-term savings that typically repay those costs by a significantly positive ratio. In the case of the 2022 Energy Code that ratio is approximately 3.5:1. Past changes to the Energy Code continue to generate benefits even as the latest version of Energy Code increases initial costs. More simply, the 2022 Energy Code will positively impact California businesses by helping create long-term economic growth and stability by increasing the disposable income of Californians and California businesses in the longer term. These long-term benefits far outweigh the initial upfront costs and, therefore, California businesses are not disadvantaged in competing with businesses from other states by these regulations. California has aggressively pursued environmental and energy regulations for well over a decade now, while simultaneously out-performing the overall United States growth in per-capita personal income.<sup>7</sup>

#### **B. ESTIMATED COSTS**

# **1**. What are the total statewide dollar costs that businesses and individuals may incur to comply with this regulation over its lifetime?

<sup>&</sup>lt;sup>6</sup> https://efiling.energy.ca.gov/GetDocument.aspx?tn=234915&DocumentContentId=67777

<sup>&</sup>lt;sup>7</sup> See (<u>https://apps.bea.gov/regional/histdata/releases/0320spi/index.cfm</u>), (<u>https://www.infoplease.com/business-finance/poverty-and-income/capita-personal-income-state</u>), and (<u>http://www.pewtrusts.org/~/media/Data-Visualizations/Interactives/2016/fiscal-50/docs/2013/StatePersonalIncomeData.xlsx?la=en</u>). Note that California's growth in per-capita personal income increases the US average growth which reduces the difference between California and the average for the rest of the nation.

The amount listed on line B1 is the sum of the lifetime residential and nonresidential measures costs for all newly constructed buildings, additions and alterations for 2023.<sup>8</sup> The question specifies the "lifetime of the regulation," and these regulations are expected to have an extended lifetime. Staff considered and rejected interpreting the "regulation over its lifetime" to mean three to five years, which is the cycle of regular updates to the Energy Code, and instead opted to provide data for the lifetime costs and savings for the first year of implementation. The life expectancy for residential and nonresidential buildings is assumed to be 30 years. For mechanical and electrical equipment in nonresidential buildings and outdoor lighting the life expectancy is assumed to be 15 years. Costs presented in this Economic Impact Statement reflect nominal costs blended with some net present value costs for some measures that provided only modestly discounted costs and savings.<sup>9</sup>

Building Type	Estimated Low Cost per Square Foot	Estimated High Cost per Square Foot
Hotels	\$0.18	\$1.59
Offices	\$6.33	\$13.79
Healthcare (not Hospitals)	\$0.70	\$0.91
Restaurants	\$0.69	\$1.14
Retail	\$5.55	\$13.24
Schools	\$7.06	\$13.73
Colleges	\$6.35	\$13.17
Refrigerated Warehouses	\$6.50	\$20.48
Nonrefrigerated Warehouses	\$8.29	\$22.28
Grocery	\$5.77	\$19.69

#### 1(a, b) Initial costs for a small business and initial costs for a typical business.

The Energy Code does not differentiate between a small business and a typical business but rather impact construction that may occur in nearly all public and private buildings in California. Estimated per square footage costs for newly constructed nonresidential buildings vary by location and building type:

The higher per square foot costs reflect a focus on regulating the construction of refrigerated or heavily conditioned spaces (including computer/server rooms) and initial regulations for indoor agricultural buildings. These per square foot estimates do not include selected measures that

<sup>&</sup>lt;sup>8</sup> Effectively, this means the total costs are slightly miss-estimated for the year 2023 because the lifetime costs include any increased costs associated with the cost of maintenance. Maintenance costs are typically a small portion of the total costs associated with Energy Code measures.

<sup>&</sup>lt;sup>9</sup> A few measures provided by the Codes and Standards Enhancement Team only included net present value costs and savings. The Energy Commission requires a 3% discount rate in calculations to determine cost effectiveness. The inclusion of discounted numbers in the total makes the estimated savings more conservative and has very little impact on estimated costs as the substantial majority of costs reflect first year costs.

do not lend themselves to accounting through a per square foot metric. These measures include seven measures that may result in additional newly constructed building costs of \$42.9 million, and a single measure that may provide overall nonresidential newly constructed building costs reductions (savings) of an estimated \$290 million, for an overall estimated net reduction of \$247.9 million in newly constructed nonresidential building costs.

Staff calculated the initial and annual range of costs to a business based on the following model and assumptions:

- A newly constructed building of 15,000 square footage is being purchased.
- The purchase will be financed.
- The purchaser will make an initial down payment equal to 20% of the incremental costs associated with the changes in the 2022 Energy Code.
- The loan financed amount has an interest rate of 6% annual.
- The loan has term of 10 years.
- The purchaser will pay additional 2% annual taxes and 2% insurance on the incremental costs associated with the changes in the 2022 Energy Code.

As previously noted, these assumptions do not account for significant savings from changes the Energy Code that may result in an estimated \$247.9 million in reduced initial costs.

The costs associated with nonresidential additions and alterations cost is included in the statewide total dollar costs, but that cost is not reflected in the small business or typical business initial costs. The initial costs associated with the proposed Energy Code for newly constructed nonresidential buildings will be substantially higher than the initial costs for additions and alterations in existing nonresidential buildings. We estimate that the costs for additions and alterations will be approximately \$293.2 million less overall in 2023 due to changes to the nonresidential indoor lighting power density requirements.

It should be noted that, assuming nonresidential construction costs average \$300 per square foot, the additional costs from the proposed Energy Code will increase the cost of the building by approximately 0.06 - 7.43% depending on the building type and its location.<sup>10</sup> It is anticipated that this marginal increase in average costs will have no substantive impact on the commercial construction industry overall.

#### 1(c) Initial costs to an individual.

The 2022 Energy Code will have a de minimis impact on the cost of newly constructed singlefamily homes as only a single measure is proposed to impact the cost of new single-family construction. That measure has an incremental cost of \$31.48. The initial and ongoing costs for

<sup>&</sup>lt;sup>10</sup> Anecdotally, \$300 per square foot is arguably a very low number in many cases (<u>https://ccorpinsights.com/costs-per-square-foot/</u>). You will not that those costs do not include land acquisition, professional fees, permits, furniture, fixtures, equipment and soft costs.

a new single home buyer are assumed to be effectively zero.<sup>11</sup> The upper boundary cost range presented in B1(c) and B4 reflects initial and ongoing costs to a very small portion of multifamily tenants, most specifically high-rise multifamily tenants in high-demand markets in selected climate zones.

The proposed changes to the 2022 Energy Code include a substantial consolidation of provisions related to multifamily construction into an independent section within the Code. Previously high-rise multifamily residential buildings followed provisions in the nonresidential portion of the Code and low-rise multifamily residential followed provisions in the residential portion of the Code. Part of the consolidation of the multifamily provision included changes made for consistency and uniformity in single family and multifamily residential construction. Staff calculated the initial and annual range of costs to a multifamily housing tenant based on the following model and assumptions:

- The multifamily tenant will rent a newly constructed unit at market rate.
- The market rate for a unit will allow the multifamily housing owner to fully pass on incremental annual costs associated with the 2022 Energy Code on to the tenants.
- The multifamily housing owner purchased the multifamily building with terms nearly identical to those assumed for other nonresidential buildings (see above):
  - The purchase will be financed.
  - The full incremental cost will be financed (this effectively includes a profit for the multifamily owner since we would normally assume 20% down payment).
  - The loan financed amount has a 6% annual interest rate.
  - The loan has term of 10 years.
  - The purchaser will pay additional 2% annual taxes and 2% annual insurance on the incremental costs associated with the changes in the 2022 Energy Code.
- The multifamily tenant will pay one-month's rent in advance and that is the initial cost.

The multifamily construction cost impact of the 2022 Energy Code ranges from \$8,495 – \$11,948 per unit. That high cost range is largely due to the implementation of PV and battery requirements to high rise residential construction. Without that measure, the multifamily construction cost impact would range from \$890 - \$1,717 per unit. Staff used the maximum cost to determine the upper boundary of the range of annual costs.

The costs associated with residential additions and alterations are included in the statewide total dollar costs, but that cost is not reflected in the individual costs. The impact of the proposed 2022 Energy Code on residential additions and alterations is more substantial than previous Code updates. Estimated 2023 costs for residential additions and alterations exceed \$732 million. These costs are incurred across 12 separate measures and have been estimated

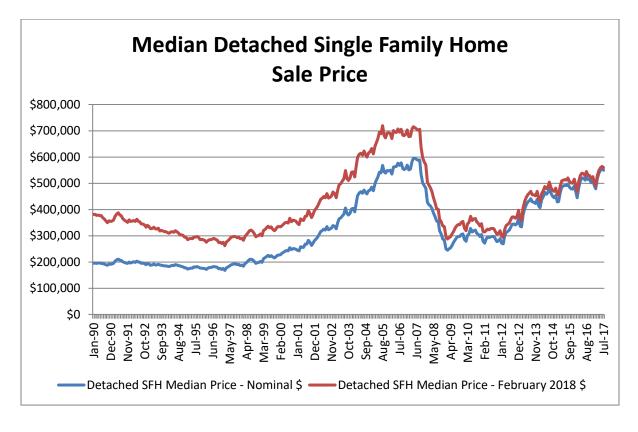
<sup>&</sup>lt;sup>11</sup> Total annual cost is less than \$3 assuming 1) 30-year financing, 2) a 3% annual interest rate, 3) 20% down payment, 4) 2% ad valorem tax, and 5) 1% insurance costs.

assuming different addition and alteration rates that are not readily represented on a per individual basis.

#### 4. Will the regulation directly impact housing costs?

As noted in 1(c) above, the initial cost per housing unit of estimated newly constructed housing in 2023 ranges from 0 - 2,070. The number of housing units listed at 171,011 represents the total estimated 119,045 single-family homes and the 51,966 multifamily units of newly constructed housing for 2023.

**California Single-Family Home Prices:** According to the California Association of Realtors (CAR), from January 2009 through December 2016 the statewide median detached single-family home price went from \$249,960 to \$508,870. That is a 103% increase in the median detached single-family home price. These numbers are bit skewed in that they cover the great recession. Looking at the same data set, the statewide median home price in January 1990 was \$194,952, adjusted for CPI inflation that would equal \$373, 090 or approximately \$135,000 less than the current \$508,870 statewide median home price. The chart below shows median detached single-family home prices (in nominal \$ and February 2018 \$) from January 1990 through September 2016.



Average median single-family home monthly inflation has been approximately \$2,300 for the past three years.<sup>12</sup> Recent CAR data for 2016-2017 shows the same above inflation level increase in median home price. According to CAR from July 2016 to July 2017 the median sold single-family home price increased 7.4% from \$511,420 to \$529,460. In some markets the increase during that same period was over 10%.

There is significant evidence that the cost increases associated with complying with Energy Code have no statistically significant impact on median single family home sale prices.<sup>13</sup> Overall construction related costs can have a significant impact on what gets built, where it gets built, when it gets built and the profitability of what gets sold. Sales price is a much more complicated issue. This is common sense. If it were not the case, then anything could be built anywhere the builder determined and sold for whatever price the builder asks.

The current single-family housing market in California suffers primarily from inadequate supply and (possibly) inflated demand or real pent-up demand.<sup>14</sup> The former is possibly due to systemic fallout from the housing bubble collapse of 2007-08 when many housing contractors left the marketplace. Further complicating inadequate supply in the single-family housing and rental housing marketplace is the availability of land appropriate for housing (which is by definition a finite good) and land use planning laws. The demand related issue is due to the nature of the housing lending market. Loans are the primary vehicle through which single family homes are purchased. Inadequate underwriting of loans can result in excessive risk taking in lending and by extension create increased "demand" for housing. This was essentially what occurred in the run-up to the 2007-08 housing bubble collapse. Single family home median sale prices have increased in real dollar terms to approximately the same point they were in 2003 and this has occurred in spite of the wage stagnation for a significant portion of California's working population.<sup>15</sup> There seem to be only two likely culprits for this price increase in the face of wage stagnation and low inflation: 1) lending reforms and requirements instituted after the 2007-08 housing collapse have failed to curb excessive risk-taking in lending, and/or 2) inadequate production for the past decade has created an inadequate housing supply for existing demand.<sup>16</sup> Based on this, our assessment is that the proposed Energy Code will have no statistically significant supply or median sale price impact on the single family housing market.

<u>Market Rate Multifamily Rents</u>: Multifamily renters are generally more mobile than single family homebuyers, and the multifamily rental market is even more fluid and subject to market

<sup>&</sup>lt;sup>12</sup> This is the monthly average of a serious of rolling 12-month averages from January 2015 through July 2017. See "Median Price" worksheet in the "2019 Form 399 Calculations.xlsx" file.

<sup>&</sup>lt;sup>13</sup> See TN #223055 (<u>https://efiling.energy.ca.gov/GetDocument.aspx?tn=223055</u>).

<sup>&</sup>lt;sup>14</sup> See <u>http://hcd.ca.gov/policy-research/plans-reports/docs/California's-Housing-Future-Full-Public-Draft.pdf.</u>

<sup>&</sup>lt;sup>15</sup> See <u>http://www.lao.ca.gov/LAOEconTax/Article/Detail/256</u>.

<sup>&</sup>lt;sup>16</sup> See TN #223054 figures 1.1 and 1.2 (<u>https://efiling.energy.ca.gov/GetDocument.aspx?tn=223054</u>).

forces of supply and demand than the single-family market. The following factors can significantly impact the market rate rent of any multifamily unit:

- Location of the rental. Juxtaposition of the unit to job markets and cultural or governmental amenities are critical to setting market rents.
- Local market demand. If you are in a market area with high demand for rental units generally, the available stock of rental units will be lower allowing for higher rents.
- Time of year. There is a season for moving. Additionally, students can be an important part of the multifamily rental market. Both the season and the existence of a student market can impact rental prices on a seasonal basis.
- Type of rental. There are senior only complexes, and others that explicitly cater to young families or single adults. The more appropriate your rental is to the market area it is catering to, the stronger the ability to set higher rents.
- Age of the rental. Amenities improve the relative attractiveness of a multifamily unit and housing amenities tend to improve over time, with older rental properties typically providing fewer amenities. Conversely, the wear and tear associated with rental units tends to negatively impact their value over time.
- Type of rental lease. Some leases are only available month-to-month, while other leases can be for extended periods. Generally, the stability of a longer lease allows the landlord to minimize the risk of income loss due to unit turnover, and therefore allows for lower rents.
- State law and local ordinances. The State recently enacted a statewide law impacting rents for older properties, and multiple jurisdictions across the state have rent controls and/or renter protections.

The analysis performed to determine the upper boundary of the costs impacts to individuals (sections B1(c) and B4) essentially reflects ideal conditions for a landlord that would be necessary to allow all of the costs associated with 2022 Energy Code compliance to be directly passed on to a tenant: a combination of strong local market demand for a rental unit appropriate to the marketplace and the youth (and therefor quality of the amenities) of the rental itself. Arguably, this is an outlier and reflects what would be a small proportion of multifamily units constructed under the 2022 Energy Code and a tiny proportion of the total statewide multifamily rental market.

### C. ESTIMATED BENEFITS

**1.** Briefly summarize the benefits of the regulation, which may include among others, the health and welfare of California residents, worker safety and the State's environment: Beyond the monetary benefits, the Energy Commission estimates that the implementation of the 2022 Energy Code updates will reduce anticipated increases in statewide annual electricity demand and natural gas consumption. This will, in turn, result in a net reduction in the emissions of greenhouse gases, nitrous oxide, sulfur oxides, carbon monoxide, and particulate matter attributable to electricity generation and on-site combustion (compared to the existing Energy Code requirements). Reduced air pollution and reductions in greenhouse gases will result in health benefits to Californians and help mitigate health and other costs associated with climate change. The reduction in statewide electricity demand will also marginally decrease water consumption in the electricity generation sector.

#### 3. What are the total statewide benefits from this regulation over its lifetime?

Staff considered and rejected interpreting the "regulation over its lifetime" to mean three to five years, which is the cycle of regular updates to the Energy Code, and instead opted to provide data for the lifetime costs and savings for the first year of implementation. The life expectancy for residential and nonresidential buildings is assumed to be 30 years. For mechanical and electrical equipment in nonresidential buildings and outdoor lighting, the life expectancy is assumed to be 15 years. Savings presented in this Economic Impact Statement reflect nominal savings blended with net present value savings for measures that provided only modestly discounted costs and savings (see footnote 7 above). The value of greenhouse gas emission reductions (as currently valued) is included in the calculation of statewide benefits.

The total savings number provided in C3 is the sum of nominal energy and other savings, meshed with the time dependent energy valuation net present value energy savings for a few measures, for residential and nonresidential measures for all newly constructed buildings, additions and alternations for 2023 for all of the measures, through the life of the measures. Put more simply, the total costs for the 2022 Energy Code incurred in 2023 are represented in B1. The total lifetime savings for the 2022 Energy Code costs incurred in 2023 are represented in C3. Conservatively, these estimated savings equal a 30-year stream of approximately \$292.6 million in annual savings.

Building Type	Estimated Low Savings per Square Foot	Estimated High Savings per Square Foot
Hotels	\$0.96	\$8.47
Offices	\$15.66	\$32.21
Healthcare (not Hospitals)	\$2.79	\$7.82
Restaurants	\$4.47	\$8.90
Retail	\$13.69	\$31.08
Schools	\$17.21	\$33.88
Colleges	\$15.55	\$31.26
Refrigerated Warehouses	\$13.79	\$58.46
Nonrefrigerated Warehouses	\$27.77	\$75.05

As previously noted in the narrative concerning sections B1(a) and (b) regarding costs, there is commensurate variation in the estimated per square footage savings for newly constructed nonresidential buildings:

Grocery	\$13.38	\$56.62
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#### D. ALTERNATIVES TO THE REGULATION

# **1.** List alternatives considered and describe them below. If no alternatives were considered, explain why not:

For more than thirty-five years, legislative enactments and state energy policies have directed the Energy Commission to adopt cost-effective building standards to conserve energy and improve energy efficiency and thereby improve the state's economy, energy security, and environment.<sup>17</sup> The Energy Commission has been presented with and has considered multiple alternatives to the proposed standards; however, at this time the Commission is not aware of alternatives to the proposed regulations that would lessen any adverse impact on small businesses or that would be less burdensome and equally effective in achieving the purposes of the regulation in a manner that achieves the purposes of the statute being implemented.

During the initial, informal stage of the rulemaking process, the Commission conducted an extensive pre-rulemaking public process where it considered many suggestions from numerous stakeholders about (1) alternatives that could improve the feasibility of the Commission's preliminary versions of the proposed regulations or could reduce their adverse impacts; (2) the technical and cost-effectiveness analyses of those preliminary proposals; and (3) the language in those proposals. Based on the comments received, the Commission developed Preliminary Draft Standards and held comprehensive and numerous pre-rulemaking public workshops to obtain public comment on those; in turn, many more comments were received and, in response to them, the Commission has produced the proposed regulations.

The two alternatives provided in D2 reflect two scenarios:

- Alternative 1 reflects the costs and benefits assuming the Energy Commission moved forward without proposed measures that would impact indoor horticulture throughout the state.
- Alternative 2 reflects the costs and benefits assuming the Energy Commission had moved forward without proposed measures that would impact computer/server room efficiency throughout the state.

There are an enormous number of potential alternative cost and benefit scenarios to the current proposed 2022 Energy Code. The process of updating the Energy Code begins with a list of potential measures that is typically several times larger than the final list of measures include in an update to the Energy Code.

<sup>&</sup>lt;sup>17</sup> See Public Resources Code sections 25007 and 25402(a)(1), (a)(3), & (b)(3); 2016 Integrated Energy Policy Report Update (<u>http://docketpublic.energy.ca.gov/PublicDocuments/16-IEPR-</u>01/TN216281 20170228T131538 Final 2016 Integrated Energy Policy Report Update Complete Repo.pdf).

# **3.** Briefly discuss any quantification issues that are relevant to a comparison of estimated costs and benefits for this regulation or alternatives:

Because the Energy Code is fundamentally performance-based, there are multiple options and multiple "pathways" to meeting the Energy Code. Given the plethora of available options, the Energy Commission chose the most cost-effective to present in this analysis.

#### E. MAJOR REGULATIONS

4. Will the regulation subject to OAL review have an estimated economic impact to business enterprises and individuals located in or doing business in California exceeding \$50 million in any 12-month period between the date the major regulation is estimated to be filed with the Secretary of State through 12 months after the major regulation is estimated to be fully implemented?

The proposed 2022 Building Efficiency Standards are not a "Major Regulation" as defined by Government Code section 11342.548 for which a Standardized Regulatory Impact Assessment is required. Section 11342.548 defines "Major Regulation" as "any proposed adoption, amendment, or repeal of a regulation *subject to review by the Office of Administrative Law pursuant to Article 6 [of Chapter 3.5 of Part 1 of Division 3 of Title 2 of the Government Code]* that will have an economic impact on California business enterprises and individuals in an amount exceeding fifty million dollars as estimated by the agency" (emphasis added). Because the proposed 2019 Building Efficiency Standards are "building standards" as defined by Health and Safety Code section 18909 and Government Code section 11342.530, they are subject to review by the Office of Administrative Law pursuant to Article 6." (See Government Code section 11342.548 and Health and Safety Code 18930.) Consequently, they do not meet the definition of a Major Regulation.

### FISCAL IMPACT STATEMENT

#### A. FISCAL EFFECT ON LOCAL GOVERNMENT

#### 6. Additional expenditures and savings.

The 2022 Energy Code will be in effect in 2023. Current fiscal year is assumed to be 2020-2021. Data on local government existing building stock is very limited, as is data on proposed local government building construction. These expenditures and savings values were calculated based on an estimate that six percent of the total costs of nonresidential newly constructed buildings, additions and alterations to existing buildings, would apply to local government. Based on these assumptions, the expenditures per year are estimated at \$76.9 million

beginning in 2023, while total lifetime savings are estimated at \$396.1 million. These savings represent an annual savings of approximately \$13.2 million over a 30-year period.

Only local government owned buildings, not leased buildings, are relevant to these calculations. Existing leased buildings should not be impacted except in those cases where the lease agreements allow for rent increases in the event of retrofit work. And, even in those cases, the retrofit costs would have to be for work that was impacted by the 2022 changes to the Energy Code. New leases cannot be assumed to be for newly constructed buildings, and as with the sale price of newly constructed homes, rents are not based on the costs of construction but rather are based on marketplace demand and supply.

#### **B. FISCAL EFFECT ON STATE GOVERNMENT**

#### 1 and 2. Additional expenditures and savings

The 2022 Energy Code will be in effect in 2023. Current fiscal year is assumed to be 2020-2021. For future years, state expenditures per year are estimated at \$38.5 million beginning in 2023, while total lifetime savings are estimated at \$198.1 million. These savings represent an annual savings of approximately \$6.6 million over a 30-year period. These expenditures and savings values were calculated based on an estimate that three percent of the total costs of nonresidential newly constructed buildings, additions and alterations to existing buildings, would apply to state government. The three percent figure is based on the rough (underreported) estimate of over 12,000 buildings owned by the state and the estimated ~600,000 commercial buildings in California.

Only state government owned buildings, not leased buildings, are relevant to these calculations. Existing leased buildings should not be impacted except in those cases where the lease agreements allow for rent increases in the event of retrofit work. And, even in those cases, the retrofit costs would have to be for work that was impacted by the 2022 changes to the Energy Code. New leases cannot be assumed to be for newly constructed buildings, and as with the sale price of newly constructed homes, rents are not based on the costs of construction but rather are based on marketplace demand and supply.

### C. FISCAL EFFECT ON FEDERAL FUNDING OF STATE PROGRAMS

#### 4. Other. Explain:

State agencies that are reimbursed for utility costs by the Federal Government may have reduced utility costs and therefore have lowered Federal reimbursements reflecting those lowered utility costs.